

# COVID-19 WEEKLY SURVEILLANCE IN NSW

## EPIDEMIOLOGICAL WEEK 34, ENDING 28 August 2021

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### Overview

Table 1. Number and proportion of COVID-19 cases in NSW by likely source of infection to week ending 28 August 2021

	2020		2021		Total
	Jan – Jun	July – Dec	01 Jan – 15 Jun	16 Jun – 28 Aug	
Locally acquired	1,236 (39 %)	807 (52 %)	51 (7%)	19,012 (99%)	21,108 (86%)
Interstate acquired	67 (2 %)	23 (1 %)	0 (0%)	5 (<1%)	95 (<1%)
Overseas acquired	1,892 (59 %)	714 (46 %)	641 (93%)	170 (1%)	3,417 (14%)
Total	3,195 (100 %)	1,544 (100 %)	692 (100%)	19,187 (100%)	24,620
Deaths	51	5	0	91	147

### Summary for the week 22 August to 28 August 2021 (inclusive)

- There were 6,711 locally acquired cases reported in the week ending 28 August 2021. Of these:
  - 1,425 (21%) cases were residents of Cumberland LGA
  - 1,196 (18%) cases were residents of Canterbury-Bankstown LGA
  - 839 (13%) cases were residents of Blacktown LGA
  - 2,088 (31%) cases were residents of other 9 LGAs of concern
  - 1,161 (17%) cases were residents across 51 other LGAs
- There were 17 cases reported in overseas returned travellers in the last week (down 6%).
- There were 16 deaths in people diagnosed with COVID-19 reported this week.
- In the four weeks ending 28 August 2021, 100% (2,726/2,726) of the sequenced SARS-CoV-2 viruses from locally acquired cases were the delta variant of concern.
- Since March 2021, 483 (2.5%) locally acquired cases were reported as being fully vaccinated.
- Testing rates decreased compared to the previous week (down 8%), with continued high testing rates in the Nepean Blue Mountains, South Eastern Sydney, South Western Sydney, Sydney, and Western Sydney LHDs. Testing rates decreased in the Far West and Western NSW LHDs, but remained well above the rates one month prior.
- In the week ending 28 August, 194 sewage samples were tested for fragments of SARS-CoV-2. Of these, there were seventy two detections. The sewage treatment plants at Nambucca, Bellingen, Quirindi, Cowra, Condobolin, Lake Cargelligo, Trangie, Gilgandra, Baradine, Coolah, Dunedoo, South Kempsey, Branxton, Tanilba Bay and Temora were added as new sites. Detections from Baradine, Bonny Hills, Brewarrina, Byron Bay, Cooma, Merimbula, Moree, Tamworth, Temora and Trangie occurred with no known or recent cases in the catchment. Subsequently cases were identified in Brewarrina.

## Indicators of effective prevention for COVID-19 in NSW for the week ending 28 August 2021

Where there are many cases, NSW Health may conduct a shorter preliminary interview with some patients upon confirmation of a positive COVID-19 result. In this preliminary interview the patient's result is confirmed, their welfare and medical needs are assessed, their need to isolate is reinforced, and their close contacts are identified to arrange urgent testing.

For those cases who have a short preliminary interview, further details are collected in a follow up interview. Only once the follow up interview is completed will cases be considered fully interviewed for the measures described in the table below.

In addition, short delays in conducting interviews may be as a result of cases being moved to a different location for the purpose of isolation or deteriorating health, incorrect contact details, or not being able to be reached by phone, in which case escalation processes are put in place.

**Table 2. Measures of public health action, NSW, for the period from 15 August to 28 August 2021**

	Week ending 28 Aug	Week ending 21 Aug
Proportion locally acquired cases notified to NSW Health by the laboratory within 1 day of specimen collection	68% (4563/6711)	65% (2975/4611)
Locally acquired cases contacted by text message within 1 day of notification to NSW Health	91%	88%
Locally acquired cases fully interviewed by public health staff within 1 day of notification to NSW Health	34% (2281/6711)	56% (2562/4611)

**Interpretation:** In the week ending 28 August, 68% of cases were notified to NSW Health within a day of test collection, 34% of cases were fully interviewed within one day of notification and 91% of cases were advise of their positive result, provided isolation requirements and asked to identify high risk exposure settings by text. The remaining cases who do not have a valid mobile phone number are contacted by case management teams and where no phone number exists are referred to NSW Police to identify alternative contact details. Police also visit cases to provide advice on isolation to the whole household

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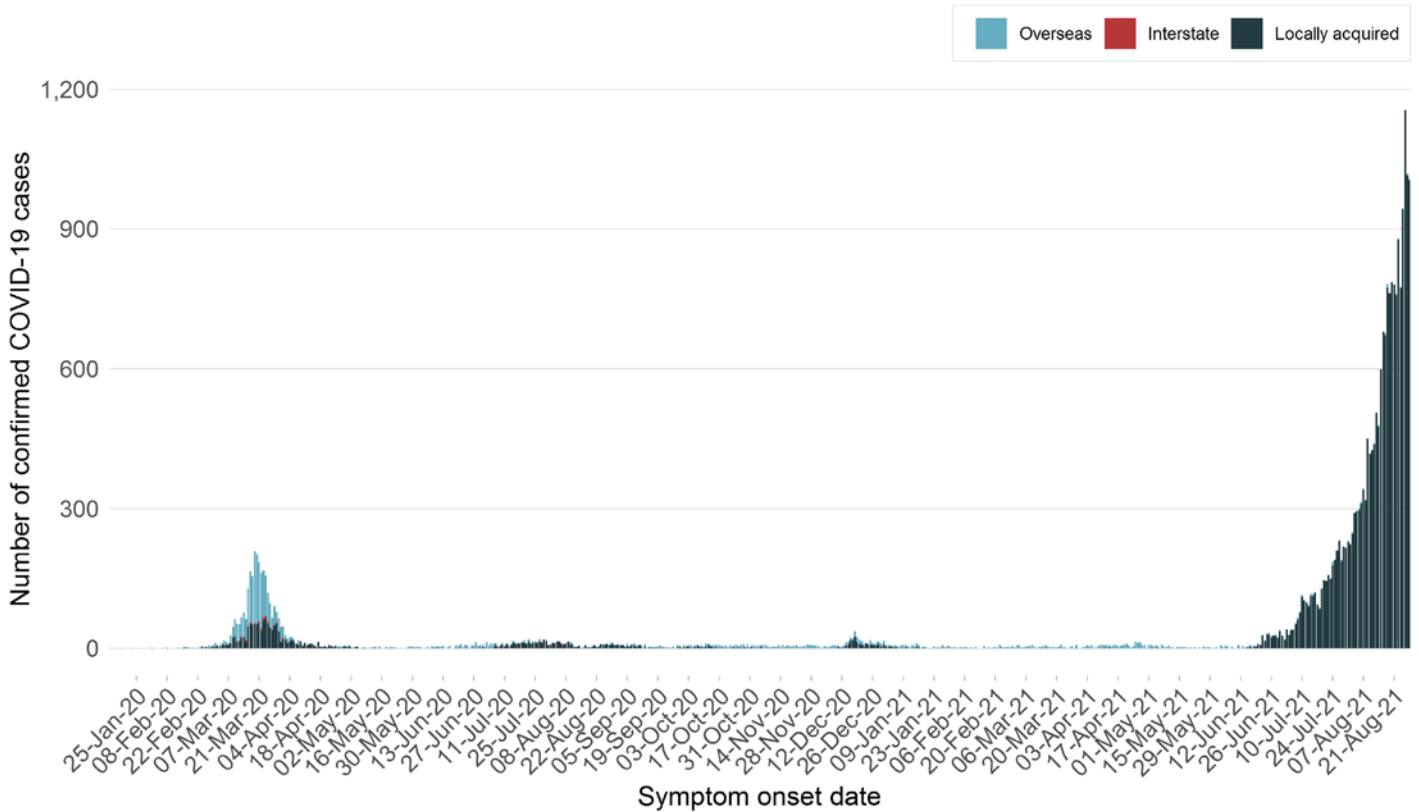
### COVID-19 Vaccination program

- Australian Government Department of Health reports the number of vaccine doses administered across Australia — [Daily COVID-19 vaccine rollout numbers](#)
- Therapeutic Goods Administration (TGA) report data on received reports of suspected side effects (also known as adverse events) and other safety information from Australia and overseas — [Weekly COVID-19 vaccine safety report](#)
- AusVaxSafety is conducting active vaccine safety surveillance of the vaccines in use. Surveillance data have been provided by Vaxtracker, SmartVax and the Victorian Department of Health COVID-19 Vaccine Management System based on surveys sent on Day 3 after the vaccination — [Weekly COVID-19 vaccine safety surveillance report](#)

## Section 1: How is the outbreak tracking in NSW?

To understand how the outbreak is tracking we look at how many new cases are reported each day and the number of people being tested. Each bar in the graph below represents the number of new cases based on the date of symptom onset.

