COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 01 ENDING 8 JANUARY 2022

Published 20 January 2022

Summary for the week 2 January 2022 to 8 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 8 January 2022

	1 Jan 2020 – 15 Jun 2021 (pre-Delta)	16 Jun 2021 – 25 Nov 2021 (Delta variant)	26 Nov 2021 – 8 Jan 2022 (Omicron emergence)	Total
Total cases	5,431 (100%)	75,318 (100%)	379,056 (100%)	459,805 (100%)
Hospitalised*	384 (7%)	7,881 (10%)	4,100 (1%)	12,365 (3%)
Admitted to ICU*	145 (3%)	1,459 (2%)	395 (<1%)	1,999 (<1%)
Deaths*	56 (1%)	584 (1%)	98 (<1%)	738 (<1%)
Tests	6,858,446	15,811,925	4,604,242	27,723,655

* 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 8 January 2022:

- There were 226,672 total cases reported, more than double those reported in the week ending 1 January 2022 (100,786).
- Since 26 November 2021, when the first Omicron case was detected in NSW, 4,264 cases have been whole genome sequenced, of which 1,633 were Omicron and 2,631 were Delta variants of SARS-CoV-2. Note that the samples with whole genome sequencing are not representative of all samples; rather, cases admitted to an intensive care unit are currently prioritised for sequencing.
- The ten LGAs with the highest number of cases were:
  - Canterbury-Bankstown, 15,369 (7%) cases
  - Blacktown, 14,931 (7%) cases
  - Cumberland, 11,511 (5%) cases
  - Sydney, 10,243 (5%) cases
  - Liverpool, 9,809 (4%) cases
  - Fairfield, 9,133 (4%) cases
  - Northern Beaches, 7,712 (3%) cases
  - Sutherland Shire, 7,478 (3%) cases
  - Bayside, 7,398 (3%) cases
  - Penrith, 7,350 (3%) cases
  - 125,438 (54%) cases were residents across 118 other LGAs
- There were 63 deaths in people diagnosed with COVID, compared with 21 in the week ending 1 January 2022.
- Among those aged 12 and over, 76.4% of all cases, and 92.7% of the population had received two effective doses.
- PCR testing rates decreased compared to the previous week (down 4%).

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Table 2. Measures of public health action, NSW, for the period from 26 December 2021 to 8 January 2022

	Week ending 8 Jan	Week ending 1 Jan
Proportion total cases notified to NSW Health by the laboratory within 1 day of specimen collection	43% (97,012/226,672)	27% (26,848/100,786)
Total cases contacted by text message within 1 day of notification to NSW Health	98% (222,250/226,672)	99% (98,539/100,786)
Number of high-risk cases fully interviewed by public health staff within 1 day of responding to the NSW Health text message*	82% (336/408)	74% (164/223)
Total cases fully interviewed by public health staff within 1 day of notification to NSW Health#	4% (7,987/226,672)	9% (8,634/100,786)

* In the week ending 8 January, cases were considered high risk if they identify as Aboriginal and/or Torres Strait Islander, or had visited or worked in the following settings in the last week: Aboriginal community, or prison/detention, or had not responded to the text within 24 hours and were aged 65 or over.
# Due to the increase in case numbers, NSW Health is no longer interviewing all COVID-19 cases.

Section 1: Case overview

Figure 1. COVID-19 case count by symptom onset date*, with 7 day backward rolling average, NSW, from 16 June 2021 to 8 January 2022

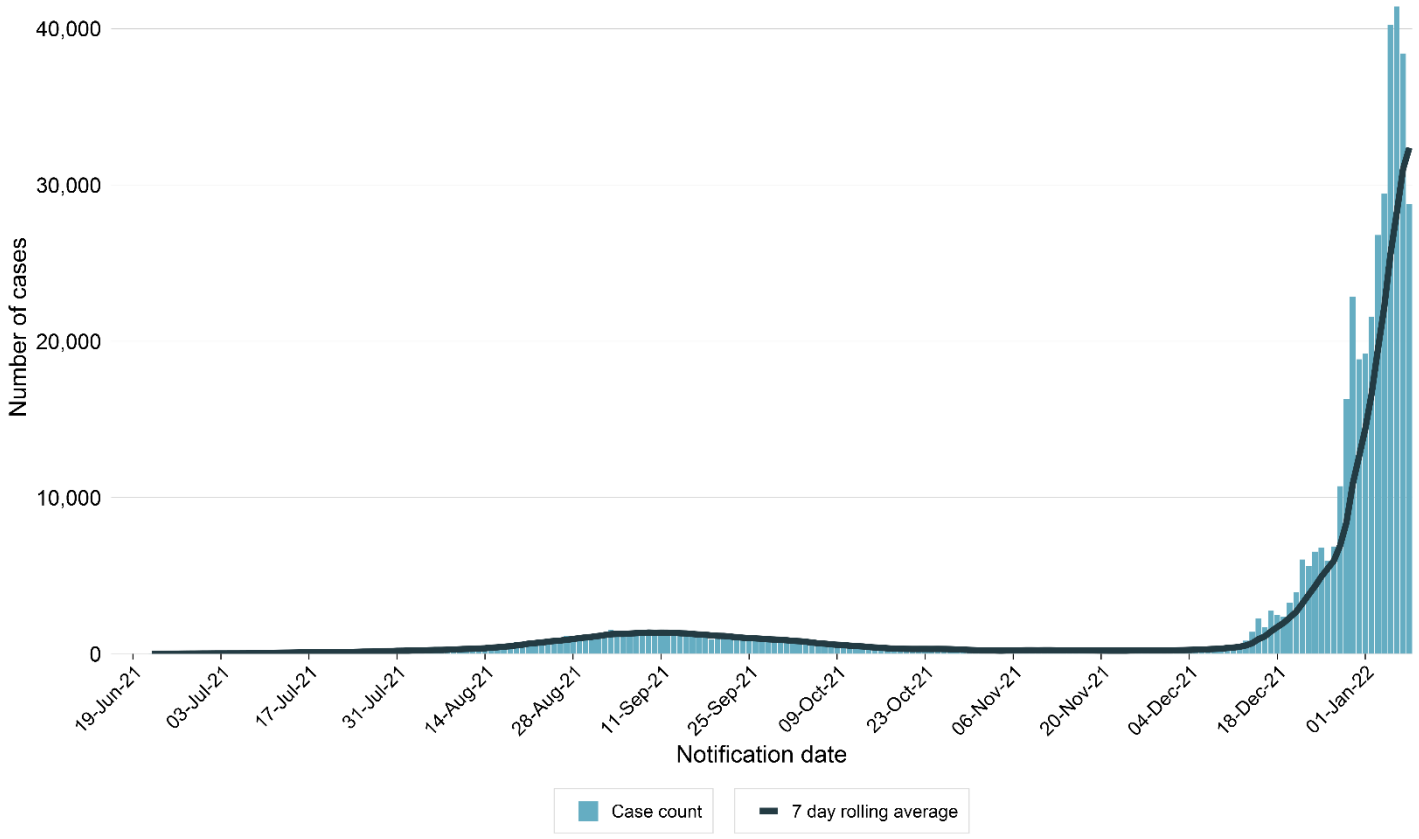


Table 3. Demographics of infections among total cases by gender and age, NSW, 1 January 2020 to 8 January 2022

	Week ending		26 Nov 2021 – 8 Jan 2022	16 Jun 2021 – 25 Nov 2021	1 Jan 2020 – 15 Jun 2021
	8 Jan 2022	1 Jan 2022			
Gender					
Female	115,212 (51%)	51,202 (51%)	191,800 (51%)	35,771 (47%)	2,670 (49%)
Male	110,945 (49%)	49,405 (49%)	186,461 (49%)	39,504 (52%)	2,760 (51%)
Non-specified or non-binary	515 (<1%)	179 (<1%)	795 (<1%)	43 (<1%)	1 (<1%)
Age group					
0-9	14,569 (6%)	6,261 (6%)	24,209 (6%)	12,409 (16%)	251 (5%)
10-19	28,571 (13%)	12,859 (13%)	49,312 (13%)	12,318 (16%)	325 (6%)
20-29	68,488 (30%)	29,675 (29%)	116,604 (31%)	14,744 (20%)	1,115 (21%)
30-39	42,312 (19%)	19,374 (19%)	71,240 (19%)	12,885 (17%)	1,098 (20%)
40-49	28,173 (12%)	12,637 (13%)	46,188 (12%)	9,269 (12%)	718 (13%)
50-59	22,638 (10%)	10,561 (10%)	36,956 (10%)	6,747 (9%)	710 (13%)
60-69	13,064 (6%)	5,723 (6%)	20,726 (5%)	3,869 (5%)	656 (12%)
70-79	5,668 (3%)	2,494 (2%)	9,016 (2%)	1,902 (3%)	394 (7%)
80-89	2,453 (1%)	940 (1%)	3,728 (1%)	939 (1%)	122 (2%)
90+	700 (<1%)	252 (<1%)	1,029 (<1%)	237 (<1%)	42 (1%)
Total	226,672 (100%)	100,786 (100%)	379,056 (100%)	75,318 (100%)	5,431 (100%)

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 8 January 2022

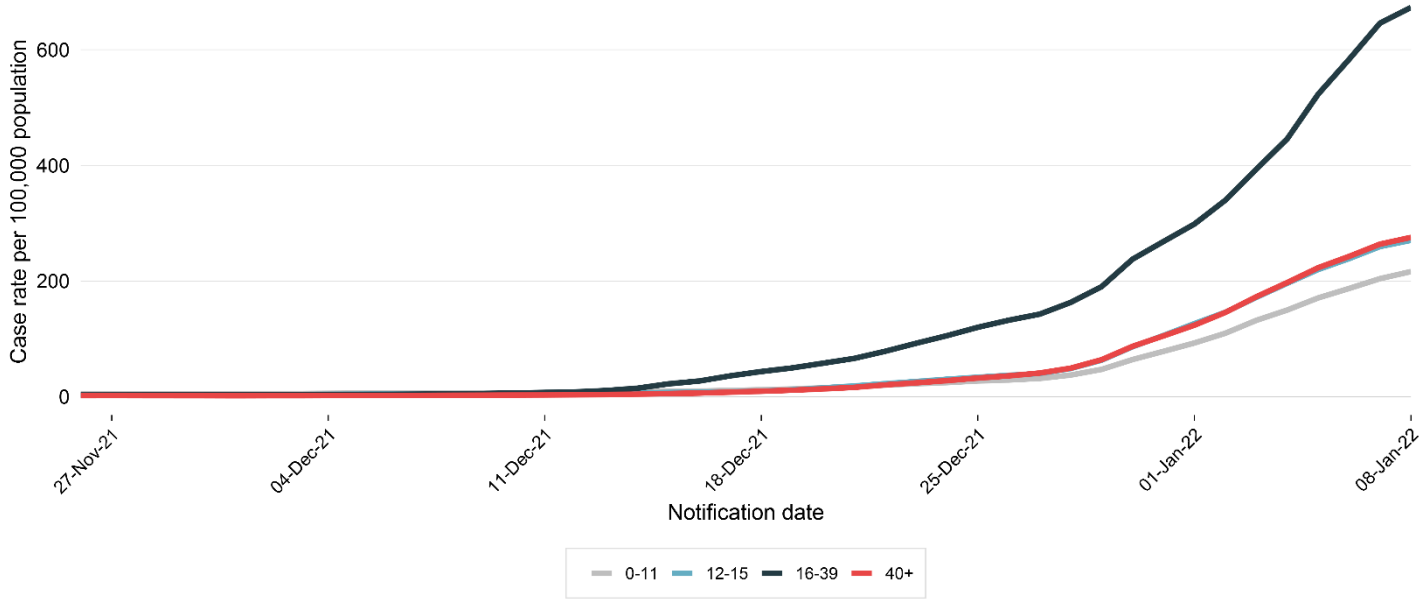
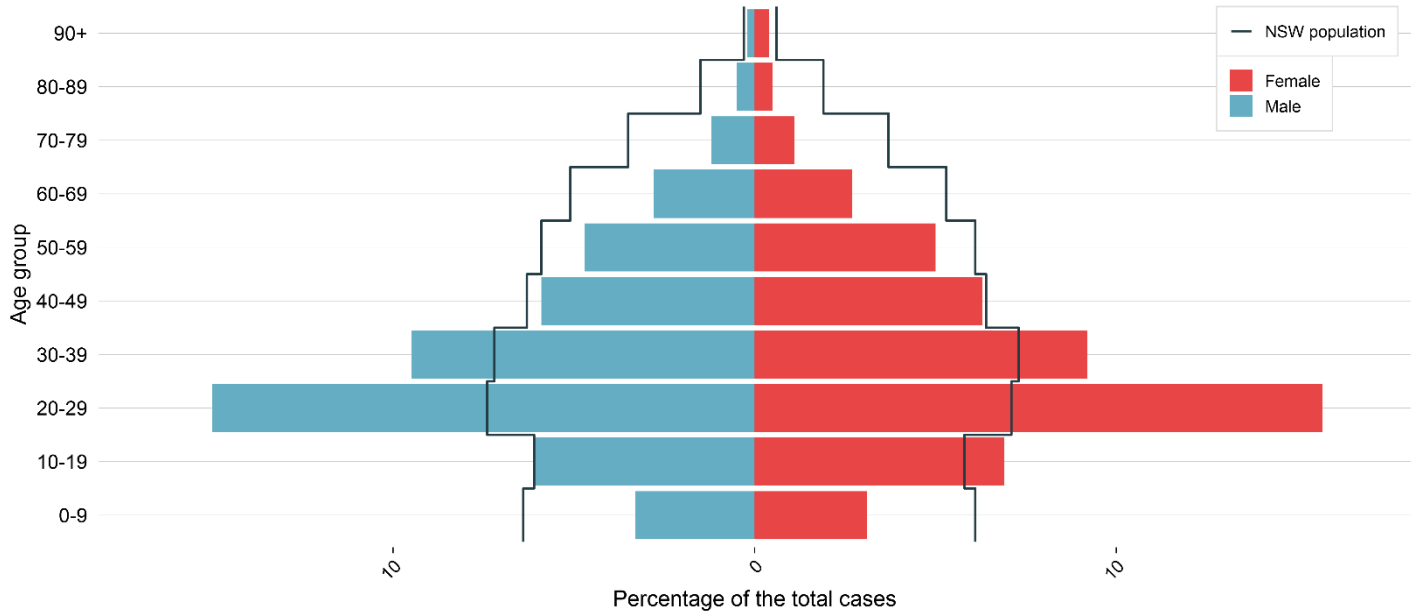


Figure 3. Current wave total case percentage (n = 378,221) by age and gender, NSW, from 26 November 2021 to 8 January 2022



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

- Cases more than doubled in the week ending 8 January 2022, compared to the previous week.
- Cases since 26 November 2021 have been concentrated in the 16-39 years age group, and especially in the 20-29 years age group. This may be due to increased social interaction in this age group, particularly during the Christmas and New Year period.
- Case rates for those aged 0-11, 12-15 and 40+ years have increased at a slower rate since 26 November 2021 compared to the case rate in those aged 16-39 years.
- The median age of cases since 26 November 2021 was 29 (interquartile range (IQR) = 21-44). Cases aged 20-29 years are over-represented among cases relative to their proportion in the NSW population by a factor of approximately two. Cases aged 10-19 and 30-39 years are also over-represented among cases relative to their proportion in the NSW population but to a lesser extent.