Figure 1. COVID-19 cases by likely infection source and illness onset, NSW, from 25 January 2020 to 28 August 2021



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

**Interpretation:** Between 13 January 2020 and 28 August 2021, 24,618 COVID-19 cases have been notified in NSW. Of those, 3,417 (14%) were overseas acquired, 95 (<1%) were interstate acquired, and 21,106 (86%) were locally acquired.

### Four major waves of COVID-19 cases

The epidemiology of COVID-19 in NSW continued to evolve since the first three cases were reported in NSW on 25 January 2020 in people who acquired their infection in China. The first locally acquired COVID-19 case in NSW was reported on 2 March 2020 and by mid-March case numbers had increased rapidly in overseas returned travellers and their contacts and within localised community outbreaks. In NSW, the number of reported daily cases peaked on 27 March 2020 at 213 cases. Public health action and the introduction of a range of stringent control measures, including the closure of international borders, 14-day mandatory quarantine for returned travellers and restrictions of movement within NSW lead to a decline in cases. Community transmission was interrupted by the end of May 2020.

In early July seeding of SARS-CoV-2 into South Western Sydney from an outbreak in Melbourne led to a second wave of infection. Following intensive public health action community transmission was again interrupted by the end of November 2020.

In December 2020 two new introductions of SARS-CoV-2 caused outbreaks in Sydney’s Northern Beaches and Berala in Sydney’s West. Community transmission was again interrupted by the end of January 2021.

The current outbreak across NSW began in mid-June 2021 in Sydney’s east, and spread from there to West and South Western Sydney, and the greater metropolitan area. Clusters have developed in the Central Coast, Hunter New England, Western NSW, Far Western NSW, and cases have been found in most LHDs except Northern NSW and Murrumbidgee.

## Section 2: Locally acquired COVID-19 transmission in NSW in the last four weeks

Table 3. Locally acquired COVID-19 cases by LHD of residence and week reported, NSW, 25 July to 28 August 2021

Local Health District	Week ending				Total	Days since last case reported
	28-Aug	21-Aug	14-Aug	7-Aug		
Western Sydney	2,633	1,791	856	514	5,794	0
South Western Sydney	2,094	1,437	716	648	4,895	0
Sydney	608	407	278	301	1,594	0
Nepean Blue Mountains	444	354	252	115	1,165	0
South Eastern Sydney	340	223	179	94	836	0
Northern Sydney	151	83	58	32	324	0
Illawarra Shoalhaven	41	6	5	3	55	0
Central Coast	15	7	12	12	46	0
Western NSW	255	207	60	0	522	0
Far West	51	24	0	0	75	0
Hunter New England	19	53	87	22	181	0
Southern NSW	0	2	0	0	2	8
Mid North Coast	0	2	0	0	2	9
Northern NSW	0	0	0	0	0	151
Murrumbidgee	0	0	0	0	0	355
Correctional settings	45	9	3	0	57	0
<b>NSW*</b>	<b>6,711</b>	<b>4,611</b>	<b>2,509</b>	<b>1,741</b>	<b>15,572</b>	<b>0</b>

\*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.

**Interpretation:** There were 6,711 locally acquired cases reported in the week ending 28 August 2021. Most cases were residents of Western Sydney LHD (2,633, 39%) followed by South Western Sydney LHD (2,094, 31%), and Sydney LHD (608, 9%). Correctional settings include all cases residing in NSW correctional facilities.

### Section 3: Epidemiology of local cases with COVID-19 from 16 June 2021 to 28 August 2021

Since 16 June 2021, NSW has experienced a cluster of COVID-19 infections caused only by the delta variant of the SARS-CoV-2 virus. This section describes some of the epidemiological features of this cluster.

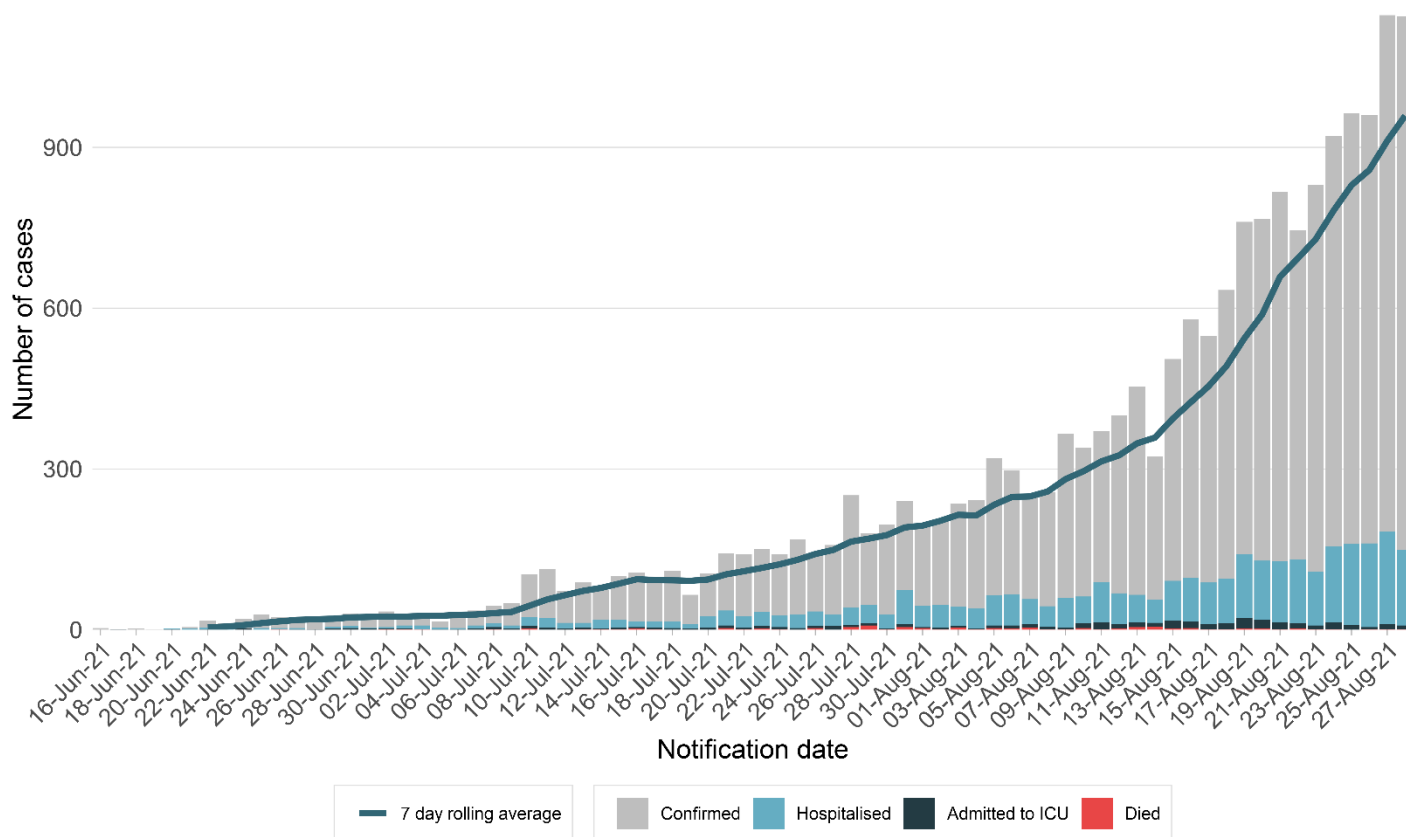
Table 4. COVID-19 cases and tests reported, NSW, from 1 January 2021 to 28 August 2021

	Week ending 28 Aug	Week ending 21 Aug	% change	Total 2021
Number of cases	6,729	4,632	45 %	19,879
Locally acquired	6,711	4,611	46 %	19,063
Known epidemiological links to other cases or clusters	2,126	2,094	2 %	9,202
No epidemiological links to other cases or clusters	4,585	2,517	82 %	9,861
Overseas acquired	17	18	-6 %	811
Interstate acquired	1	3	-67 %	5
Number of tests	948,383	1,036,750	-9 %	8,967,508

Note: The case numbers reported for previous weeks is based on the most up to date information from public health investigations.

**Interpretation:** Almost all cases reported in the last four weeks in NSW were locally acquired (15,572/15,639 cases, or 99.6%). Of the 6,711 locally acquired cases reported in the week ending 28 August 2021 83% were from the 12 LGAs of concern (Cumberland, Canterbury-Bankstown, Blacktown, Fairfield, Liverpool, Penrith, Campbelltown, Burwood, Parramatta, Bayside, Georges River, and Strathfield).

Figure 2. COVID-19 cases by outcome and notification date with 7 day backward rolling average, NSW, from 16 June 2021 to 28 August 2021



**Interpretation:** This graph shows the number of COVID cases notified each day to NSW Health, and their outcome as of 28th of August. The grey bar represents the number of cases notified on a given day and the blue bar is the number of those same cases that were subsequently hospitalised. These data are analysed only up to 28 August. Because there can be a delay between a person being notified as a COVID-19 case and when they may require hospitalisation. Currently there is a median of 5 days between onset date hospital admission date.