Section 2: Variants in NSW

Table 4. Variants identified among COVID-19 cases by week reported, NSW, 1 January 2020 to 8 January 2022

Variant	Week ending				26 Nov 2021 – 8 Jan 2022	16 Jun 2021 – 25 Nov 2021	1 Jan 2020 – 15 Jun 2021
	8 Jan*	1 Jan*	25 Dec	18 Dec			
Total	190	288	372	1,138	4,264	16,613	297
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)	10	30	72	390	2,631	16,597	73
Omicron (B.1.1.529)	180	258	300	748	1,633	-	-

***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.

- From 1 January 2020 to 15 June 2021, genomic sequencing identified several variants in cases in NSW, with the predominant variant in the community 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.
- The current priority for whole genome sequencing is cases admitted to an intensive care unit. In the general community, the Omicron variant 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 8 January 2022

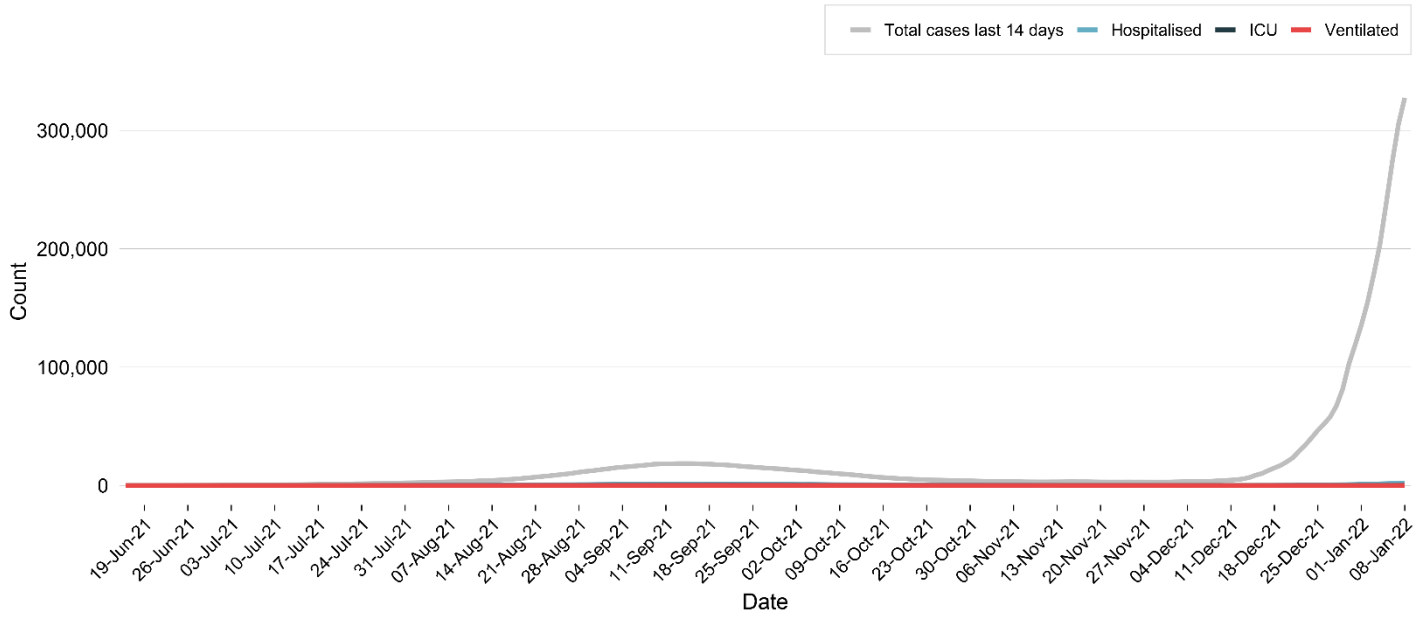
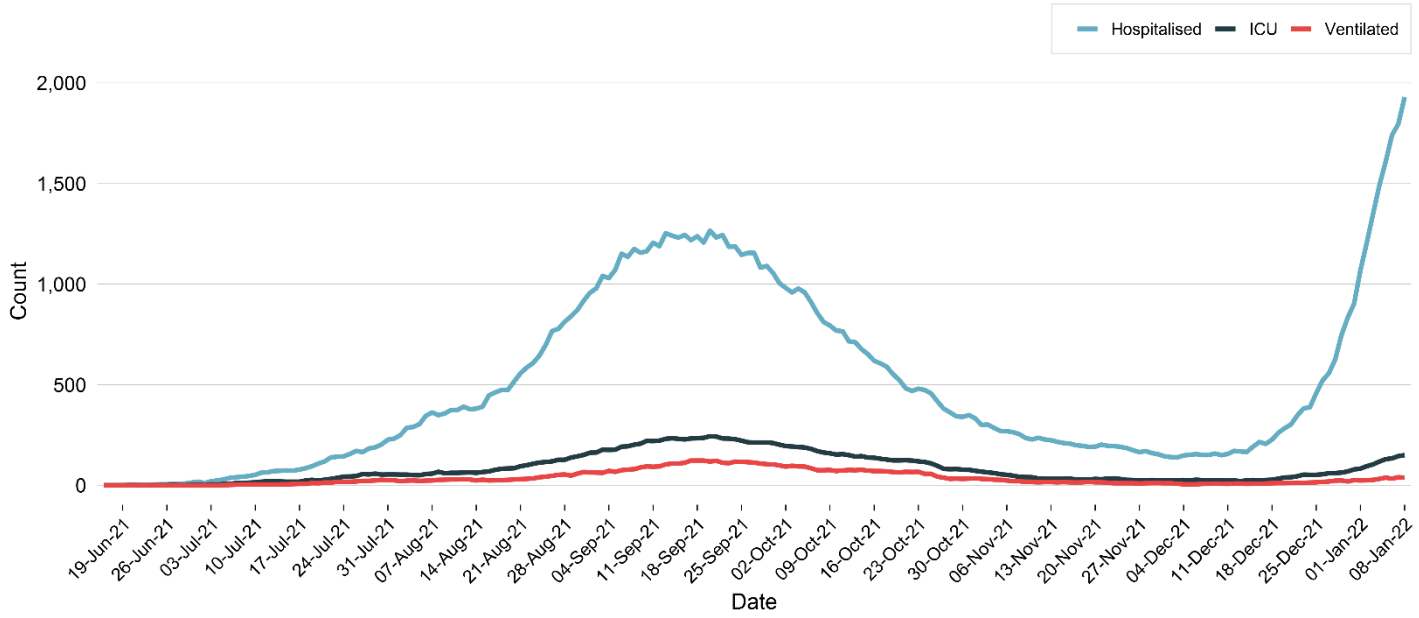


Figure 4b. Number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June 2021 to 8 January 2022



- The graph shows the number of active cases and the number 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, down from the previously reported median of 5 days. This is due to a recent increase in the proportion of cases being diagnosed within one day of admission to hospital.
- Cases doubled in the week ending 8 January, and the number of cases who are hospitalised also approximately doubled. The number of cases in hospital is higher than the previous peak in mid-September, 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 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.

Section 4: Clinical severity by vaccination status

Figure 5. COVID-19 cases by outcome, notification date and vaccination status with 7 day backward rolling average, NSW, from 16 June to 8 January 2021[1]

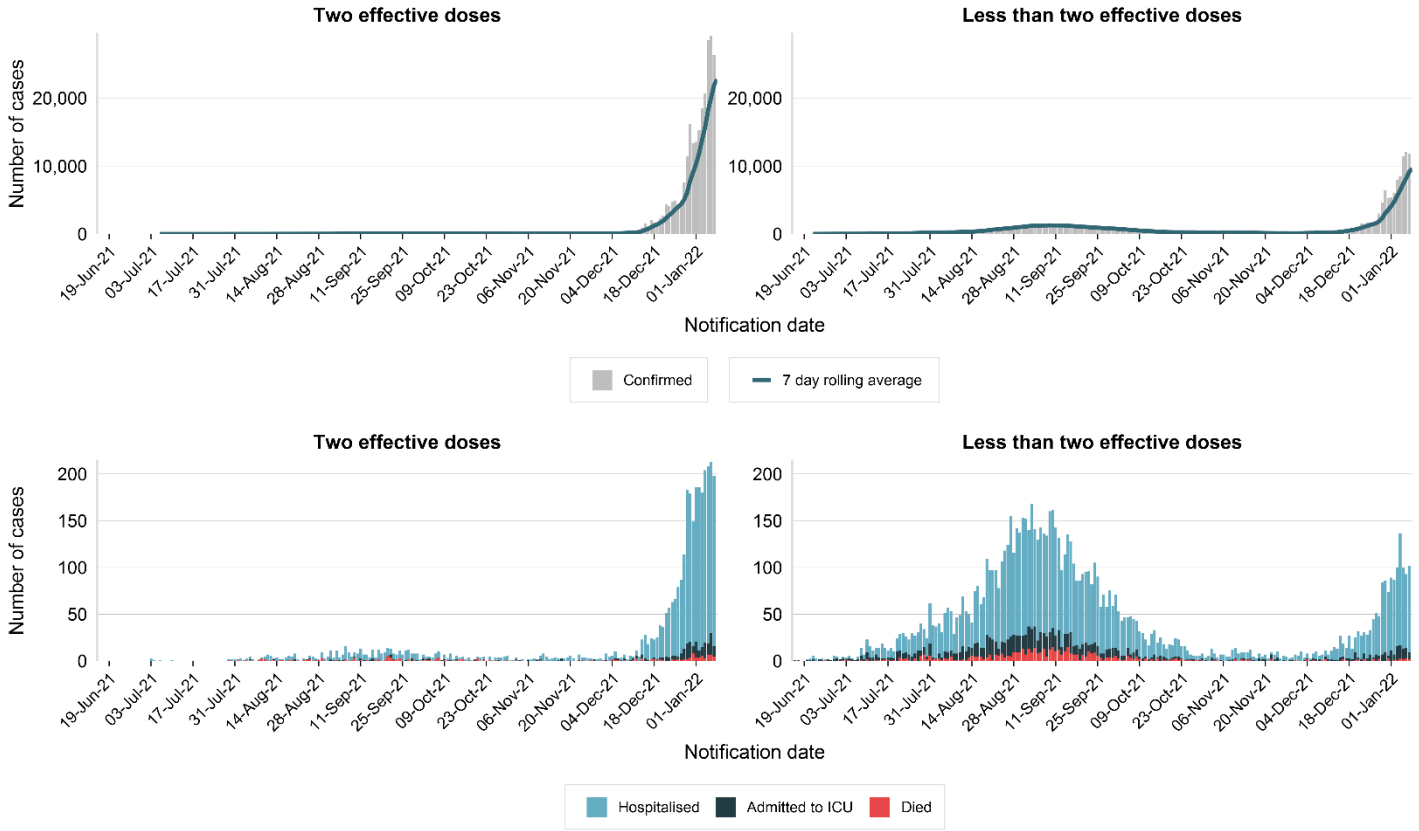


Table 5. Hospitalisations, ICU admissions and deaths among cases diagnosed with COVID-19, by vaccination status, NSW, from 26 November 2021 to 8 January 2022

Vaccination status	Total cases	Hospitalised (% of total cases)	Hospitalised and in ICU (% of total cases)	Death (% of total cases)
Two effective doses	267,381	2,627 (1.0%)	215 (0.1%)	67 (<0.1%)
One effective dose	2,578	80 (3.1%)	12 (0.5%)	3 (0.1%)
No effective dose	3,552	315 (8.9%)	55 (1.5%)	21 (0.6%)
Under investigation	74,878	881 (1.2%)	106 (0.1%)	6 (<0.1%)
Not eligible for vaccination (aged 0-11 years)	30,667	197 (0.6%)	7 (<0.1%)	1 (<0.1%)
Total	379,056	4,100 (1.1%)	395 (0.1%)	98 (<0.1%)

- In the past week, 159,127 (70.2%) of all cases had received two effective doses (see Appendix C), reflective of the high proportion of community vaccination (91.5% of those aged 12+ years, at the start of this wave on 26 November 2021). Similar breakdowns by vaccination status for previous periods are in Appendix C.
- Among cases since 26 November 2021, although the *number* of hospitalisations, admissions to ICU and deaths is greater among those who had received two effective doses than those with no effective dose, the *proportion* of cases with these outcomes is still much higher among those with no effective dose.
- Among cases aged 12 years and over with no effective dose, 8.9% of cases were hospitalised, 1.5% of cases were admitted to ICU, and 0.6% of cases died. In comparison, among cases who had received two effective doses, 1.0% of cases were hospitalised, 0.1% were admitted to ICU, and less than 0.1% died.
- COVID-19 is relatively mild in most young children aged 0-11 years who are ineligible for vaccination: among cases in this group, 0.6% were hospitalised, less than 0.1% were admitted to ICU, and less than 0.1% have died.

[1] Figure dates are based on the date of the case's notification rather than the date they were hospitalised, admitted to ICU, or died. Cases are classified in the figure according to their most severe outcome (e.g., a person was admitted to hospital and then died is counted only as a death). Data are provided to 8 January 2022; because of the delay between onset and severe illness or death, outcomes are under-reported for the most recently notified cases. Note that the scale differs between the top and bottom panels to allow easier visualisation.