## Local Government Areas

Table 5a. Top 20 locally acquired COVID-19 cases ranking by last 7 days per 100,000 population rate, breakdown by metropolitan LGA of residence, NSW, 16 June to 28 August 2021

LGA name	Last 7 days		Current NSW outbreak (16 Jun-28 Aug 2021)	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Cumberland	1,425	590	3,350	1,387
Canterbury-Bankstown	1,196	316	3,596	952
Liverpool	519	228	1,467	645
Blacktown	839	224	2,179	582
Fairfield	468	221	2,059	973
Penrith	391	184	1,091	512
Campbelltown	206	121	652	381
Parramatta	262	102	693	269
Camden	96	95	242	239
Hunters Hill	13	87	19	127
Strathfield	40	85	124	264
Burwood	25	62	101	249
Hawkesbury	41	61	83	123
Bayside	96	54	370	207
Georges River	81	51	350	219
Sydney	111	45	253	103
Randwick	68	44	194	125
Inner West	87	43	217	108
Ryde	54	41	132	101
The Hills Shire	57	32	156	88

Table 5b. Top 20 locally acquired COVID-19 cases ranking by last 7 days per 100,000 population rate, breakdown by rural and regional LGA of residence, NSW, 16 June to 28 August 2021

LGA name	Last 7 days		Current NSW outbreak (16 Jun-28 Aug 2021)	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Central Darling	46	2,501	67	3,643
Bourke	26	1,004	32	1,236
Dubbo Regional	173	322	388	722
Warren	6	222	13	482
Brewarrina	3	186	9	559
Narromine	8	123	12	184
Gilgandra	3	71	6	142
Parkes	6	40	7	47
Bogan	1	39	1	39
Orange	16	38	22	52
Broken Hill	5	29	8	46
Coonamble	1	25	2	51
Cobar	1	21	1	21
Forbes	2	20	2	20
Walgett	1	17	6	101
Blayney	1	14	1	14
Bathurst Regional	5	11	12	28
Singleton	2	9	5	21
Mid-Western Regional	2	8	9	36
Maitland	5	6	43	50

**Interpretation:** The top 20 metropolitan LGAs contributed 90% of all cases in the week ending 28 August. The three highest case rates per 100,000 population are in rural and regional areas and are associated with known clusters, particularly in the west and far west of NSW. Although case numbers in most regional LGAs are relatively small, because the population is also small, the case rate is substantially higher than observed in some metropolitan LGAs.

### Source of infection for locally acquired cases in NSW

Figure 3a. Source of infection for locally acquired cases, Metropolitan LHDs, 16 June to 28 August 2021

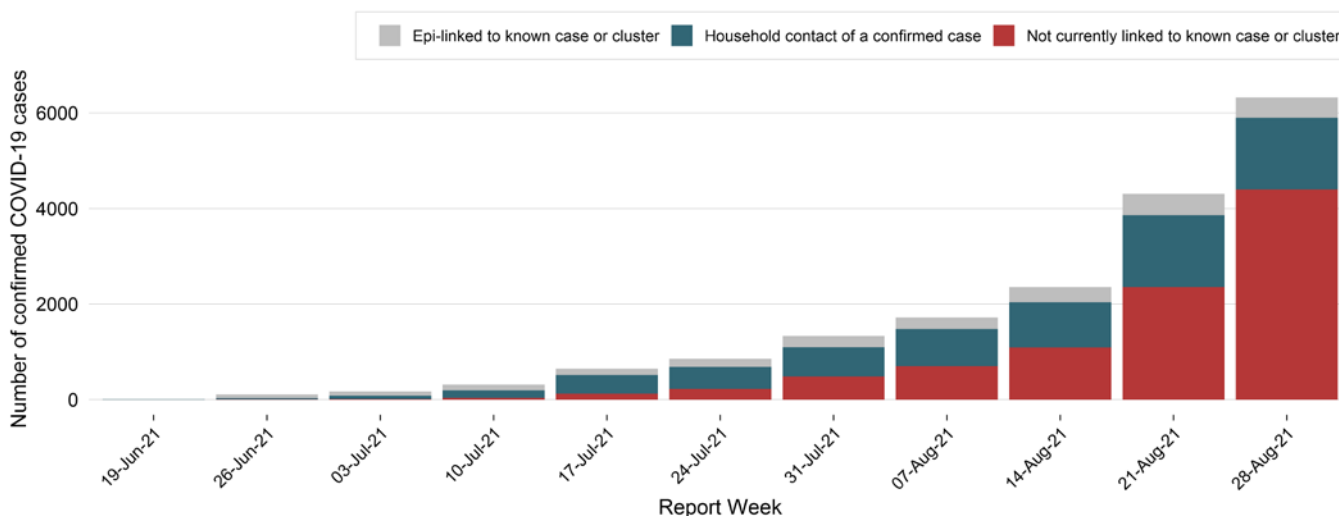
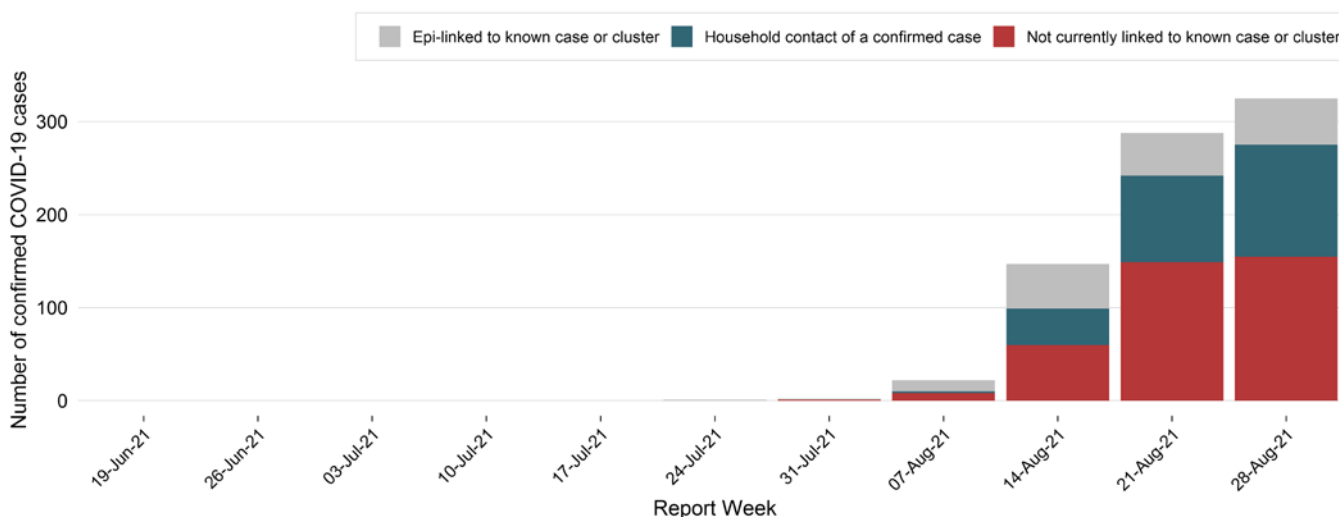


Figure 3b. Source of infection for locally acquired cases, rural and regional LHDs, 16 June to 28 August 2021



Note: This graph does not include cases in Justice Health and correctional facilities and those for whom LHD was not available at the time of data extraction