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, 1 January 2020 to 8 January 2022

Age-group (years)	1 Jan 2020 - 15 Jun 2021		16 Jun 2021 – 25 Nov 2021				26 Nov 2021 – 8 Jan 2022			
			Two effective doses		No effective doses		Two effective doses		No effective doses	
0-9	0%	(0 / 251)	-	-	<1%	(10 / 12,409)	-	-	<1%	(7 / 24,209)
10-19	<1%	(1 / 325)	<1%	(0 / 155)	<1%	(28 / 10,078)	<1%	(4 / 32,886)	<1%	(4 / 7,458)
20-29	<1%	(4 / 1,115)	<1%	(2 / 1,035)	1%	(96 / 10,144)	<1%	(12 / 88,028)	<1%	(4 / 865)
30-39	1%	(15 / 1,098)	<1%	(5 / 1,406)	2%	(152 / 8,023)	<1%	(16 / 52,145)	1%	(7 / 643)
40-49	2%	(12 / 718)	<1%	(4 / 1,304)	3%	(178 / 5,516)	<1%	(20 / 36,605)	1%	(5 / 393)
50-59	4%	(30 / 710)	1%	(15 / 1,159)	7%	(261 / 3,795)	<1%	(23 / 30,100)	7%	(14 / 210)
60-69	7%	(44 / 656)	2%	(17 / 813)	13%	(228 / 1,772)	<1%	(47 / 16,626)	8%	(15 / 186)
70-79	12%	(46 / 394)	7%	(37 / 565)	23%	(163 / 708)	1%	(75 / 7,264)	10%	(15 / 157)
80-89	21%	(26 / 122)	11%	(34 / 298)	36%	(129 / 359)	2%	(52 / 2,964)	8%	(6 / 74)
90+	38%	(16 / 42)	21%	(24 / 114)	45%	(29 / 64)	3%	(23 / 763)	12%	(3 / 24)
Total	4%	(194 / 5,431)	2%	(138 / 6,849)	2%	(1,274 / 52,868)	<1%	(272 / 267,381)	<1%	(80 / 34,219)

* For this table, no effective dose also includes those who are ineligible for vaccination (aged 0-11 years).

- 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.
- In the period from 16 June to 25 November 2021, the likelihood of a severe outcome for individuals with no effective dose is similar to the pre-delta period, while the likelihood of a severe outcome is substantially reduced amongst cases with two 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.
- 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 since 26 November 2021, the *number* of cases with two effective doses who experience severe outcomes is reflective of the high number in the community who have received two doses. However, the *proportion* of cases with two effective doses who experience severe outcomes is still lower than that for cases with no effective dose 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 no effective dose 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.

Section 5: Deaths following recent infection with COVID-19

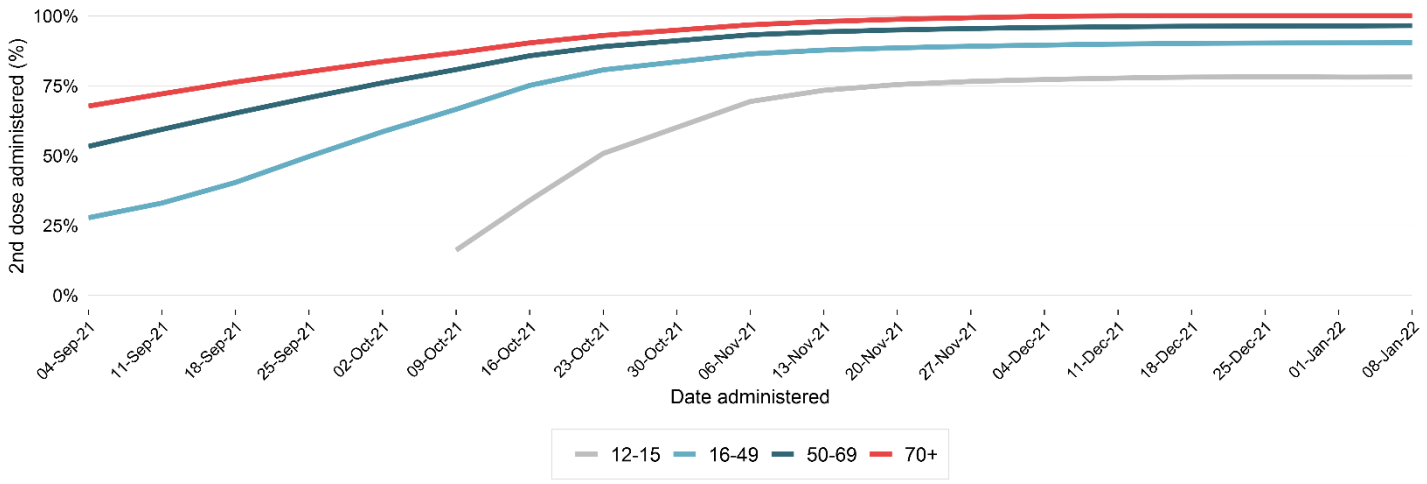
Table 7. Deaths following recent infection with COVID-19, by age group and location, 26 November 2021 to 8 January 2022

Age-group (years)	Number of deaths	Case fatality rate	Location of death	
			Health care facility	Aged care facility
0-9	1	<1%	0	0
10-19	0	0%	0	0
20-29	1	<1%	1	0
30-39	1	<1%	1	0
40-49	0	0%	0	0
50-59	3	<1%	3	0
60-69	8	<1%	8	0
70-79	29	<1%	25	4
80-89	30	<1%	28	2
90+	25	2%	17	7
Total	98	<1%	83	13

- Since the start of the pandemic, 0.2% of cases (738 people) have died.
- This includes 122 residents of aged care facilities.
- Among cases since 26 November, 21.4% (21/98) 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 0.8% (3,052/379,056) of cases.
- In the period from 16 June to 25 November 2021, the median delay between a person becoming ill and death was 15 days. Between 16 June 2021 and 8 January 2022, the median has dropped to 13 days.
- In the week ending 8 January 2022, there were 63 deaths in people diagnosed with COVID-19, including
  - 44 people who had received two effective doses (1 in their 20s, 5 in their 60s, 14 in their 70s, 13 in their 80s, and 11 aged 90+ years),
  - 14 people who had received no effective dose (1 in their 30s, 3 in their 50s, 1 in their 60s, 4 in their 70s, 2 in their 80s, and 3 aged 90+ years),
  - 4 people whose vaccination status is under investigation (2 in their 70s, 1 in their 80s, and 1 aged 90+ years), and
  - 1 person who was ineligible for vaccination (aged 0-11 years).
- The majority of deaths in cases since 26 November 2021 have occurred in hospital (83/98, 85%).
- There have been two deaths at home. Among these, both had been previously diagnosed with COVID-19.

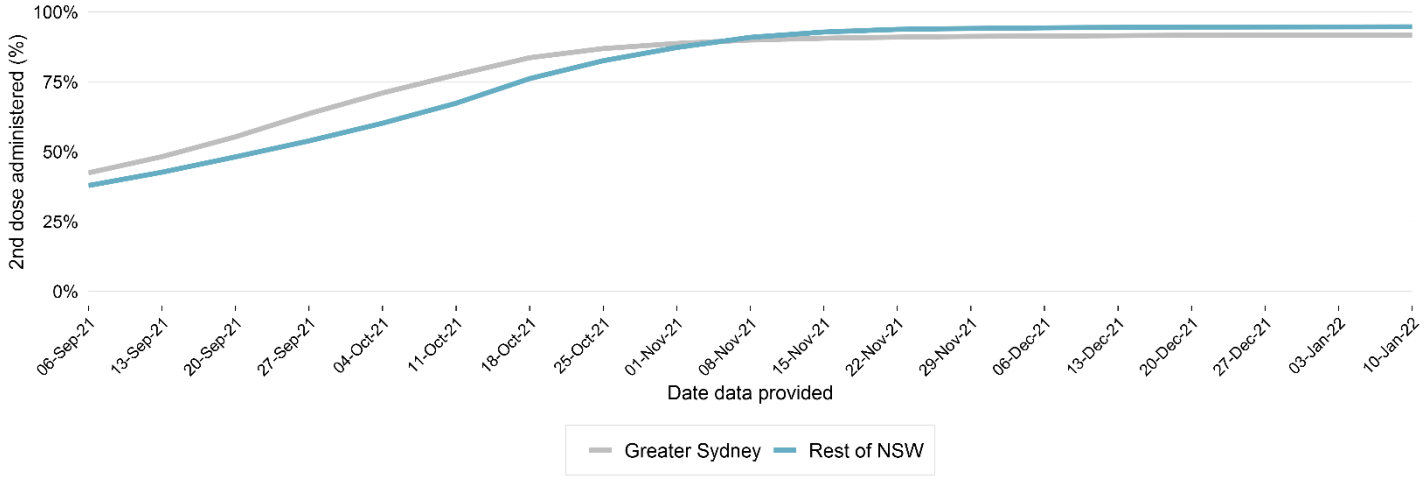
Section 6: Vaccination coverage in NSW

Figure 6. Proportion who have received two doses of COVID-19 vaccine, by age range and time, NSW, 4 September 2021 to 8 January 2021



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

Figure 7. Proportion who have received two doses, by region and time, for those aged 15 and over, NSW, 6 September 2021 to 10 January 2022



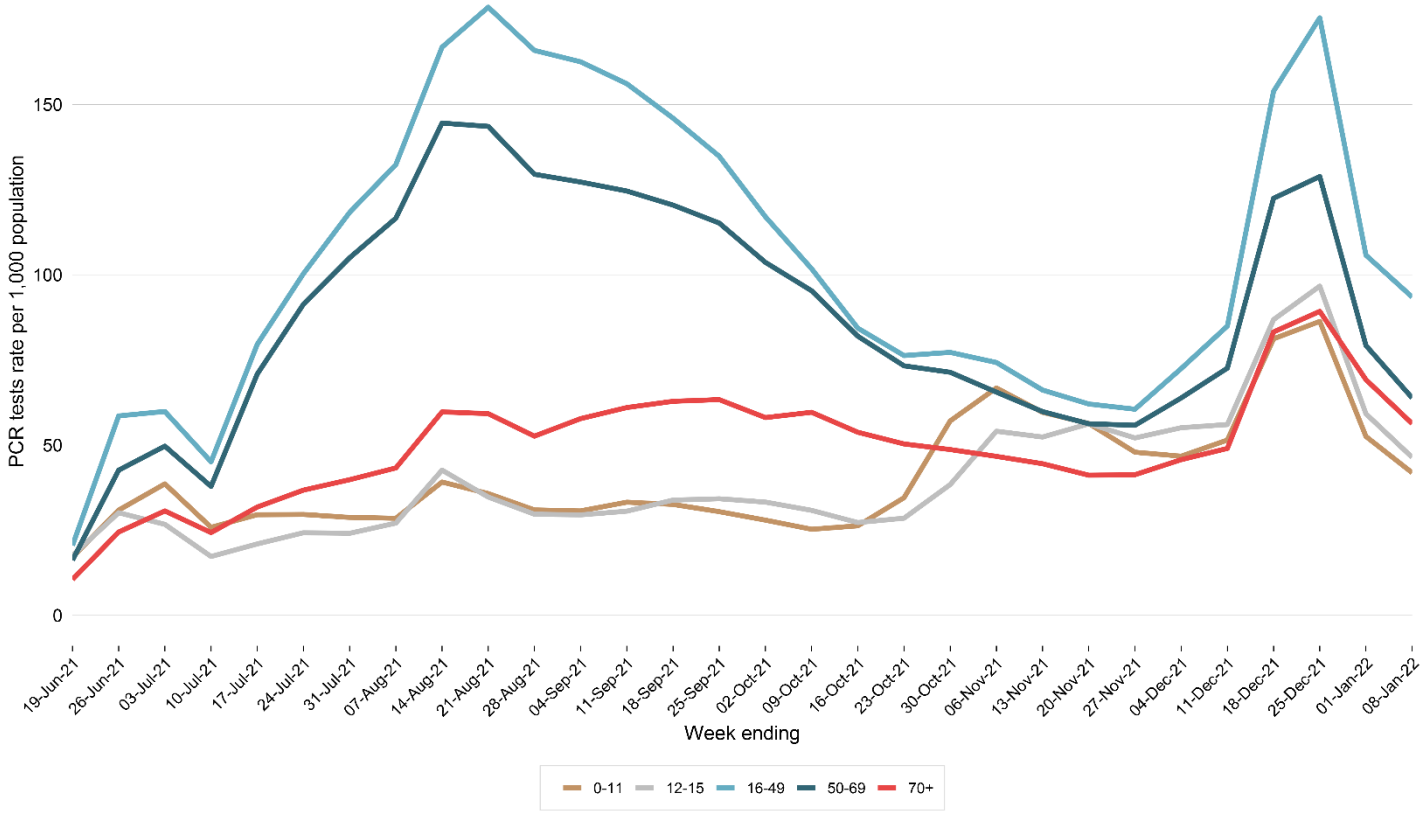
Source: https://www.health.gov.au/resources/collections/covid-19-vaccination-geographic-vaccination-rates-sa4

- The proportion of the NSW population who have received two vaccine doses has increased substantially in the last four months, reaching over 93% of those aged 16 and over by 8 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 75-78%.
- The highest vaccination rates have been achieved among those aged 70+ and 50-69 years, who have a vaccination rate above 95%.
- Vaccination rates in Greater Sydney were higher than those in the Rest of NSW to early November 2021, and since then have been higher outside Greater Sydney[2].

[2] Federal geographic vaccination data is provided publicly at the level of 28 geographic regions (Australian Bureau of Statistics Statistical Area Level 4, or SA4), designated as Greater Sydney or Rest of NSW. The total population and proportion with two vaccine doses (truncated at > 95%) is provided. Data presented in the graph are calculated as a weighted average across SA4s within each designation. Due to the truncation of the source data at 95%, the maximum vaccination rate over time will also be 95%. Other geographic representations of NSW vaccination data use other sources and will not exactly correspond to this figure.