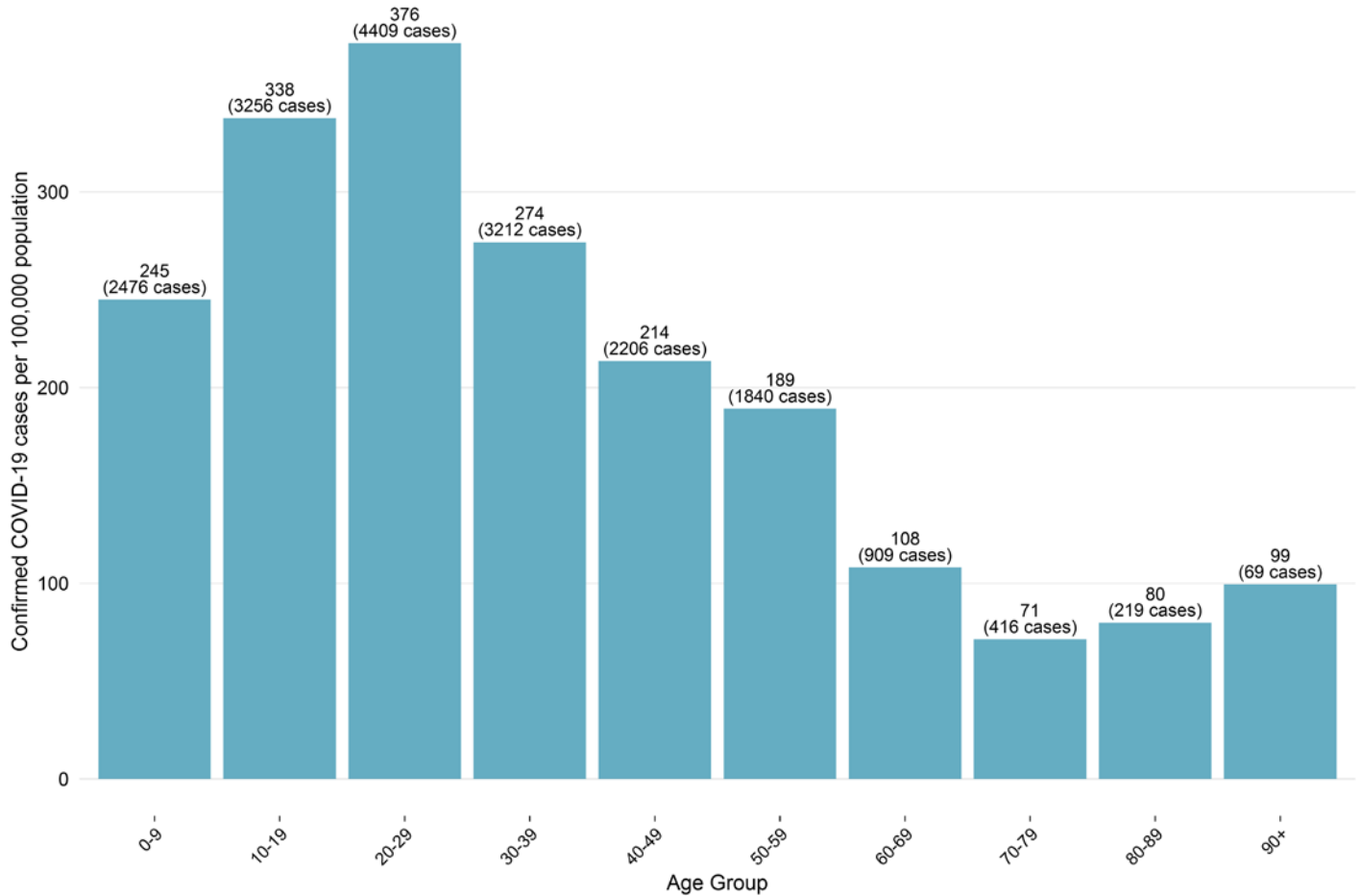
**Interpretation:** In the week ending 28 August, cases increased by about 50% in metropolitan LHDs (6,326 compared to 4,308 the previous week), with a smaller increase of 12% in rural and regional LHDs (325 compared to 288 the previous week). Of the 6,326 cases reported this week in metropolitan LHDs, 1,498 (24%) were household contacts, 429 (7%) were epidemiologically linked but not household contacts and 4,399 (70%) were not currently linked to a case or cluster. There were 325 cases reported this week in rural and regional LHDs. Of these 120 (37%) are household contacts, 50 (15%) are epidemiologically linked but not household contacts and 155 (48%) have not currently been linked to a case or cluster.



### Age breakdown of locally acquired cases, NSW, from 16 June to 28 August 2021

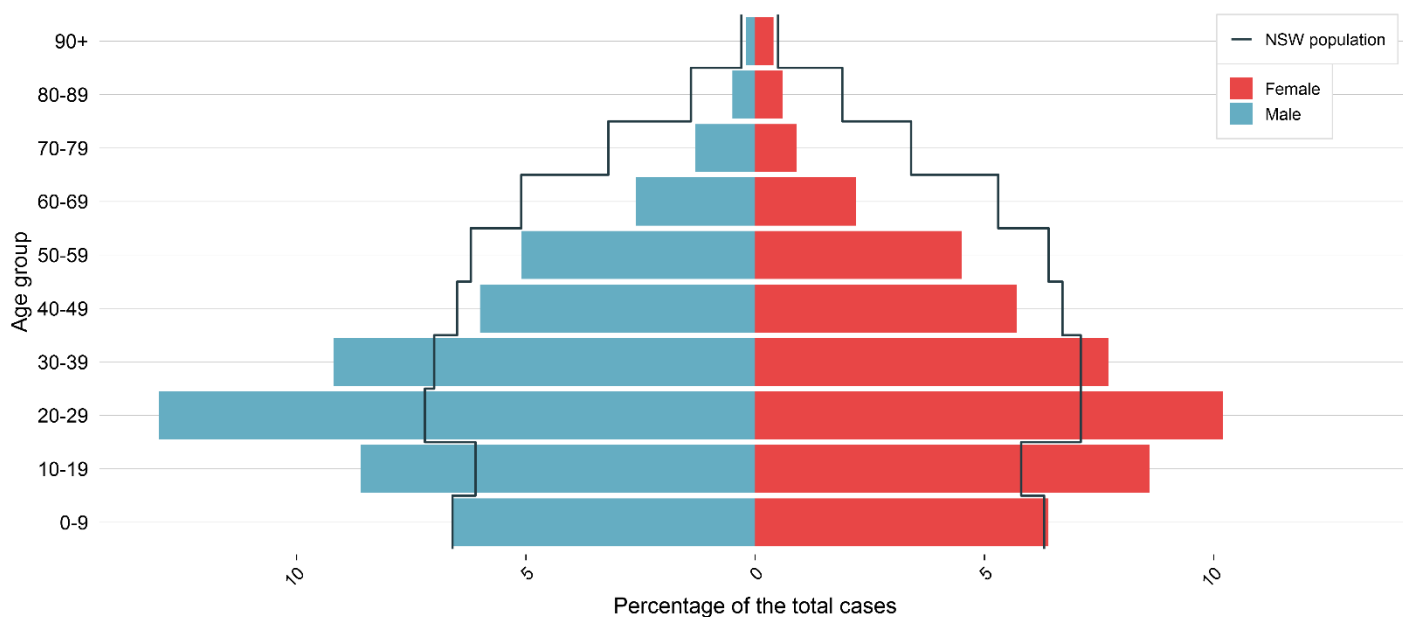
Between 16 June and 28 August 2021, there have been 19,012 locally acquired cases in this period. The median age was 28 years (IQR = 17-43 years). The median age of cases between 1 January 2020 and 15 June 2021 was 37 years (interquartile range (IQR) = 25-55 years).

Figure 4. Rates of COVID-19 infection by age group, current outbreak, NSW, from 16 June 2021 to 28 August 2021



**Interpretation:** The age group with the highest rates of people diagnosed with COVID-19 is those aged 20-29 years (4,409 cases, or 376 per 100,000 people) and high rates are also seen in people aged 10-19 years (3,256 cases, or 338 per 100,000 people).

Figure 5. Current wave locally acquired case percentage (n = 18,948) by age and gender, NSW, from 16 June to 28 August 2021



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

**Interpretation:** In the current outbreak, people aged 10-39 are over-represented among the cases, relative to their proportion in the NSW population. Under-representation among older groups may be due to vaccination programs targeted towards elderly and aged care residents.

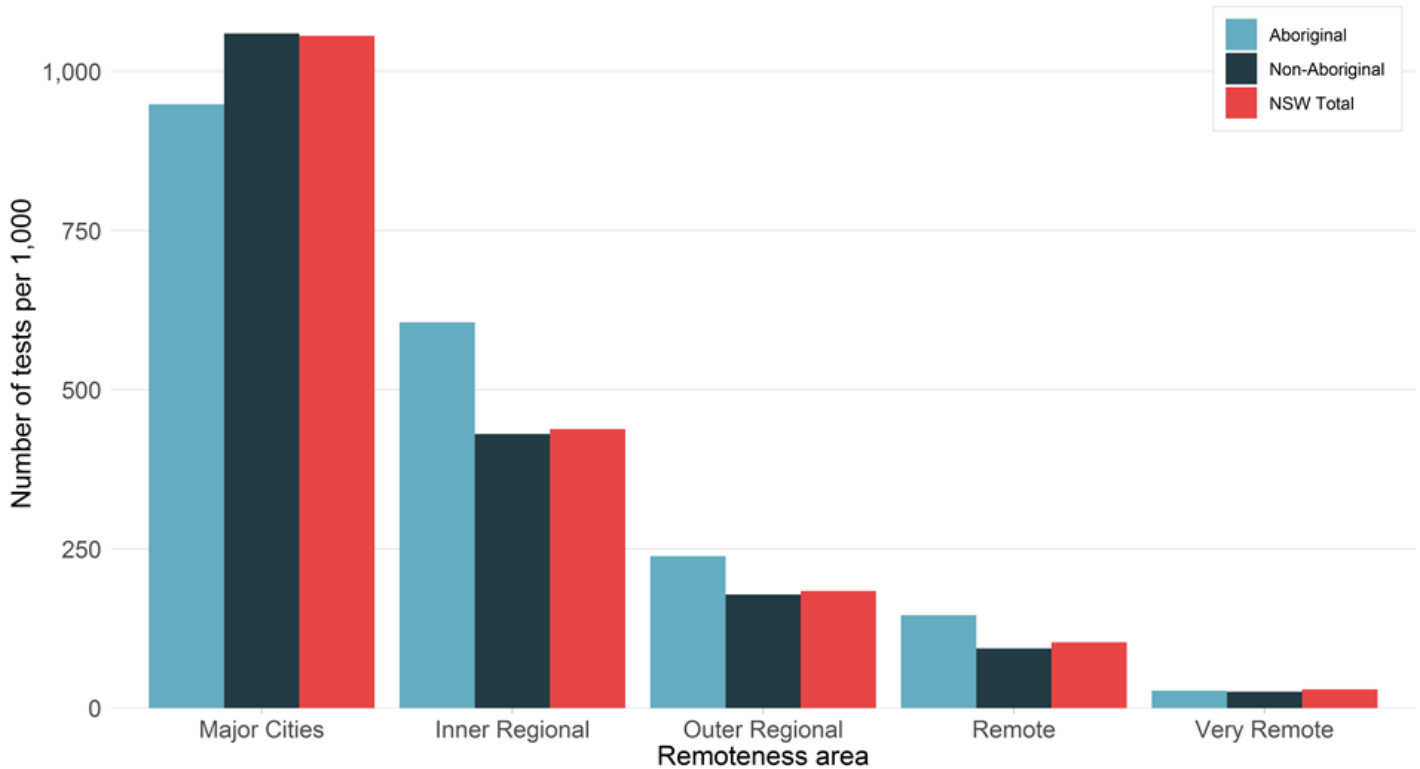
## Section 4: COVID-19 in specific populations

### Aboriginal people

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 access including institutional racism and mistrust of mainstream health services, crowded and inadequate housing, and burden of disease.