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

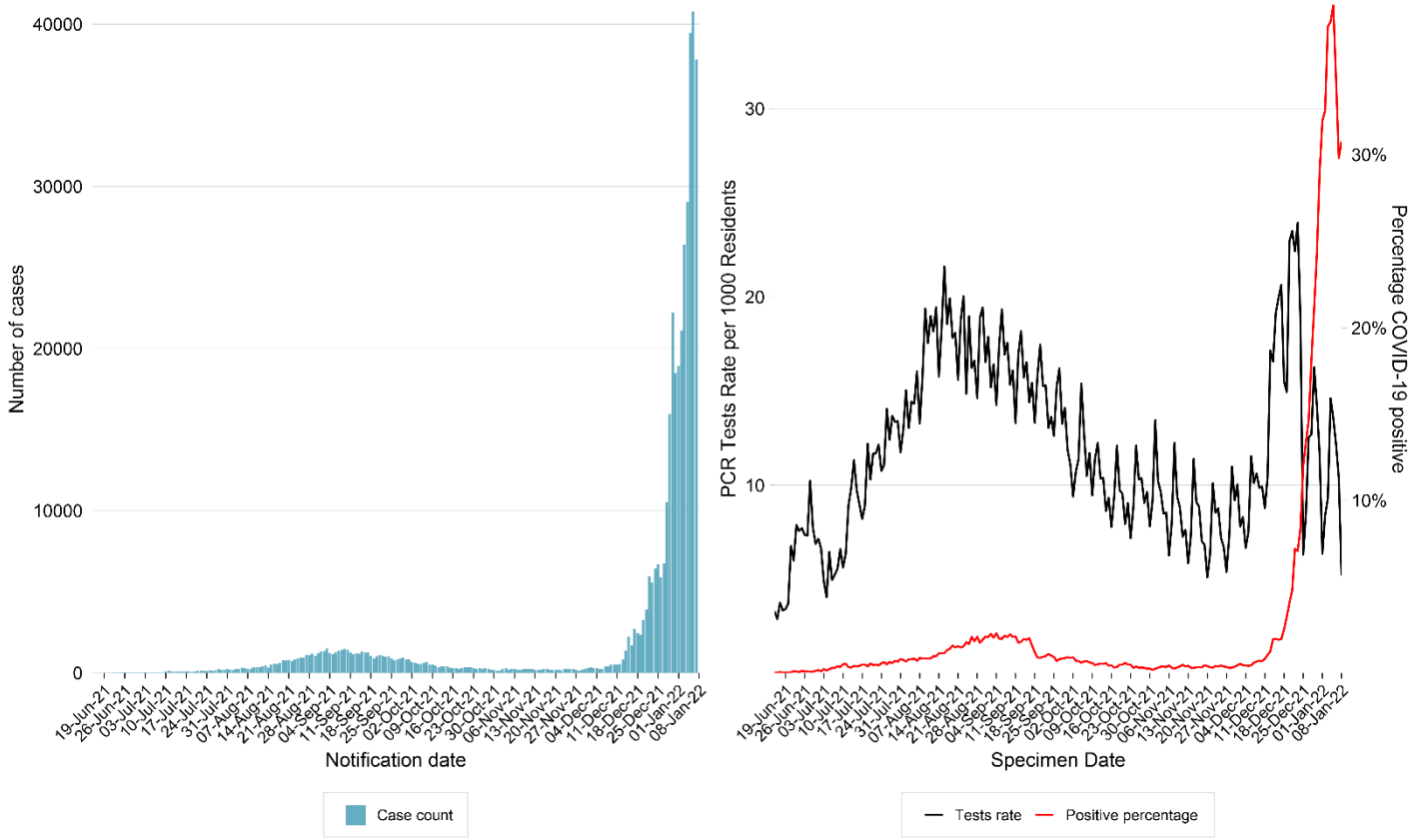
Figure 8. Number of PCR tests per 1,000 population, by age group, NSW, 16 June 2021 to 8 January 2022



- During the wave between 16 June and 25 November 2021, there was a sustained increase in the number of tests reported for people aged 16 years and over, which peaked in August. The greatest testing rate was among those aged 16-49 years.
- In December 2021 there was a large and sustained increase in testing for all age groups. In the week ending 1 January, testing rates decreased for all age groups. This may be due to difficulties accessing PCR testing facilities, using rapid antigen tests instead, and/or delays in processing and reporting PCR tests to NSW Health.

Section 8: Testing and positivity rates, NSW

Figure 9. Cases, testing rates per 1000 population, and percentage of tests which were positive for COVID-19, NSW, 16 June 2021 to 8 January 2022



- There were 812,789 tests reported in the week ending 8 January 2022, down 4% from the 848,201 reported in the week ending 1 January 2022.
- This may be due to fewer people being able to access testing, delays in reporting tests to NSW Health and the use of Rapid Antigen Tests instead of PCR.
- Test positivity rates have generally between 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 was undetected COVID-19 transmission in the community.
- From 5 January, people who receive a positive Rapid Antigen Test no longer need to have a PCR test (except in limited circumstances). This is likely to result in fewer PCR tests being reported, and in particular positive PCR tests.
- The decreased test positivity in the week ending 8 January 2022 should not be interpreted to indicate that the peak of transmission has passed; rather, it more likely reflects cases using rapid antigen tests instead of accessing PCR testing.

Section 9: Testing and positivity rates, Greater Sydney, Central Coast and Illawarra Shoalhaven LHDs

Figure 10. Cases, testing rates per 1000 population, and percentage of tests which were positive for COVID-19, by LHD of residence, metropolitan LHDs, NSW, 16 June 2021 to 8 January 2022

Section 10: Testing and positivity rates, rural and regional LHDs

Figure 11. Cases, testing rates per 1000 population, and percentage of tests which were positive for COVID-19, by LHD of residence, rural and regional LHDs, NSW, 16 June 2021 to 8 January 2022

- Note that the axes may differ within and between figures
- Testing rates and positivity rates show larger deviations in rural compared to metropolitan LHDs because their population is small.
- The increased case numbers, increased testing, and increased test positivity from December 2021 are apparent in all LHDs.

Section 11: Case rates in Local Government Areas

Table 8a. Top 20 metropolitan LGAs of residence, ordered by total COVID-19 cases in the last 7 days, per 100,000 population rate, NSW, 26 November 2021 to 8 January 2022

LGA name	Last 7 days		26 Nov 2021 - 8 Jan 2022	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Strathfield	2,686	5,724	4,103	8,744
Hunters Hill	760	5,073	1,376	9,186
Waverley	3,751	5,049	6,885	9,267
Cumberland	11,511	4,766	18,077	7,485
Fairfield	9,133	4,314	14,535	6,866
Liverpool	9,809	4,310	15,637	6,871
Randwick	6,680	4,292	11,892	7,640
Sydney	10,243	4,158	19,565	7,942
Bayside	7,398	4,147	12,530	7,024
Canterbury-Bankstown	15,352	4,062	26,322	6,965
Blacktown	14,931	3,987	23,066	6,160
Lane Cove	1,502	3,741	2,703	6,731
Campbelltown	6,107	3,573	10,283	6,015
Georges River	5,648	3,542	9,616	6,030
Penrith	7,350	3,451	11,593	5,443
Camden	3,436	3,387	5,906	5,822
Woollahra	1,955	3,292	3,745	6,306
Sutherland Shire	7,478	3,243	13,887	6,022
The Hills Shire	5,725	3,217	9,948	5,590
Burwood	1,233	3,036	1,948	4,797

Table 8b. Top 20 regional and rural LGAs of residence, ordered by total COVID-19 cases in the last 7 days, per 100,000 population rate, NSW, 26 November 2022 to 8 January 2022

LGA name	Last 7 days		26 Nov 2021 - 8 Jan 2022	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Byron	1,152	3,284	2,673	7,620
Maitland	2,575	3,024	4,628	5,434
Newcastle	4,066	2,456	9,610	5,804
Cessnock	1,423	2,372	2,260	3,768
Singleton	5,38	2,293	924	3,938
Port Stephens	1,611	2,192	2,621	3,567
Junee	144	2,155	174	2,604
Warren	58	2,151	83	3,077
Tweed	2,081	2,145	2,562	2,641
Narrabri	279	2,124	416	3,167
Moree Plains	275	2,074	453	3,416
Orange	873	2,056	1,296	3,053
Lake Macquarie	4,162	2,021	8,809	4,278
Albury	1,010	1,858	1,215	2,235
Tamworth Regional	1,132	1,810	1,575	2,518
Port Macquarie-Hastings	1,514	1,791	2,228	2,636
Bathurst Regional	776	1,779	898	2,059
Dubbo Regional	921	1,714	1,320	2,457
Ballina	749	1,678	1,148	2,572
Kempsey	467	1,570	710	2,387

- The top 20 metropolitan LGAs contributed 59% of all cases in the week ending 8 January.
- The top 20 regional and rural LGAs contributed another 11% of cases.
- The LGAs with the highest case rates per 100,000 population are predominantly metropolitan LGAs, with 19 of the top 20 LGA case rates being in metropolitan areas.
- The case numbers in some regional LGAs are relatively small, but because the population is also small the case rate is high.

Section 12: Aboriginal people

Figure 12. Number of confirmed COVID-19 infections among Aboriginal people by date, NSW, 16 June 2021 to 8 January 2022

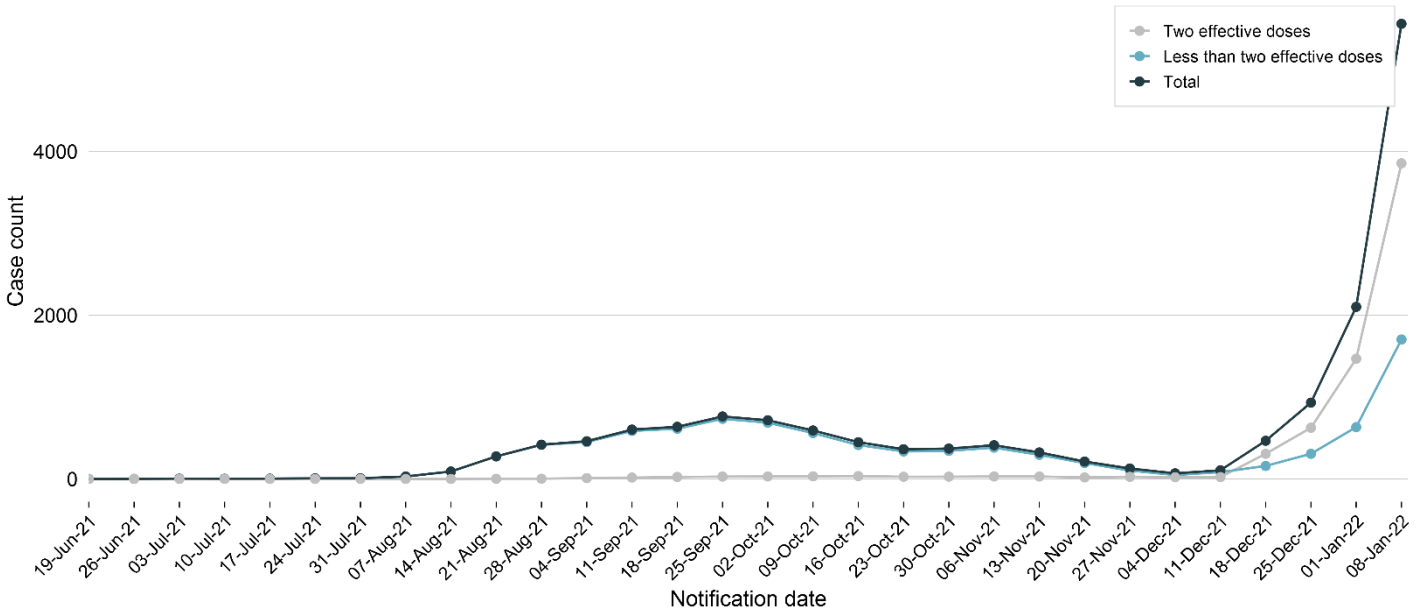


Table 9. Demographics of infections among Aboriginal people by gender, age, and vaccination status, NSW, 16 June 2021 to 8 January 2022

	Week ending				26 Nov 2021 - 8 Jan 2022	16 Jun 2021 - 25 Nov 2021
	8 Jan	1 Jan	25 Dec	18 Dec		
Gender						
Female	3,091 (56%)	1,147 (55%)	492 (53%)	242 (52%)	5,063 (55%)	3,496 (51%)
Male	2,463 (44%)	953 (45%)	439 (47%)	224 (48%)	4,178 (45%)	3,364 (49%)
Non-specified or non-binary	3 (<1%)	1 (<1%)	1 (<1%)	0 (0%)	7 (<1%)	1 (<1%)
Age group						
0-9	703 (13%)	279 (13%)	99 (11%)	37 (8%)	1,180 (13%)	1,804 (26%)
10-19	1,171 (21%)	432 (21%)	217 (23%)	113 (24%)	1,974 (21%)	1,597 (23%)
20-29	1,771 (32%)	634 (30%)	334 (36%)	196 (42%)	2,982 (32%)	1,224 (18%)
30-39	782 (14%)	308 (15%)	120 (13%)	57 (12%)	1,286 (14%)	960 (14%)
40-49	520 (9%)	201 (10%)	92 (10%)	33 (7%)	856 (9%)	643 (9%)
50-59	370 (7%)	157 (7%)	45 (5%)	19 (4%)	597 (6%)	387 (6%)
60+	240 (4%)	90 (4%)	25 (3%)	11 (2%)	373 (4%)	246 (4%)
Vaccination status						
Two effective doses	3,854 (69%)	1,468 (70%)	625 (67%)	307 (66%)	6,299 (68%)	343 (5%)
One effective dose	49 (1%)	19 (1%)	10 (1%)	12 (3%)	98 (1%)	475 (7%)
No effective dose	287 (5%)	116 (6%)	67 (7%)	39 (8%)	557 (6%)	3,324 (48%)
Under investigation*	480 (9%)	168 (8%)	97 (10%)	61 (13%)	819 (9%)	552 (8%)
Not eligible for vaccination (aged 0-11 years)	887 (16%)	330 (16%)	133 (14%)	47 (10%)	1,475 (16%)	2,167 (32%)
Total	5,557 (100%)	2,101 (100%)	932 (100%)	466 (100%)	9,241 (100%)	6,860 (100%)

* Vaccination status is updated regularly using both the Australian Immunisation Register and the patient's interview.

- Since 26 November 2021 there have been 9,241 Aboriginal people diagnosed with COVID-19, representing 2.4% 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.

Section 13: Correctional settings

Figure 13. Number of confirmed COVID-19 infections among people residing in correctional settings by date, NSW, 16 June 2021 to 8 January 2022

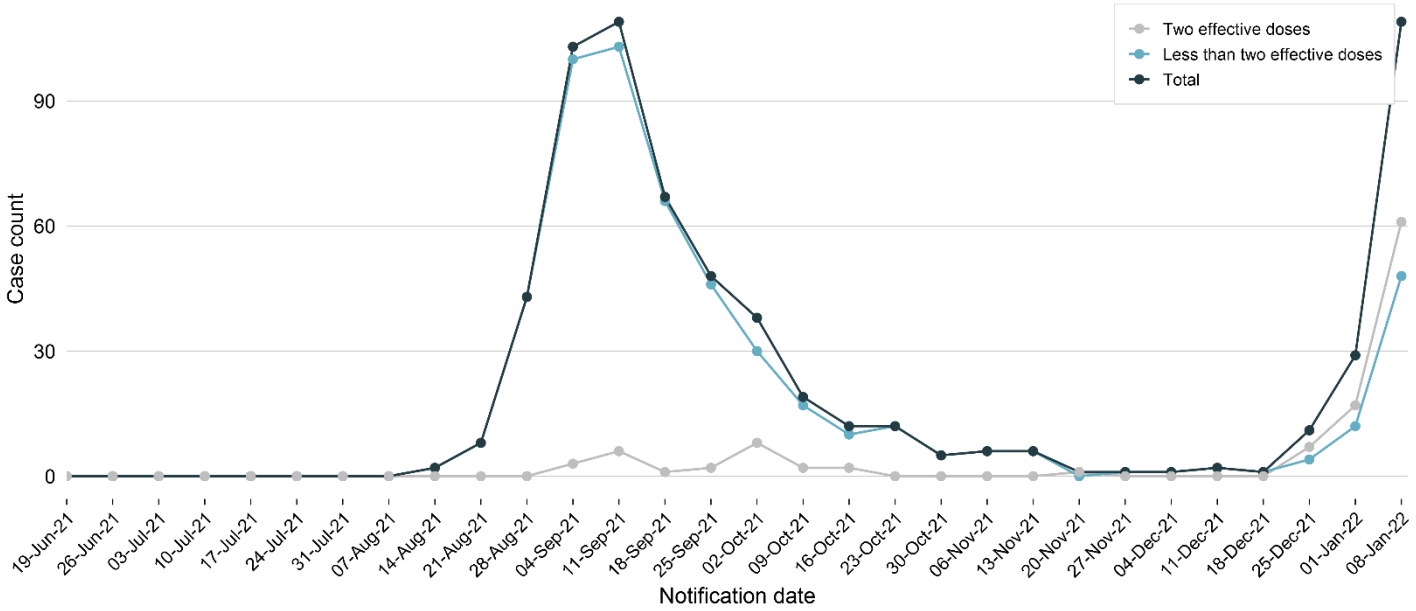


Table 10. Demographics of infections in correctional settings by gender, age, and vaccination status, NSW, 16 June to 8 January 2022

	Week ending				26 Nov 2021 – 8 Jan 2022	16 Jun 2021 - 25 Nov 2021
	8 Jan	1 Jan	25 Dec	18 Dec		
Gender						
Male	106 (97%)	26 (90%)	11 (100%)	1 (100%)	147 (96%)	453 (94%)
Female	3 (3%)	3 (10%)	0 (0%)	0 (0%)	6 (4%)	27 (6%)
Age group						
10-19	7 (6%)	1 (3%)	4 (36%)	0 (0%)	12 (8%)	28 (6%)
20-29	29 (27%)	8 (28%)	3 (27%)	1 (100%)	43 (28%)	142 (30%)
30-39	30 (28%)	12 (41%)	1 (9%)	0 (0%)	43 (28%)	169 (35%)
40-49	28 (26%)	7 (24%)	1 (9%)	0 (0%)	37 (24%)	95 (20%)
50-59	9 (8%)	1 (3%)	2 (18%)	0 (0%)	12 (8%)	35 (7%)
60-69	6 (6%)	0 (0%)	0 (0%)	0 (0%)	6 (4%)	7 (1%)
70-79	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (1%)
80-89	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)
Vaccination status						
Two effective doses	61 (56%)	17 (59%)	7 (64%)	0 (0%)	85 (56%)	25 (5%)
One effective dose	6 (6%)	0 (0%)	0 (0%)	0 (0%)	8 (5%)	59 (12%)
No effective dose	1 (1%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	267 (56%)
Under investigation*	41 (38%)	12 (41%)	4 (36%)	1 (100%)	59 (39%)	129 (27%)
Total	109 (100%)	29 (100%)	11 (100%)	1 (100%)	153 (100%)	480 (100%)

* Vaccination status is updated regularly using both the Australian Immunisation Register and the patient's interview.

- 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.
- Cases in correctional settings more than tripled from the week ending 1 January 2022 to the week ending 8 January 2022.

Section 14: Other respiratory infections in NSW

Figure 14. Proportion of tests positive for influenza, NSW, 1 January 2016 to 2 January 2022

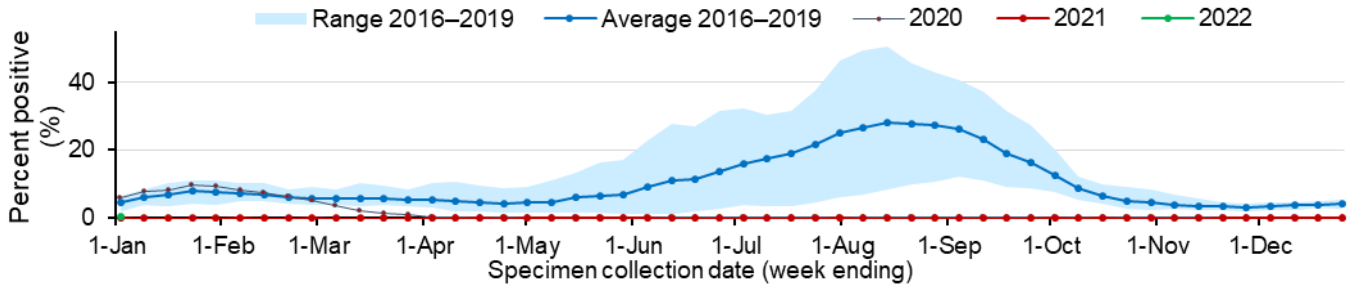


Figure 15. Proportion of FluTracker participants reporting influenza-like illness, NSW, 1 January 2016 to 2 January 2022

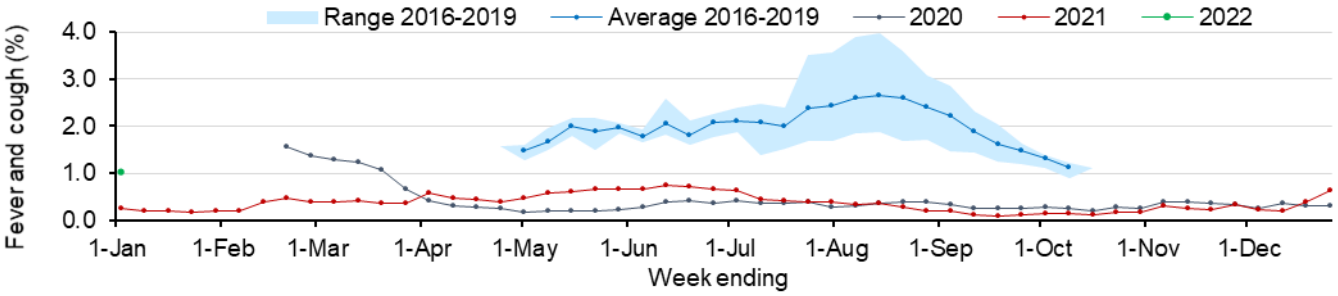


Figure 16. Emergency Department pneumonia presentations, NSW, 1 January 2017 to 9 January 2022

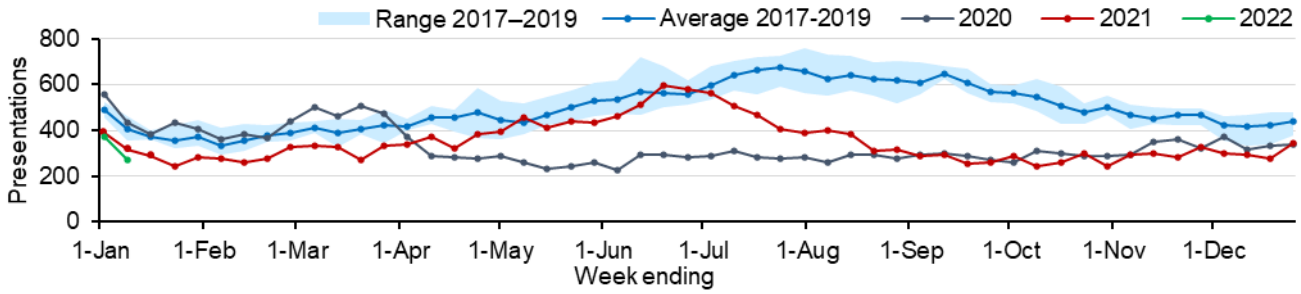
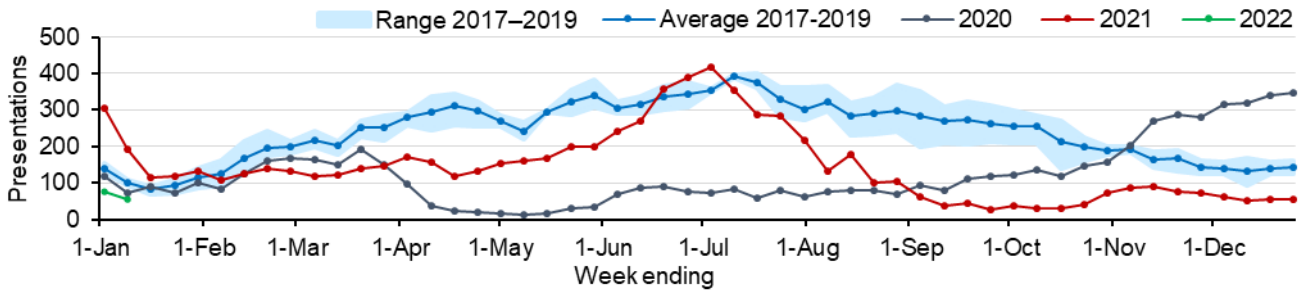


Figure 17. Emergency Department bronchiolitis presentations, NSW, 1 January 2017 to 9 January 2022



- The percentage of influenza tests that were positive has been very low (<0.01%) relative to the usual seasonal range, indicating limited influenza transmission in the community. However, the number of influenza cases has increased since mid-November, with 53 reported in the week ending 2 January 2022.
- In the week ending 2 January 2022, 16,121 people were surveyed, and 168 people (1.0%) reported flu-like symptoms.
- In the last four weeks, 69% (243/354) of new cases of flu-like illness reported having a COVID-19 test.
- Improved hygiene and social distancing measures implemented during the COVID-19 pandemic have impacts 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 to remain below the seasonal range for this time of year.
- Data are pending from one lab for several weeks from 5 December 2021 and are subject to change.

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

		Week ending				Total since January 2021	
		08 Jan 2022		01 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
Central Coast	*LHD Total**	18,954	7.67	21,485	8.70	740,223	299.68
Illawarra Shoalhaven	Kiama	1,569	9.58	1,940	11.85	42,496	259.59
	Shellharbour	4,603	8.98	6,885	13.43	168,170	328.05
	Shoalhaven	5,019	6.79	6,600	8.92	143,506	194.05
	Wollongong	13,280	8.70	22,374	14.65	507,968	332.70
	*LHD Total**	24,471	8.33	37,799	12.87	862,140	293.51
Nepean Blue Mountains	Blue Mountains	4,318	7.80	5,628	10.16	187,953	339.37
	Hawkesbury	4,735	10.05	4,474	9.50	230,594	489.51
	Lithgow	792	5.24	918	6.07	24,115	159.45
	Penrith	19,372	12.99	22,053	14.79	784,574	526.26
	*LHD Total**	28,971	10.59	32,772	11.97	1,212,619	443.06
Northern Sydney	Hornsby	6,113	5.74	7,781	7.31	268,172	251.94
	Hunters Hill	1,742	16.61	2,599	24.79	67,317	641.97
	Ku-ring-gai	8,447	9.49	11,559	12.99	307,936	345.97
	Lane Cove	3,999	14.23	5,258	18.71	156,322	556.14
	Mosman	1,852	8.54	2,477	11.42	62,077	286.24
	North Sydney	3,194	6.08	4,133	7.87	126,040	240.01
	Northern Beaches	17,911	9.36	21,445	11.20	682,278	356.38
	Parramatta#	17,153	9.53	18,747	10.41	678,991	377.14
	Ryde	9,208	10.02	11,450	12.46	352,787	383.92
	Willoughby	3,767	6.63	5,005	8.81	131,881	232.05
	*LHD Total**	58,879	8.80	75,232	11.24	2,262,017	338.05
South Eastern Sydney	Bayside	15,097	12.09	17,810	14.26	565,126	452.55
	Georges River	13,212	11.84	16,221	14.53	479,908	429.91
	Randwick	14,565	13.37	16,138	14.81	535,126	491.15
	Sutherland Shire	18,357	11.37	23,395	14.49	599,587	371.43
	Sydney#	19,982	11.59	24,720	14.34	748,922	434.31
	Waverley	6,459	12.42	8,441	16.23	261,501	502.82
	Woollahra	4,024	9.68	5,607	13.49	193,159	464.65
	*LHD Total**	78,355	11.67	96,138	14.32	2,878,987	428.82
South Western Sydney	Camden	8,403	11.83	10,091	14.21	389,218	548.15
	Campbelltown	15,949	13.33	15,572	13.01	622,138	519.92
	Canterbury-Bankstown#	36,330	13.73	41,978	15.87	1,654,047	625.25
	Fairfield	17,797	12.01	17,294	11.67	917,539	619.18
	Liverpool	20,378	12.79	20,902	13.12	914,888	574.28
	Wingecarribee	2,639	7.37	3,695	10.32	89,723	250.67
	Wollondilly	2,510	6.75	2,804	7.54	105,295	283.02
	*LHD Total**	85,621	11.78	91,744	12.62	3,879,510	533.65
Sydney	Burwood	2,931	10.31	3,161	11.12	101,760	357.95
	Canada Bay	6,695	9.96	8,576	12.75	260,781	387.77
	Canterbury-Bankstown#	36,330	13.73	41,978	15.87	1,654,047	625.25
	Inner West	12,901	9.18	17,333	12.33	539,604	383.87
	Strathfield	6,326	19.26	6,486	19.75	218,799	666.09