There were 346 locally acquired cases of COVID-19 reported in Aboriginal people in the week ending 28 August 2021. Of the 346 cases, none were fully vaccinated and 42 were partially vaccinated. In total there have been 705 Aboriginal people diagnosed with COVID-19 in the current NSW outbreak.

Figure 6. Testing rate by Aboriginality and remoteness area, per 1,000 population, NSW, 1 April to 21 August 2021



Note: NSW Total and Non-Aboriginal includes persons tested in NSW without Aboriginality recorded.

**Interpretation:** Testing rates were highest in major cities in NSW, where the majority of cases in the current fourth wave are located. In all parts of NSW except major cities, testing rates were higher among Aboriginal people than among Non-Aboriginal people.

### Pregnant women

In the week ending 28 August, 66 pregnant women were diagnosed with COVID-19. Since January 2020, 272 pregnant women have been diagnosed with COVID-19 in NSW. As those who test negative are not interviewed, testing rates among pregnant women are not available.

### Correctional settings

In the week ending 28 August, there were 45 confirmed cases residing in correctional settings. Since 16 June 2021, 57 people residing in correctional settings have been diagnosed with COVID-19 in NSW.

## Healthcare workers

The following describes infections of COVID-19 in healthcare workers (HCWs). HCWs in this section 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.

In the week ending 28 August, there were 86 healthcare workers diagnosed with COVID-19. Of these, 17 (8%) were potentially infected in a healthcare setting, 17 (20%) were social or household contacts of previously reported cases and 62 (72%) are currently not linked. Twenty-seven (31%) cases were fully vaccinated and 19 (22%) were partially vaccinated.

In total there have been 399 cases of COVID-19 in health care workers since August 2020. Of these, 76 were potentially infected in healthcare settings. A further 131 cases were linked to social or household contacts, and for 192 cases the source of infection is either unknown or under investigation. Prior to August 2020, there were 35 cases identified in HCWs who had worked in a health facility in the 14 days prior to symptom onset or date of testing (see [COVID-19 in healthcare workers in NSW](#)).

**Table 6. Number of healthcare worker infections by source of infection and proportion fully vaccinated**

Healthcare workers	Last 7 days			Current NSW outbreak (16 Jun-28 Aug 2021)		
	Number of HCWs	Fully vaccinated	Partially vaccinated	Number of HCWs	Fully vaccinated	Partially vaccinated
Healthcare acquired	7	1 (14%)	3 (43%)	51	13 (25%)	13 (25%)
Community acquired	17	7 (41%)	2 (12%)	114	31 (27%)	23 (20%)
Not currently linked	62	19 (31%)	14 (23%)	186	51 (27%)	50 (27%)
Total	86	27 (31%)	19 (22%)	351	95 (27%)	86 (25%)

**Interpretation:** Since 16 June, most healthcare workers associated with the current NSW outbreak have been infected in the community and outside of a healthcare setting (300/351, 85%). Of the 351 healthcare workers that have been diagnosed with COVID-19 in the current outbreak, 95 (27%) have been fully vaccinated and 86 (25%) have been partially vaccinated.

## Aged care workers

There were 23 locally acquired cases in aged care workers in the week ending 28 August 2021. Two cases acquired their infection while working in an aged care facility, seven cases were social or household contacts of a known case and for fourteen cases the source of infection is under investigation. The two cases who acquired their infection at work were both partially vaccinated.

Since 16 June 2021, there have been 112 cases reported in aged care workers. Of these, 59 (53%) people have reported being partially vaccinated. There have been 17 aged care workers diagnosed with COVID-19 who have been fully vaccinated.

**Table 7. Number of aged care worker infections by source of infection and proportion fully vaccinated**

Aged care workers	Last 7 days			Current NSW outbreak (16 Jun-28 Aug 2021)		
	Number of ACWs	Fully vaccinated	Partially Vaccinated	Number of ACWs	Fully vaccinated	Partially Vaccinated
Acquired at aged care facility	2	0 (0%)	2 (100%)	25	1 (4%)	16 (64%)
Community acquired	7	3 (43%)	4 (57%)	44	8 (18%)	20 (45%)
Not currently linked	14	3 (21%)	6 (43%)	43	8 (19%)	23 (53%)
Total	23	6 (26%)	12 (52%)	112	17 (15%)	59 (53%)

**Interpretation:** In the week ending 28 August there were 23 aged care workers diagnosed with COVID-19. Of these, two (7%) were infected in an aged care facility, seven (30%) were social or household contacts of previously reported cases and fourteen (61%) are not currently linked.

## Section 5: COVID-19 vaccination status

COVID-19 vaccinations began in Australia on 22 February 2021. The first people to receive the COVID-19 vaccines were priority groups at a higher risk of COVID-19 infection, including quarantine and border workers, frontline healthcare workers, and aged and disability care residents and staff. People receiving vaccines are considered fully vaccinated two weeks after they complete the recommended course for that vaccine. Both vaccines being administered in Australia, Pfizer-BioNTech and AstraZeneca, and many from overseas such as Moderna and Sinovac, recommend a two-dose course.

The tables below show the number of COVID-19 cases by their COVID-19 vaccination status. Definitions of status are as follows:

- Cases reported as **fully vaccinated** completed the recommended vaccine course greater than 14 days prior to known exposure to COVID-19 or arrival in Australia.
- Cases reported as **partially vaccinated**:
  - received their first dose of a two-dose vaccination prior to known exposure to COVID-19 or arrival in Australia, or
  - completed their second dose of a two-dose vaccination within 14 days prior to known exposure to COVID-19 or arrival in Australia, or
  - completed a single-dose vaccination course (currently only Johnson & Johnson vaccine) within 14 days prior to known exposure to COVID-19 or arrival in Australia.

**Table 8. Locally acquired COVID-19 cases by vaccination status and week reported, NSW, 1 March to 28 August 2021**

Vaccination Status	Week ending				01 Mar to 17 Jul 2021	Total from 1 Mar 2021
	28 Aug 21	21 Aug 21	14 Aug 21	07 Aug 21		
Fully Vaccinated	168 (2.5%)	125 (2.7%)	92 (3.7%)	42 (2.4%)	56 (1.6%)	483 (2.5%)
Partially Vaccinated	1,440 (21.5%)	681 (14.8%)	272 (10.8%)	174 (10%)	239 (6.9%)	2,806 (14.8%)
None	3,212 (47.8%)	3,342 (72.5%)	1,946 (77.6%)	1,409 (80.9%)	3,046 (88.3%)	12,955 (68.1%)
Under investigation	1,891 (28.2%)	463 (10%)	199 (7.9%)	116 (6.7%)	108 (3.1%)	2,779 (14.6%)
<b>Total</b>	<b>6,711</b>	<b>4,611</b>	<b>2,509</b>	<b>1,741</b>	<b>3,449</b>	<b>19,023</b>

**Interpretation:** In the past week 2.5% of locally acquired cases were fully vaccinated. This compares with around 35.8% of the NSW population who had received two doses of vaccine by 28 August. Since 1 March 2021, there have been 483 (2.5%) locally acquired cases reported as being fully vaccinated and 2,806 (14.8%) partially vaccinated.

## Clinical severity and COVID-19 vaccination

The COVID-19 vaccines available in Australia are very effective with evidence showing that people who are fully vaccinated are 70–95% less likely to get sick with COVID-19 compared with those who are not vaccinated. However, a small proportion of fully vaccinated people may still get the disease. As the proportion of the population who are vaccinated increases, the number of cases who are fully vaccinated will increase but this does not mean the vaccines are not working.

Of the 2,706 people hospitalised with COVID-19 in the current outbreak, 360 (13%) people were in ICU. Of these, 253 (70%) were unvaccinated, and 55 (15%) were partially vaccinated or had a single dose within 14 days. There were 5 (1.4%) fully vaccinated cases in ICU. For the remaining 47 (13%) people in ICU, vaccination status could not be determined, either through interview or searching the Australian Immunisation Register.