		Week ending				Total since January 2021	
		08 Jan 2022		01 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[#]	19,982	11.59	24,720	14.34	748,922	434.31
	LHD Total[*]	59,818	12.26	71,720	14.70	2,406,790	493.46
Western Sydney	Blacktown	36,351	13.87	38,205	14.58	1,409,668	537.80
	Cumberland	25,897	15.32	26,020	15.39	1,143,270	676.23
	Parramatta[#]	17,153	9.53	18,747	10.41	678,991	377.14
	The Hills Shire	15,993	12.84	19,397	15.57	579,514	465.18
	LHD Total[*]	93,821	12.72	99,788	13.53	3,751,284	508.72
Far West	Balranald	31	1.89	66	4.03	2,395	146.34
	Broken Hill	1,065	8.70	964	7.88	33,742	275.78
	Central Darling	74	5.75	80	6.21	5,042	391.67
	Wentworth	180	3.65	353	7.15	10,735	217.44
	LHD Total[*]	1,350	6.40	1,463	6.93	51,914	246.03
Hunter New England	Armidale Regional	1,121	5.20	1,639	7.61	39,079	181.38
	Cessnock	3,251	7.74	3,068	7.31	79,350	188.98
	Dungog	270	4.09	259	3.93	9,000	136.44
	Glen Innes Severn	100	1.61	258	4.15	6,722	108.25
	Gunnedah	714	8.04	522	5.88	13,428	151.27
	Gwydir	60	1.60	130	3.47	3,204	85.51
	Inverell	650	5.50	452	3.82	18,500	156.47
	Lake Macquarie	11,816	8.20	12,385	8.59	403,719	280.11
	Liverpool Plains	241	4.36	260	4.70	7,046	127.37
	Maitland	7,361	12.35	5,961	10.00	204,778	343.49
	Mid-Coast	4,751	7.23	3,851	5.86	104,672	159.35
	Moree Plains	1,065	11.47	1,328	14.31	23,367	251.73
	Muswellbrook	609	5.31	931	8.12	16,422	143.25
	Narrabri	1,103	12.00	1,137	12.37	12,262	133.36
	Newcastle	11,958	10.32	12,459	10.75	360,510	311.05
	Port Stephens	4,452	8.66	3,709	7.21	114,134	221.89
	Singleton	1,068	6.50	1,795	10.93	38,750	235.95
	Tamworth Regional	4,085	9.33	3,686	8.42	95,269	217.61
	Tenterfield	90	1.95	178	3.86	4,329	93.79
	Upper Hunter Shire	577	5.81	803	8.09	13,682	137.84
	Uralla	124	2.95	217	5.16	4,807	114.22
	Walcha	104	4.74	189	8.62	3,217	146.64
	LHD Total[*]	55,538	8.33	55,178	8.28	1,575,642	236.35
Mid North Coast	Bellingen	239	2.63	545	5.99	11,523	126.67
	Coffs Harbour	2,669	4.93	3,905	7.22	70,005	129.41
	Kempsey	1,433	6.88	1,524	7.32	47,165	226.52
	Nambucca	553	3.99	646	4.66	15,837	114.24
	Port Macquarie-Hastings	4,648	7.86	4,231	7.15	98,105	165.81
	LHD Total[*]	9,542	6.04	10,851	6.87	242,635	153.60
Murrumbidgee	Albury	3,268	8.59	2,478	6.51	87,393	229.70
	Berrigan	87	1.42	106	1.73	4,768	77.84
	Bland	67	1.60	102	2.44	4,336	103.72
	Carrathool	47	2.40	105	5.36	1,403	71.61

		Week ending				Total since January 2021	
		08 Jan 2022		01 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	112	3.69	134	4.41	4,310	141.84
	Cootamundra-Gundagai Regional	279	3.55	345	4.39	10,181	129.46
	Edward River	78	1.23	284	4.47	9,787	153.91
	Federation	400	4.59	402	4.62	13,540	155.53
	Greater Hume Shire	402	5.34	415	5.51	13,609	180.62
	Griffith	1,360	7.19	1,537	8.12	26,648	140.84
	Hay	34	1.65	60	2.91	1,969	95.38
	Hilltops	879	6.71	826	6.31	26,107	199.40
	Junee	251	5.37	469	10.03	5,838	124.79
	Lachlan[#]	128	3.01	218	5.13	4,379	102.97
	Leeton	244	3.05	313	3.91	7,952	99.26
	Lockhart	73	3.17	91	3.96	3,501	152.25
	Murray River	56	0.66	241	2.84	6,169	72.73
	Murrumbidgee	95	3.46	95	3.46	2,851	103.98
	Narrandera	65	1.57	114	2.76	3,382	81.90
	Snowy Valleys	259	2.56	463	4.57	10,747	106.04
	Temora	184	4.17	142	3.22	4,509	102.13
	Wagga Wagga	2,384	5.22	2,981	6.53	96,110	210.40
	LHD Total[*]	10,651	5.10	11,752	5.63	346,445	166.02
	Ballina	1,780	5.70	2,354	7.54	61,296	196.21
	Byron	2,127	8.66	2,855	11.63	54,252	220.93
	Clarence Valley	1,476	4.08	1,959	5.42	45,340	125.38
	Kyogle	178	2.89	204	3.31	6,708	108.95
Northern NSW	Lismore	1,559	5.10	1,594	5.21	54,084	176.84
	Richmond Valley	838	5.10	673	4.10	28,383	172.80
	Tenterfield	90	1.95	178	3.86	4,329	93.79
	Tweed	6,014	8.86	4,975	7.33	91,785	135.18
	LHD Total[*]	14,003	6.45	14,647	6.74	342,812	157.79
	Bega Valley	1,297	5.37	822	3.41	27,521	114.04
	Eurobodalla	429	1.59	1,387	5.15	32,544	120.84
	Goulburn Mulwaree	2,590	11.88	2,132	9.78	46,542	213.57
Southern NSW	Queanbeyan-Palerang Regional	2,538	5.93	2,977	6.96	72,307	169.06
	Snowy Monaro Regional	1,682	11.55	813	5.59	30,019	206.22
	Upper Lachlan Shire	251	4.45	498	8.83	7,942	140.78
	Yass Valley	873	7.30	960	8.03	17,529	146.55
	LHD Total[*]	9,661	6.36	9,593	6.31	234,547	154.36
	Bathurst Regional	4,578	14.99	2,791	9.14	87,963	288.10
	Blayney	342	6.62	395	7.65	12,532	242.62
	Bogan	88	4.87	183	10.13	3,185	176.36
Western NSW	Bourke	233	12.85	246	13.57	7,865	433.81
	Brewarrina	53	4.70	78	6.92	2,671	236.85
	Cabonne	380	3.98	541	5.67	17,027	178.41
	Cobar	211	6.47	241	7.39	5,237	160.61

		Week ending				Total since January 2021	
		08 Jan 2022		01 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
	Coonamble	172	6.21	174	6.28	4,451	160.65
	Cowra	338	3.79	518	5.81	21,322	239.03
	Dubbo Regional	6,780	18.03	5,053	13.44	188,342	500.87
	Forbes	164	2.37	368	5.31	8,635	124.53
	Gilgandra	180	6.07	162	5.46	5,690	191.76
	Lachlan#	128	3.01	218	5.13	4,379	102.97
	Mid-Western Regional	819	4.63	1,476	8.35	36,623	207.19
	Narromine	500	10.96	478	10.48	13,636	298.91
	Oberon	200	5.28	311	8.21	9,353	246.93
	Orange	3,600	12.11	3,617	12.17	100,410	337.90
	Parkes	451	4.34	747	7.19	16,229	156.26
	Walgett	340	8.16	168	4.03	9,909	237.79
	Warren	328	17.37	302	16.00	7,896	418.24
	Warrumbungle Shire	413	6.36	445	6.85	12,851	197.87
	Weddin	43	1.70	116	4.59	3,287	129.97
	*LHD Total**	20,318	10.18	18,583	9.31	578,293	289.86
NSW Total	**NSW Total^**	570,042	10.07	648,801	11.46	21,367,175	377.32

Source - Notifiable Condition Information Management System, accessed as at 8pm 12 Jan 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: Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 2 January 2022

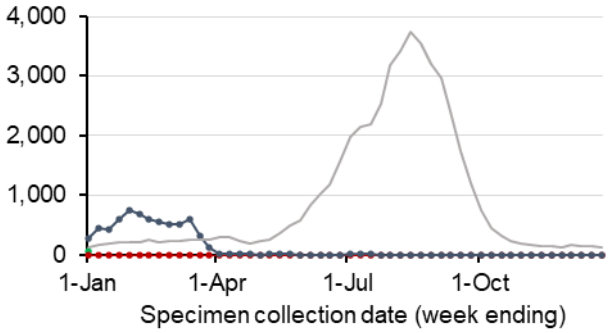
The reported testing numbers reflect the number of influenza PCR tests conducted. Not all samples are tested for all of the other respiratory viruses. Therefore, data presented may tend to under-represent current respiratory virus activity in NSW.

Testing numbers in NSW from 28 December 2020 – 2 January 2022

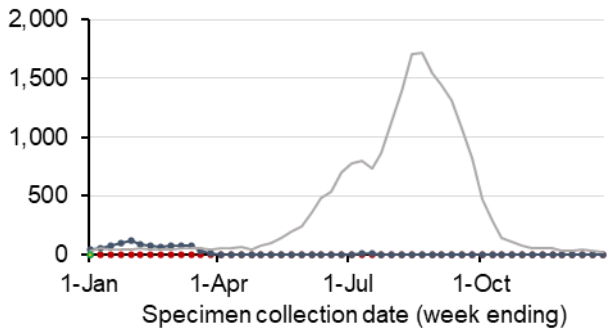
Specimen collection date	PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhino-virus	HMPV	Entero-virus
		No.	%Pos.	No.	%Pos.						
2021 Total	811,134	81	<0.01%	12	<0.01%	8,211	18,847	17,612	64,890	6,693	6,842
Month ending											
31 January*	63,814	1	<0.01%	0	-	416	88	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
Week ending											
5 December	10,675	3	< 0.01%	0	-	74	24	9	804	134	49
12 December	7,168	3	< 0.01%	0	-	67	27	8	639	197	53
19 December	7,968	7	0.01%	0	-	67	46	8	578	259	61
26 December	10,223	2	< 0.01%	2	< 0.01%	55	55	9	481	220	49
2 January	10,742	53	0.49%	0	0.00%	36	44	9	211	159	26

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 is pending from one lab 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

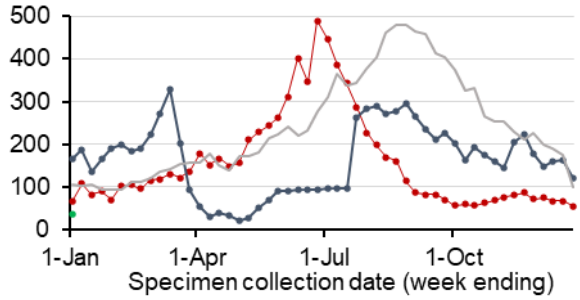
Influenza A



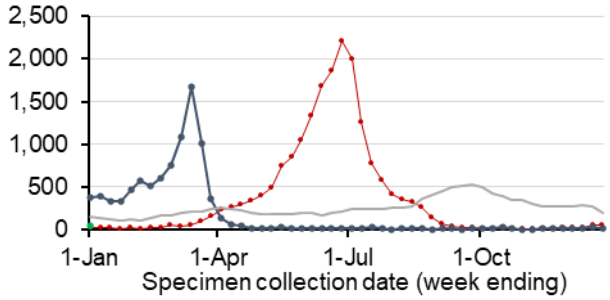
Influenza B



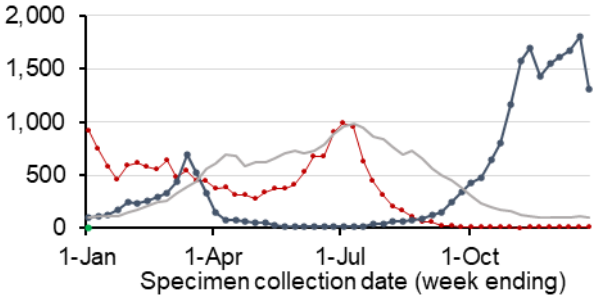
Adenovirus



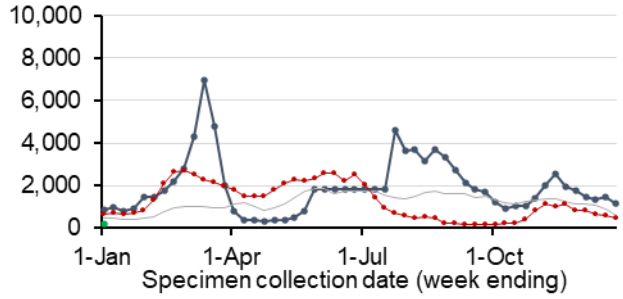
Parainfluenza



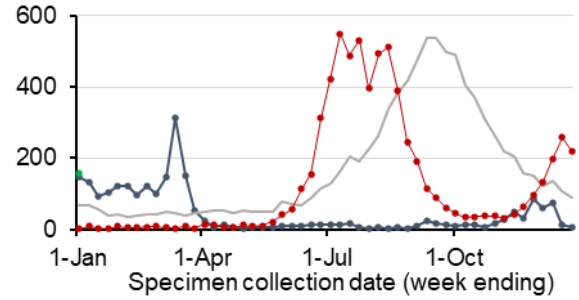
Respiratory Syncytial Virus



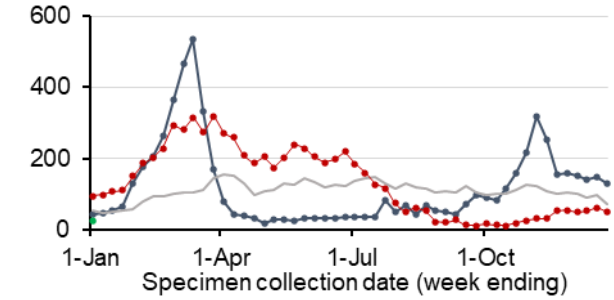
Rhinovirus



Human metapneumovirus



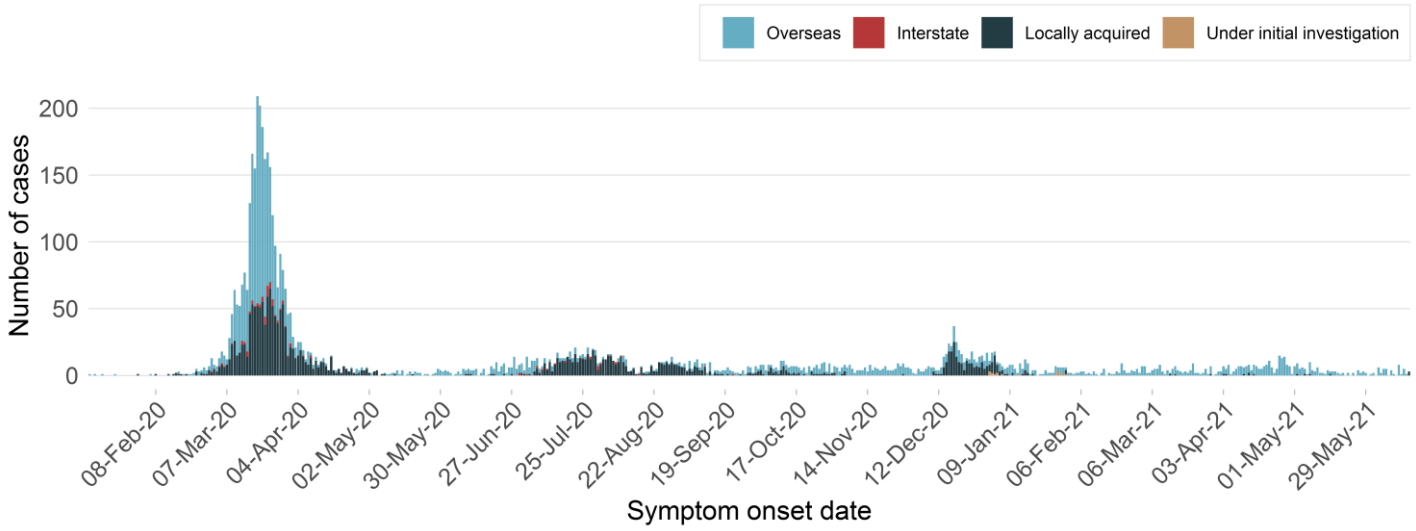
Enterovirus



Note: Preliminary laboratory data is 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 one lab for the weeks since 5 December due to high demand on testing laboratories in the past weeks, and are subject to change.