**Table 9. Hospitalisations and ICU admissions due to COVID-19, by vaccination status, NSW, from 16 June to 28 August 2021**

Vaccination status	Hospitalised (%)	Hospitalised and in ICU (%)	Death (%)
Fully Vaccinated	98 (3.6%)	5 (1.4%)	10 (11.0%)
Partially vaccinated	402 (14.9%)	55 (15.3%)	20 (22.0%)
None	1,842 (68.1%)	253 (70.3%)	57 (62.6%)
Not stated	364 (13.5%)	47 (13.1%)	4 (4.4%)
<b>Total</b>	<b>2,706 (100.0%)</b>	<b>360 (100%)</b>	<b>91 (100.0%)</b>

**Interpretation:** Of the 2,706 people hospitalised, 98 (3.6%) are fully vaccinated, 402 (14.9%) were partially vaccinated and 2,206 (81.5%) were either not vaccinated or vaccination status has not yet been determined. The 10 deaths among people fully vaccinated were four people in their 70s, four people in their 80s and two people in their 90s.

## Section 6: COVID-19 hospitalisations and deaths

### How many people were in hospital each day with COVID-19?

Figure 7a. Number of cases notified in last 14 days, in hospital, in ICU and ventilated by date, NSW, from 16 June to 28 August 2021

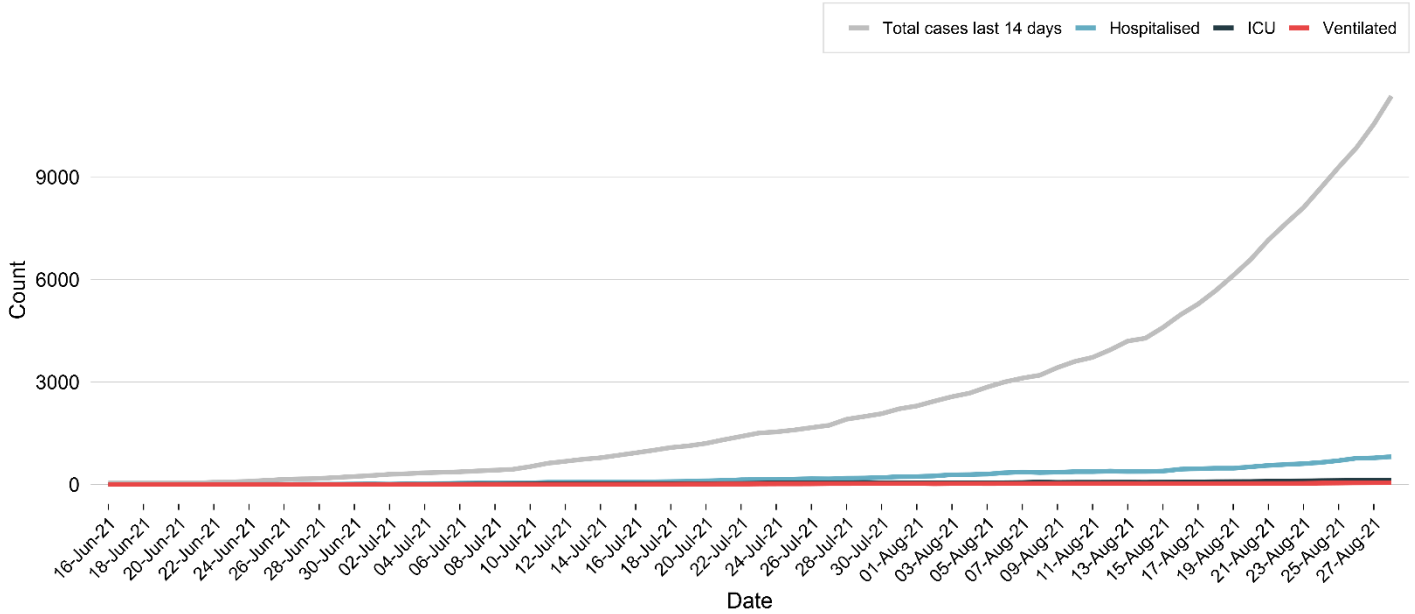
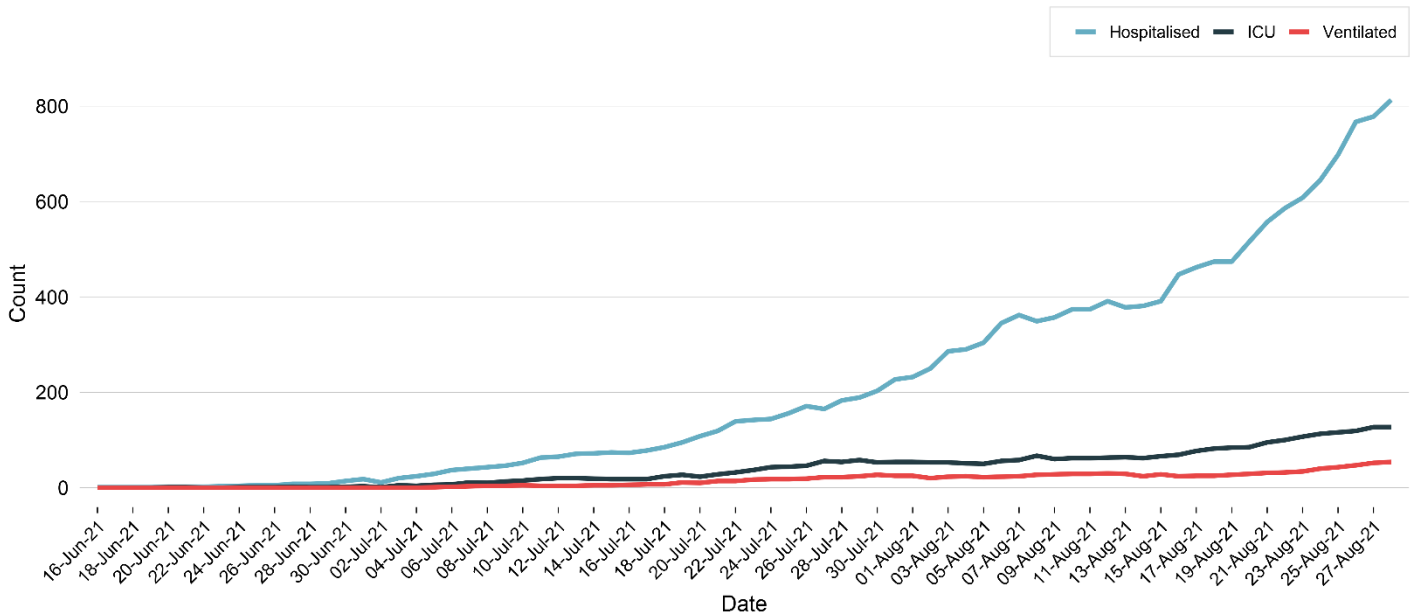


Figure 7b. Number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June to 28 August 2021



**Interpretation:** Cases are considered active for 14 days from symptom onset, during this time a person may become increasingly ill and require hospitalisation. Figure 7a shows the total number of COVID-19 cases in the last 14 days, the number currently hospitalised, the number in ICU and the number ventilated. Figure 7b the number COVID-19 cases in hospital each day, the number of cases in ICU each day and the number requiring ventilation each day. There can be a delay between a person becoming ill with COVID-19 and subsequently requiring a hospitalisation and people may be hospitalised before becoming cases. Additionally, people may require hospitalisation for long periods of time therefore reporting the number of cases hospitalised on any given date does not reflect the true proportion that will require hospitalisation. Currently there is a median delay of 5 days between a person becoming ill with COVID-19 and being admitted to hospital, and 11 days between becoming ill and dying.

## How many people with a COVID-19 diagnosis were in hospital wards?

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).

In the week ending 28 August 2021, of the 6,711 locally acquired cases, there were 617 people who had a diagnosis of COVID-19 who were also admitted to a hospital ward. In total, there have been 2,392 people with COVID-19 who were also hospitalised since the beginning of the current NSW outbreak.

**Table 10. Hospitalisations as a result of COVID-19, by age group, NSW**

Age-group (years)	Current outbreak since 16 June (Locally acquired only)			Total since January 2020	
	Hospitalised	Percentage of cases hospitalised <sup>1</sup>	Hospitalised per 100,000 population	Hospitalised	Percentage of cases hospitalised <sup>1</sup>
0-9	99	4%	9.8	114	4%
10-19	141	4%	14.6	160	4%
20-29	378	9%	32.2	427	8%
30-39	414	13%	35.4	483	11%
40-49	362	16%	35.0	442	15%
50-59	391	21%	40.2	495	19%
60-69	245	27%	29.1	378	24%
70-79	185	44%	31.7	281	35%
80-89	135	62%	49.2	191	56%
90+	45	65%	64.9	63	57%
Total	2,395	13%	29.6	3,034	12%

**Interpretation:** The highest number of cases hospitalised are aged 30-39 years (414, 13%), followed by those aged 50-59 years (391, 21%). In NSW, cases aged 90 years and over have the highest rate of hospitalisation (64.9 per 100,000 people).

## How many people with a COVID-19 diagnosis were in ICU wards?

**Table 11. ICU hospitalisations as a result of COVID-19, by age group, NSW**

Age-group (years)	Current outbreak since 16 June (Locally acquired only)			Total since January 2020	
	Admitted to ICU	Percentage of cases admitted to ICU <sup>1</sup>	ICU admission per 100,000 population	Admitted to ICU	Percentage of cases admitted to ICU <sup>1</sup>
0-9	1	<1%	0.1	1	<1%
10-19	8	<1%	0.8	9	<1%
20-29	33	1%	2.8	37	1%
30-39	37	1%	3.2	52	1%
40-49	46	2%	4.5	56	2%
50-59	75	4%	7.7	97	4%
60-69	46	5%	5.5	85	5%
70-79	32	8%	5.5	65	8%
80-89	12	5%	4.4	25	7%
90+	0	0%	0.0	0	0%
Total	290	2%	3.6	427	2%

**Interpretation:** The highest number of cases in ICU are aged 50-59 years (75, 4%). The highest rate of admission to ICU is for those aged 50-59 years (75 cases, 7.7 per 100,000 people).

<sup>1</sup> There is often a delay between a person becoming ill with COVID-19 and subsequently requiring a hospitalisation or dying. In the current outbreak the median time between onset and hospitalisation is 5 days and between onset and death is 11 days. Therefore hospitalisations and deaths are under-reported for the most recently notified cases.

## How many people have died following recent infection with COVID-19?

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. Where a Coroner's report is available, these findings are to be observed.

Since the start of the pandemic, 1% of cases (147 people) have died following a recent infection with COVID-19, most of whom were 80 years of age or older, including 35 residents of aged care facilities with known COVID-19 outbreaks. Approximately 9% (13/147) of the deaths were in overseas acquired cases.

There were 16 deaths in people diagnosed with COVID-19 reported this week including a female in her 30s (un-vaccinated), one female and one male in their 60s (both partially vaccinated), one female (fully vaccinated) and four males in their 70s (two partially vaccinated, two un-vaccinated), three females (one partially vaccinated, one unvaccinated, and one whose vaccination status is not stated), and four males in their 80s (two fully vaccinated, two un-vaccinated), and one partially vaccinated male in his 90s.

**Table 12. Deaths following recent infection with COVID-19, by age group**

Age-group (years)	Current outbreak since 16 June (Locally acquired only)			Total since January 2020	
	Number of deaths	Case fatality rate	Fatality rate per 100,000 population <sup>2</sup>	Number of deaths	Case fatality rate <sup>2</sup>
0-9	0	0%	0.0	0	0%
10-19	1	<1%	0.2	1	<1%
20-29	1	<1%	0.1	1	<1%
30-39	4	<1%	0.3	4	<1%
40-49	3	<1%	0.3	3	<1%
50-59	2	<1%	0.2	3	<1%
60-69	11	1%	1.3	15	1%
70-79	19	5%	3.3	34	4%
80-89	35	16%	12.8	56	16%
90+	14	20%	20.2	30	27%
<b>Total</b>	<b>90</b>	<b>&lt;1%</b>	<b>1.1</b>	<b>147</b>	<b>1%</b>

**Interpretation:** Cases aged 80-89 years of age had the highest number of deaths, while those aged over 90 had the highest case fatality rate.

<sup>2</sup> There is often a delay between a person becoming ill with COVID-19 and subsequently requiring a hospitalisation or dying. In the current outbreak the median time between onset and hospitalisation is 5 days and between onset and death is 11 days. Therefore hospitalisations and deaths are under-reported for the most recently notified cases.



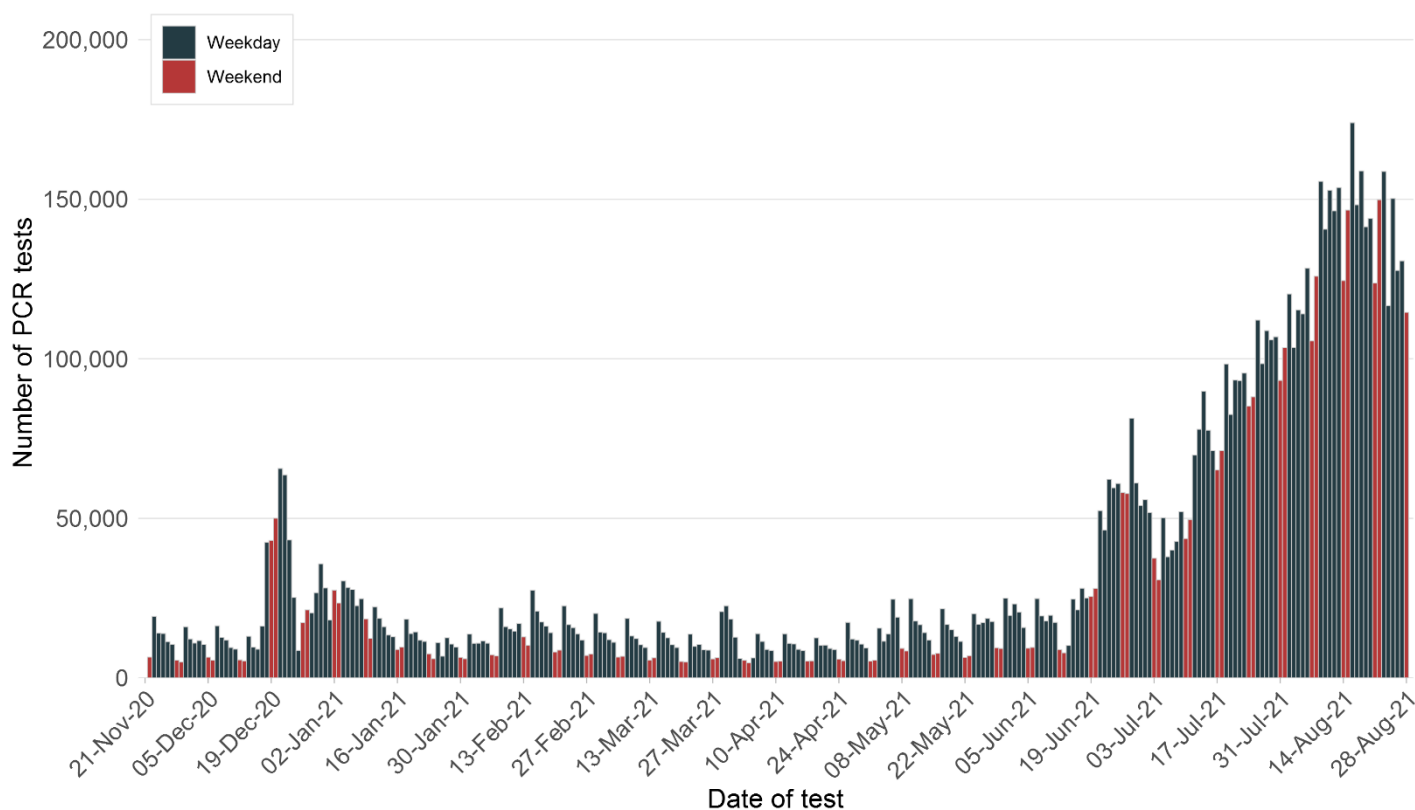
## Section 7: COVID-19 testing in NSW

### How much testing is happening?

The bars on the graph below show the number of tests by the date a person presented for the test.<sup>3</sup> While public health facilities are generally open seven days a week, there may be less demand and availability for testing through GPs and private collection centres on weekends and public holidays. This likely explains lower testing numbers on weekends.

The PCR testing numbers reported are for tests performed on nose and throat swabs. Saliva PCR tests for border and quarantine workers are not included.