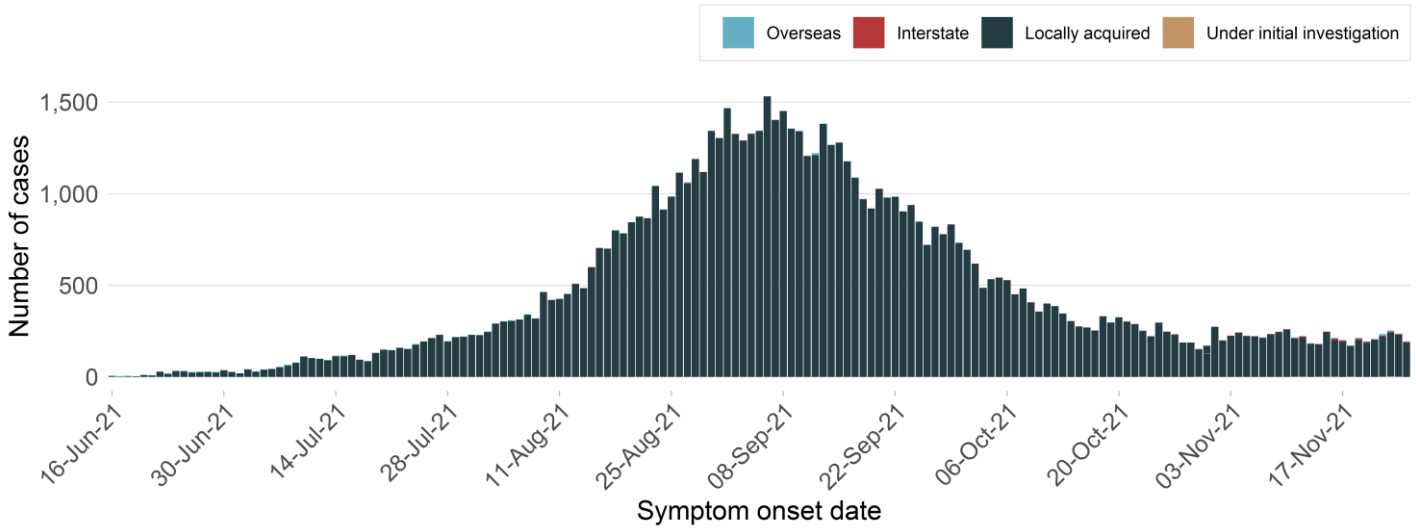
Appendix C: Additional tables and figures

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



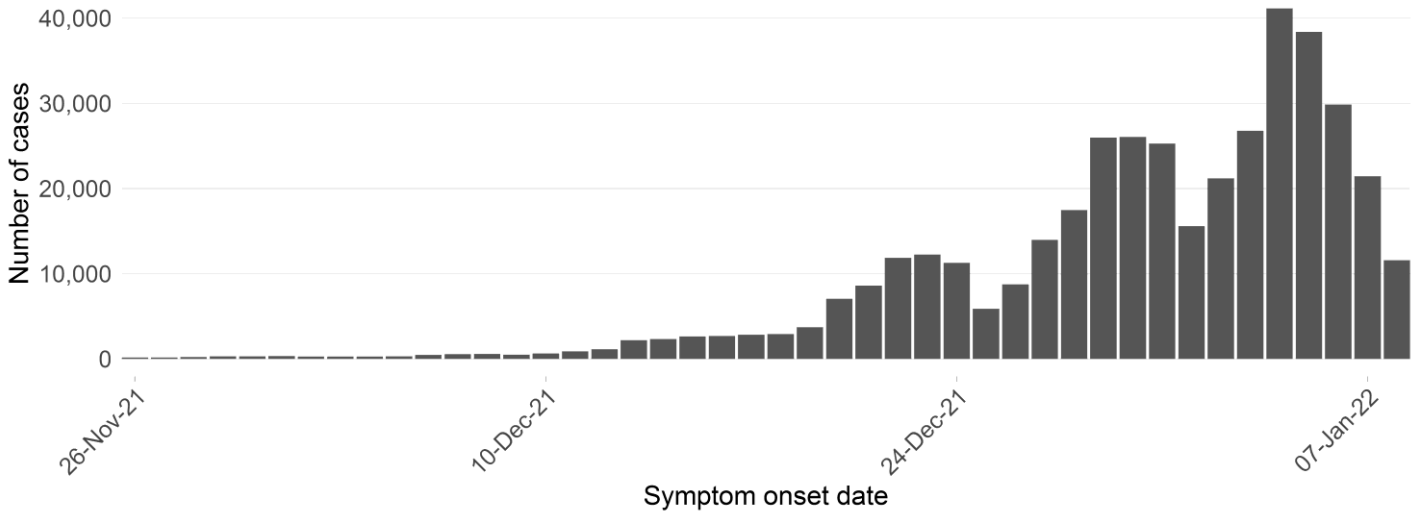
The date of the first positive test is used for cases who did not report symptoms.

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



The date of the first positive test is used for cases who did not report symptoms.

COVID-19 cases by reported illness onset, NSW, 25 November 2021 to 8 January 2022



The date of the first positive test is used for cases who did not report symptoms.

Total COVID-19 cases by LHD of residence and week reported, NSW, 12 December 2021 to 8 January 2022

	Local Health District	Week ending				Total
		8 Jan	1 Jan	25 Dec	18 Dec	
Metropolitan Local Health Districts	South Western Sydney	38,833	17,527	4,086	1,506	61,952
	Western Sydney	37,939	15,867	4,347	1,343	59,496
	South Eastern Sydney	36,533	19,506	7,024	1,723	64,786
	Sydney	25,465	12,417	5,416	1,198	44,496
	Northern Sydney	22,142	10,720	3,663	830	37,355
	Nepean Blue Mountains	9,847	4,082	1,008	201	15,138
	Illawarra Shoalhaven	8,292	2,846	779	198	12,115
	Central Coast	7,328	2,792	1,087	390	11,597
Rural and Regional Local Health Districts	Hunter New England	18,894	7,830	4,861	3,738	35,323
	Northern NSW	5,093	1,720	719	417	7,949
	Western NSW	3,831	908	344	165	5,248
	Mid North Coast	3,277	1,080	499	123	4,979
	Murrumbidgee	3,203	743	200	70	4,216
	Southern NSW	2,100	747	99	29	2,975
	Far West	192	53	22	11	278
	Correctional settings	109	29	11	1	150
	Hotel Quarantine*	3	2	0	0	5
	NSW#	226,672	100,786	34,565	12,013	374,036

* Includes people who were placed into Hotel Quarantine after time in the community.

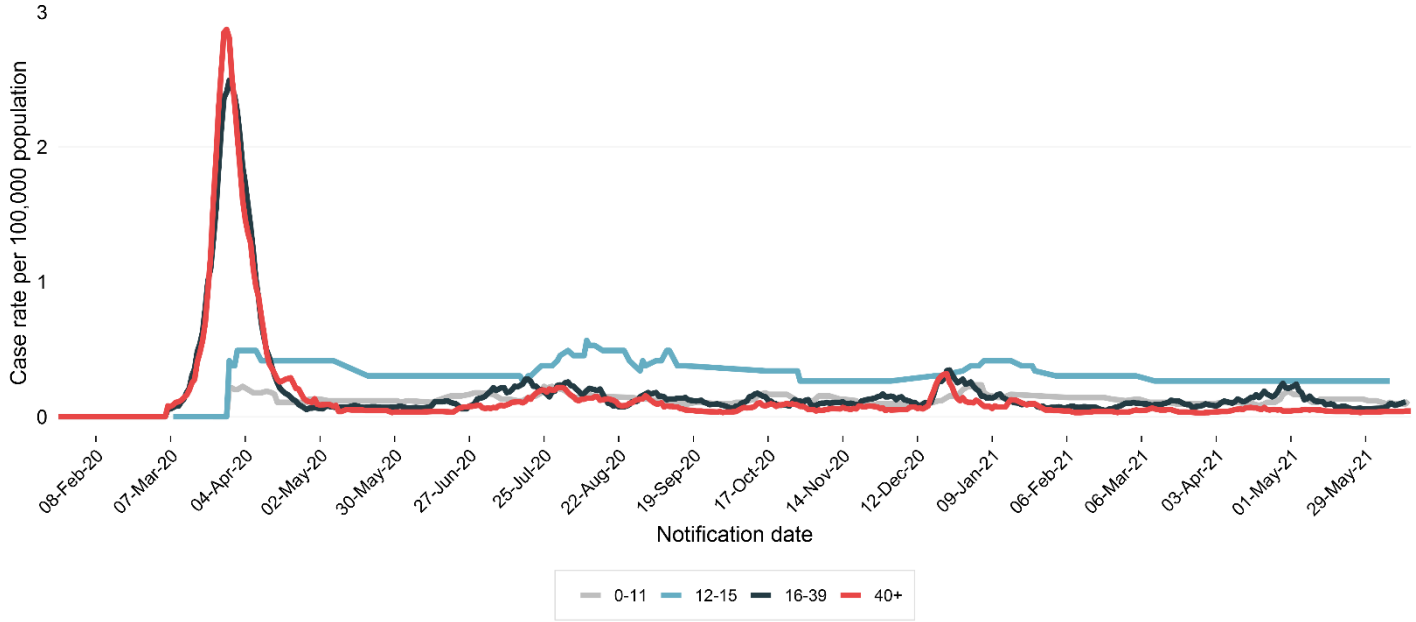
Includes people with a usual place of residence outside of NSW, and those for whom LHD was not available at the time of data extraction.

Total COVID-19 cases by vaccination status and week reported, NSW, 16 June 2021 to 8 January 2022

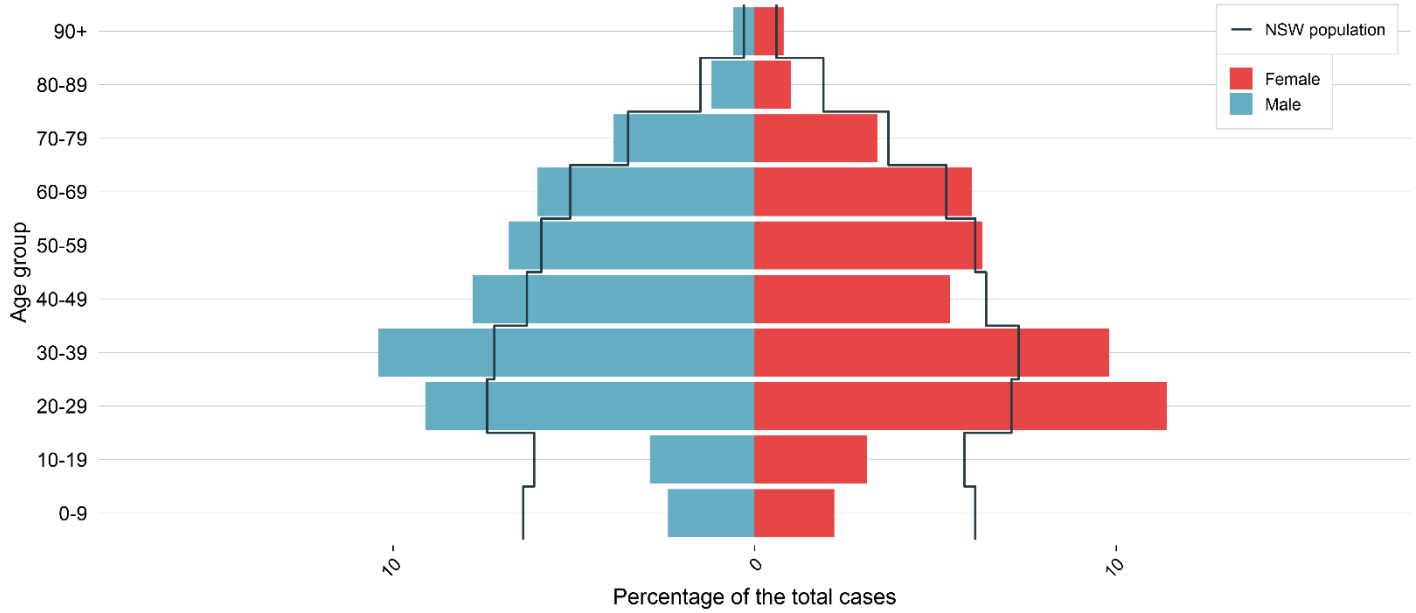
	Two effective doses	One effective dose	No effective dose	Under investigation*	Not eligible for vaccination (aged 0-11 years)	Total
16 Jun - 25 Nov 2021	6,849 (9%)	6,825 (9%)	37,913 (50%)	8,776 (12%)	14,955 (20%)	75,318 (100%)
26 Nov 2021 - 8 Jan 2022	267,381 (71%)	2,578 (1%)	3,552 (1%)	74,878 (20%)	30,667 (8%)	379,056 (100%)
Month						
June 2021	3 (1%)	11 (5%)	197 (83%)	2 (1%)	24 (10%)	237 (100%)
July 2021	70 (2%)	97 (3%)	2,665 (81%)	41 (1%)	434 (13%)	3,307 (100%)
August 2021	554 (3%)	807 (4%)	13,388 (71%)	1,097 (6%)	3,134 (17%)	18,980 (100%)
September 2021	2,613 (7%)	3,890 (11%)	15,550 (45%)	6,424 (18%)	6,395 (18%)	34,872 (100%)
October 2021	1,874 (15%)	1,714 (14%)	4,813 (39%)	822 (7%)	3,138 (25%)	12,361 (100%)
November 2021	2,148 (33%)	328 (5%)	1,498 (23%)	472 (7%)	2,095 (32%)	6,541 (100%)
December 2021	94,116 (71%)	957 (1%)	2,503 (2%)	24,210 (18%)	10,415 (8%)	132,201 (100%)
Week ending						
18 Dec 2021	8,462 (70%)	93 (1%)	658 (5%)	1,793 (15%)	1,007 (8%)	12,013 (100%)
25 Dec 2021	25,224 (73%)	243 (1%)	617 (2%)	6,180 (18%)	2,301 (7%)	34,565 (100%)
1 Jan 2022	72,206 (71%)	671 (1%)	642 (1%)	19,398 (19%)	7,869 (8%)	100,786 (100%)
8 Jan 2022	159,127 (70%)	1,468 (1%)	779 (<1%)	46,955 (21%)	18,343 (8%)	226,672 (100%)

* 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 a vaccination status Under investigation 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 who had received two effective doses and those with no effective dose.

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



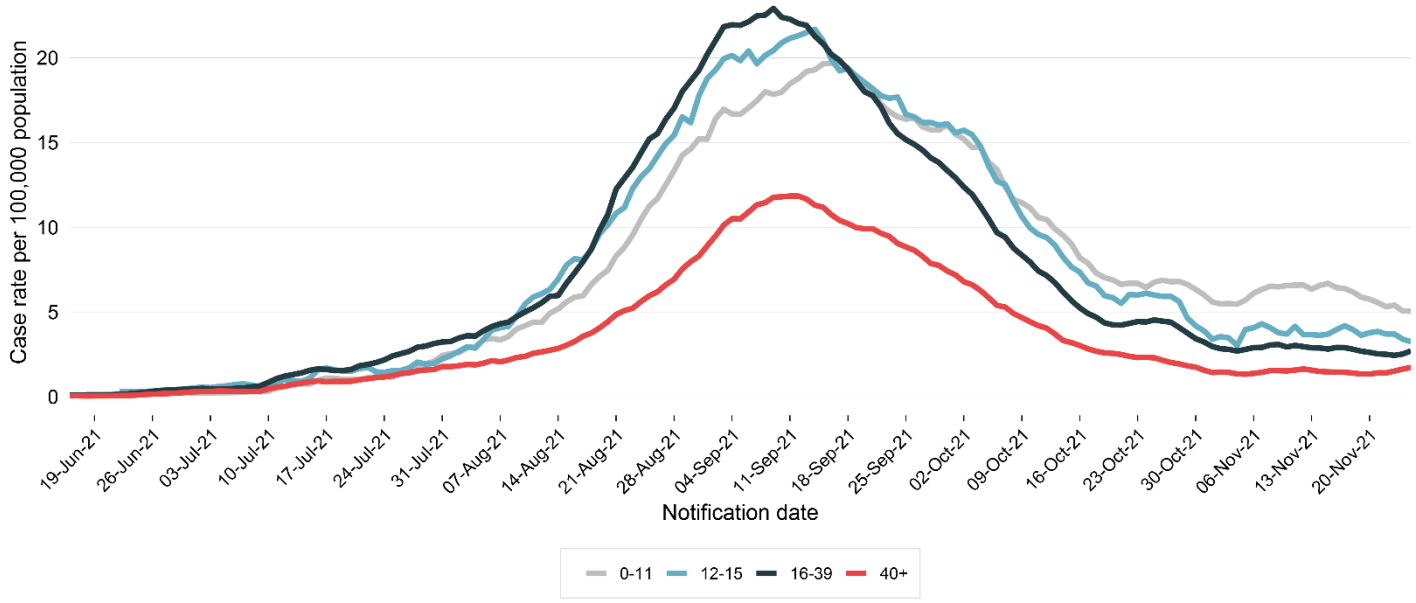
Total case percentage (n = 5,430) by age and gender, NSW, from 1 January 2020 to 15 June 2021



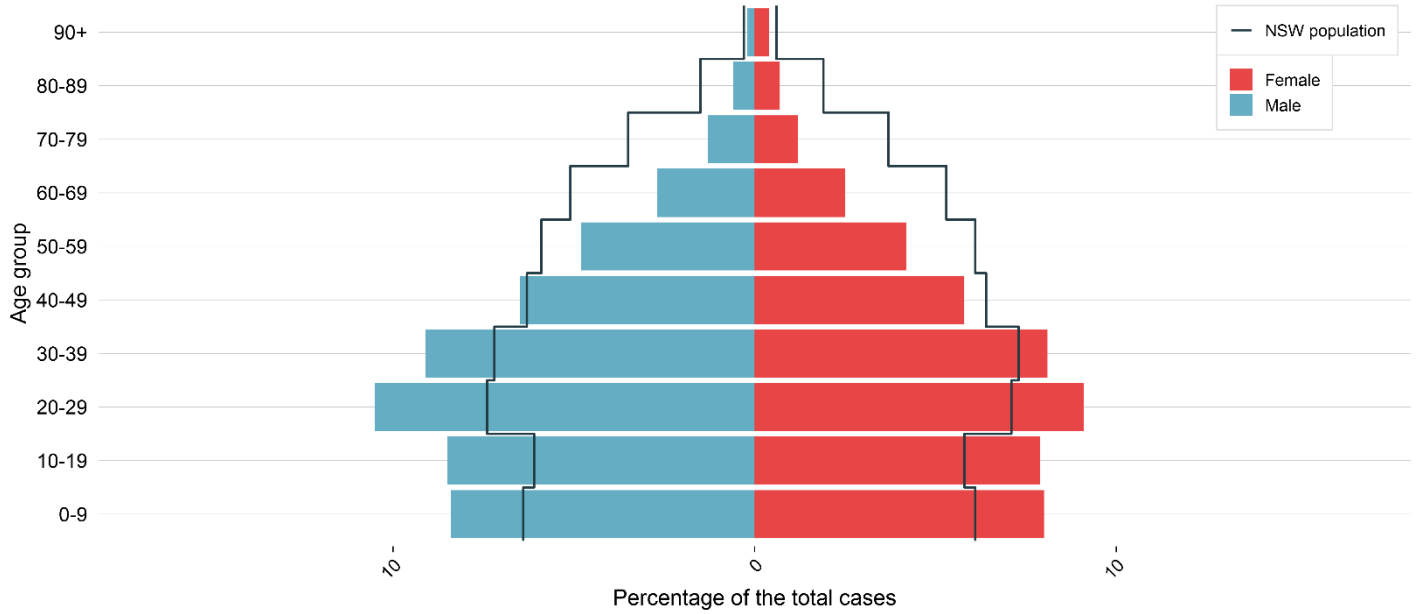
Note that the figure does not include cases for whom gender is not specified or non-binary.

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 diagnosed with COVID-19, by age group, NSW, 1 January 2020 to 8 January 2022

Age-group (years)	1 Jan 2020 – 15 Jun 2021		16 Jun – 25 Nov 2021		26 Nov 2021 – 8 Jan 2022	
	Hospitalised	Percentage of cases hospitalised	Hospitalised	Percentage of cases hospitalised	Hospitalised	Percentage of cases hospitalised
0-9	5	2%	290	2%	185	2%
10-19	8	2%	359	3%	124	2%
20-29	23	2%	970	7%	428	2%
30-39	43	4%	1,255	10%	502	4%
40-49	41	6%	1,293	14%	360	6%
50-59	59	8%	1,269	19%	440	8%
60-69	85	13%	1,046	27%	525	13%
70-79	68	17%	764	40%	679	17%
80-89	40	33%	508	54%	660	33%
90+	13	31%	128	54%	197	31%
Total	385	7%	7,882	10%	4,100	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 13 days. Therefore hospitalisations and deaths are under-reported for the most recently notified cases.

ICU hospitalisations among people diagnosed with COVID-19, by age group, NSW, 1 January 2020 to 8 January 2022

Age-group (years)	1 Jan 2020 – 15 Jun 2021		16 Jun – 25 Nov 2021		26 Nov 2021 – 8 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	<1%	10	<1%	6	<1%
10-19	2	1%	35	<1%	10	<1%
20-29	4	<1%	120	1%	28	<1%
30-39	14	1%	186	1%	43	<1%
40-49	12	2%	225	2%	47	<1%
50-59	23	3%	334	5%	57	<1%
60-69	41	6%	285	7%	75	<1%
70-79	35	9%	208	11%	89	1%
80-89	13	11%	58	6%	36	1%
90+	1	5%	1	1%	4	<1%
Total	145	3%	1,462	2%	395	<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				
					Location of death		
	Number of deaths	Case fatality rate	Number of deaths	Case fatality rate	Health care facility	Aged care facility	Home
0-9	0	0%	0	0%	-	-	-
10-19	0	0%	1	<1%	1	0	0
20-29	0	0%	6	<1%	4	0	2
30-39	0	0%	15	<1%	11	0	4
40-49	0	0%	28	<1%	22	0	6
50-59	1	<1%	66	1%	57	0	9
60-69	4	1%	105	3%	93	1	11
70-79	15	4%	135	7%	126	6	3
80-89	20	16%	165	18%	148	10	7
90+	16	38%	63	27%	47	16	0
Total	56	1%	584	1%	509	33	42

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 (26/42, 62%) were diagnosed after death.

Hospitalisations, ICU admissions and deaths among cases diagnosed 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	385 (7.1%)	145 (2.7%)	56 (1.0%)
16 June 2021 – 25 November 2021				
Two effective doses	6,849	575 (8.4%)	65 (0.9%)	86 (1.3%)
One effective dose	6,825	589 (8.6%)	93 (1.4%)	75 (1.1%)
No effective dose	37,913	5,117 (13.5%)	1,047 (2.8%)	415 (1.1%)
Under investigation	8,776	1,264 (14.4%)	242 (2.8%)	8 (0.1%)
Not eligible for vaccination (aged 0-11 years)	14,955	336 (2.2%)	12 (0.1%)	0 (0.0%)
Total	75,318	7,881 (10.5%)	1,459 (1.9%)	584 (0.8%)

- The percentage of cases who died is slightly higher for those with two 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. Among cases in the period from 16 June to 25 November 2021, the median age of those with two effective doses who died was 83.5 (interquartile range (IQR) = 76-90); for those with no effective dose it was 72 (IQR 60-82). See below for further breakdowns by age.

Glossary

Term	Description
Case	A person infected who has tested positive to a validated specific SARS-CoV-2 nucleic acid test 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). Case counts include: - 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
Health care workers	Individuals who work within a hospital or other healthcare settings, including staff in direct or indirect contact with patients or infectious materials. HCWs includes roles such as doctor, nurse, orderly, paramedic, laboratory technician, pharmacist, administrative staff, cleaners, and other support staff. Public health units routinely undertake investigations of COVID-19 cases in healthcare workers to identify ongoing risks in healthcare settings. See COVID-19 in healthcare workers in NSW for a detailed report on infections to August 2020 in 35 HCWs who had worked in a health facility in the 14 days prior to symptom onset or date or testing.
Incubation period	The time in which the case was infected. The incubation period for COVID-19 is between 1 and 14 days prior to symptom onset.
Overseas acquired case	Case who travelled overseas during their incubation period. While testing rates in NSW are high and case counts are low, cases who have travelled overseas in their incubation period are considered to have acquired their infection overseas.
Interstate acquired case	Case who travelled interstate during their infection and the public health investigation concludes the infection was likely acquired interstate.
Cluster	Group of cases sharing a common source of infection or are linked to each other in some way.
Two effective doses	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 or arrival in Australia. The COVID-19 vaccines available in Australia are very effective with evidence showing that people who have received two doses are 70–95% less likely to get sick with COVID-19 compared with those who are not vaccinated. However, a small proportion of people with two effective doses may still get the disease. As the proportion of the population who are vaccinated increases, the number of cases who have received two effective doses will increase but this does not mean the vaccines are not working.
One effective dose	Cases reported as 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 arrival in Australia, or • received their second dose of a two-dose vaccination course less than 14 days prior to known exposure to COVID-19 or arrival in Australia.
No effective dose	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 arrival in Australia, or • have not received any vaccine dose. 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.
Under investigation	For cases reported as under investigation, vaccination status could not be determined through searching the Australian Immunisation Register (AIR). Based on self-reported data at interview, for cases to September 2021, those with an unknown status are likely to be un-vaccinated. Cases between October and mid-December with an unknown status are likely to have received at least one dose, but their record could not be matched in AIR.

Hospitalisation	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, including emergency departments, around the time of their COVID-19 diagnosis. This does not mean that all the hospitalisations reported are due to a worsening of COVID-19 symptoms. The count does not include people managed in the community (e.g., including Hospital in the Home schemes).
Death	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.
Variants of concern	Global surveillance monitors the prevalence of mutations in the SARS-CoV-2 virus, focusing particularly on mutations that may reduce vaccine effectiveness or enable re-infection. This report reflects the recommendations of Australia's Communicable Diseases Genomics Network (CDGN) for reporting of Variants of Concern (VoC) in NSW. The CDGN reports on the Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1), and Delta (B.1.617.2) internationally recognised VoCs. The first recognised VoC was the Alpha variant, in December 2020. The Delta lineage (B.1.617.2) was internationally recognised as a VoC on 11 May 2021 and is responsible for almost all cases in the NSW outbreak between 16 June and 26 November 2021. A new variant, Omicron (B.1.1.529) was recognised internationally on 26 November 2021 and the first notification of a case in NSW occurred on 28 November 2021.
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 last year 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 C). 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.

Dates used in COVID-19 reporting

Event	Date name	Source
Person first starts to feel unwell	Date of symptom onset	Public health staff interview all cases at the time of diagnosis. This is the date provided to NSW Health by the case.
Person has a swab taken	Date of test	This date is provided to NSW Health by the laboratory when the test result (positive or negative) is notified.
Laboratory notifies NSW Health of result	Date of notification	This date is provided to NSW Health by the laboratory. Laboratories prioritise notification of positive results to allow prompt public health action. Positive 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. Negative 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.