Figure 8. Number of PCR tests per day, NSW, 21 November 2020 to 28 August 2021



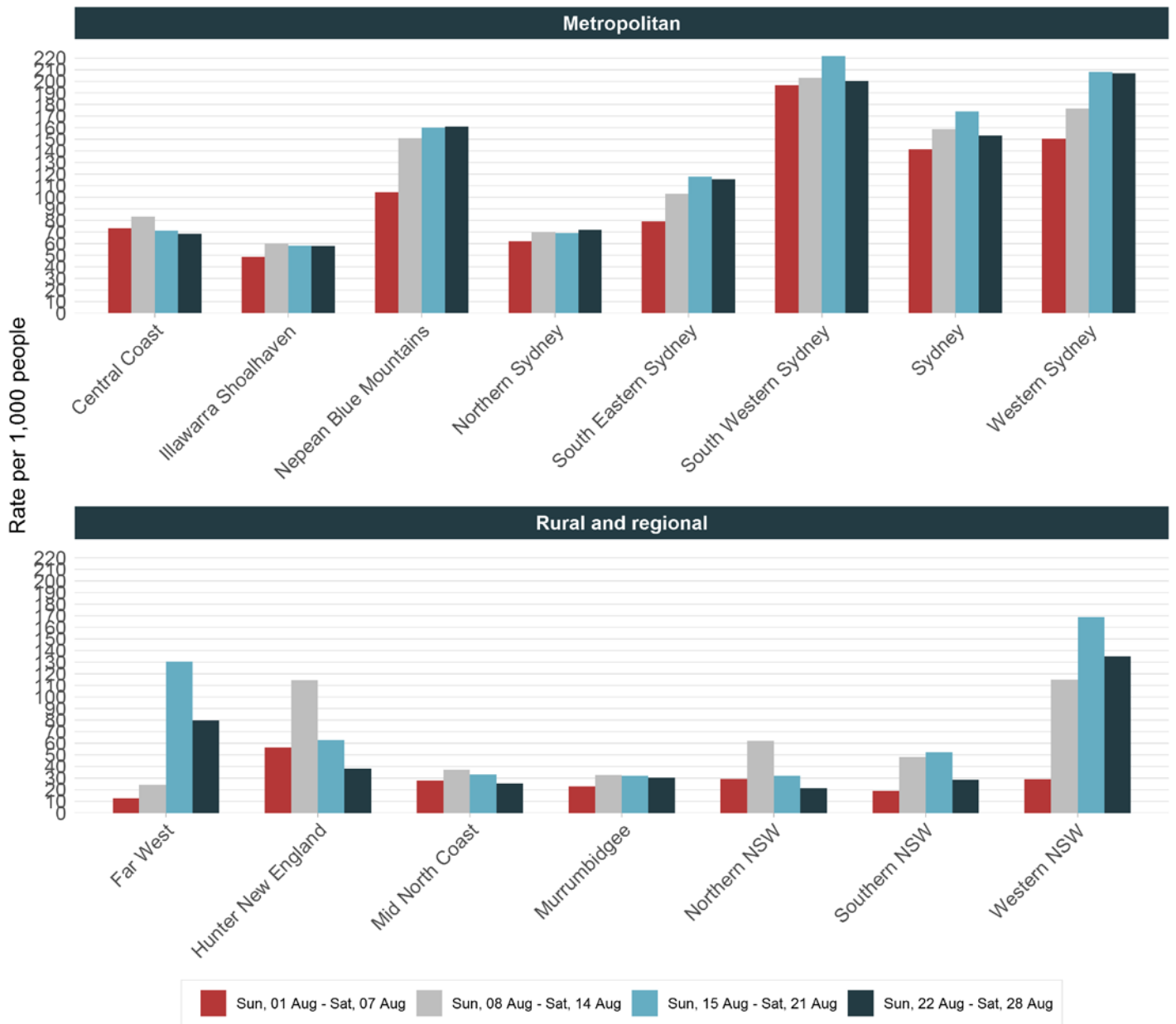
*Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.*

**Interpretation:** Testing numbers decreased in the week ending 28 August 2021 (down 8%) compared to the previous week. The average daily testing rate of 16.8 per 1,000 people in NSW each day decreased compared to the previous week of 18.3 per 1,000 people.

<sup>3</sup> The number of tests per day displayed below is different to the 24 hour increase in tests reported each day as there are delays in some laboratories providing negative results to NSW Health.

### Testing by Local Health District and Local Government Areas

Figure 9. Rates of COVID-19 testing by LHD of residence, NSW, 01 August to 28 August 2021

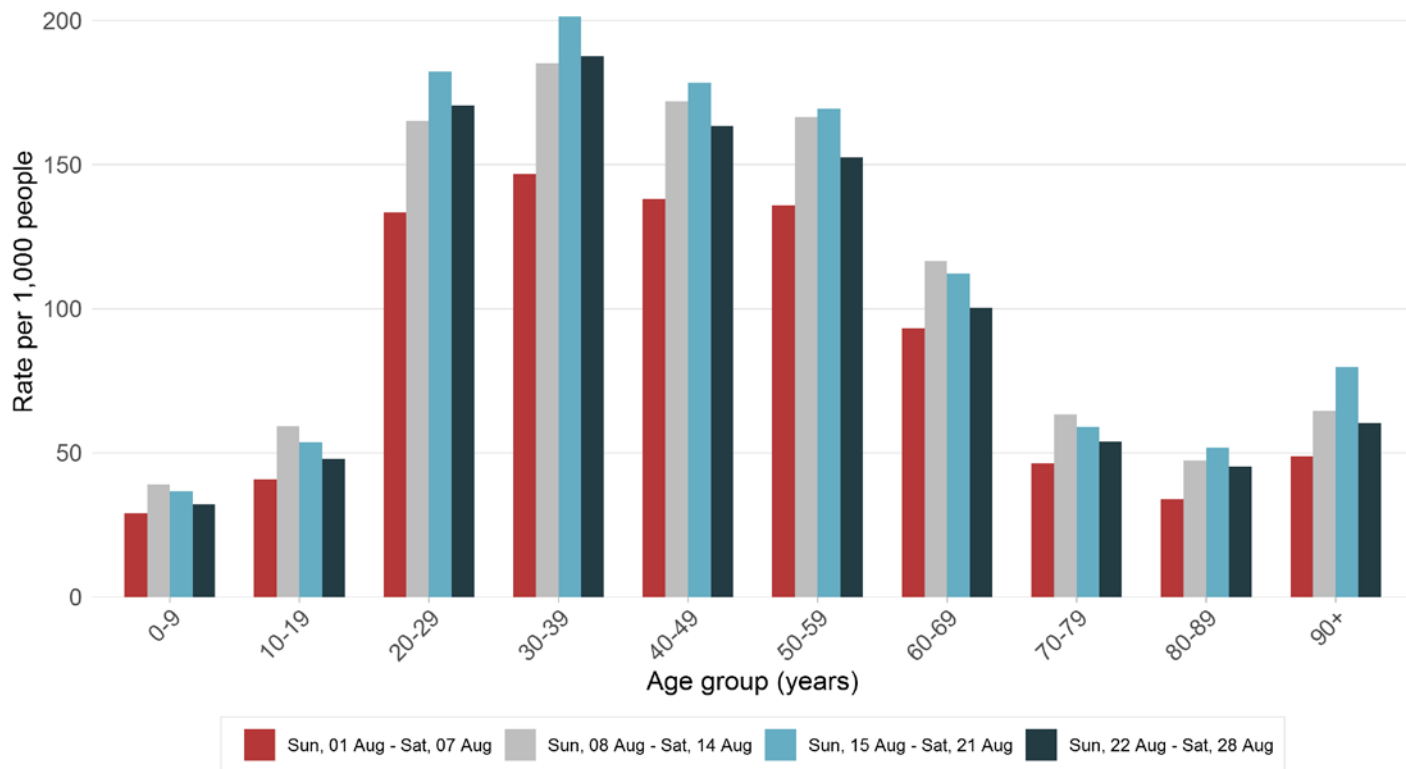


Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

**Interpretation:** State-wide weekly testing rates in the week ending 28 August decreased in most LHDs compared to the previous week (117.2 per 1,000 people compared to 128.2 per 1,000 people). Sustained high testing rates are observed for Nepean Blue Mountains, South Eastern Sydney, South Western Sydney, Sydney, and Western Sydney LHDs. Testing rates decreased in the Far West LHD (79.6 per 1,000 people, compared to 130.5 per 1,000 people in the previous week), and Western NSW LHDs (134.9 per 1,000 people compared to 168.6 per 1,000 people), but remained well above the rates one month prior.

### Testing by age group

Figure 10. Rates of COVID-19 testing by age group and week, NSW, 01 August to 28 August 2021



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

**Interpretation:** In the week ending 28 August 2021, testing rates decreased across all age groups, but remained highest among those aged 20-59.

## Section 8: Variants of Concern (VoC)

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), Kappa (B.1.617.1) 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 locally acquired cases in the NSW outbreak from 16 June 2021.

**Table 13. Variants identified among locally acquired COVID-19 cases by week reported, NSW, 29 November 2020 to 28 August 2021**

Variant	Week ending				29 Nov to 31 Jul	Total since 29 November
	28 Aug*	21 Aug*	14Aug	7 Aug		
<b>Total variants identified</b>	31	557	959	1,179	2,676	5,402
Alpha (B.1.1.7)	0	0	0	0	6	6
Beta (B.1.351)	0	0	0	0	1	1
Gamma (P.1)	0	0	0	0	0	0
Kappa (B.1.617.1)	0	0	0	0	0	0
Delta (B.1.617.2)	31	557	959	1,179	2,669	5,395

**\*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. All locally acquired cases sequenced in the week ending 28 August have been the Delta variant of concern.

**Interpretation:** Only the delta variant has been detected in recent weeks among locally acquired cases, and this is associated with the cluster that emerged in Sydney from 16 June 2021.

## Section 9: NSW Sewage Surveillance Program

The NSW Sewage Surveillance Program tests untreated sewage for fragments of the COVID-19 (SARS-CoV-2) virus at sewage treatment plant locations across NSW. In Sydney, testing is undertaken from both the sewage treatment plant (inlet sites) and sites within the network (network sites). Testing sewage can help track infections in the community and provide early warning of an increase in infections. These tests provide data to support NSW Health's response to COVID-19.

An infected person can shed virus in their faeces even if they do not have symptoms, and shedding can continue for several weeks after they are no longer infectious. The NSW sewage surveillance for SARS-CoV-2 is in the preliminary stages of analysis and work is progressing to assess the significance of the results. For example, it is not currently known the minimum number of cases that can be detected in a catchment. A small number of cases in a large sewage catchment may not be detected by sewage surveillance due to factors such as dilution, inhibition, reduction in shedding over the infection period or movement of cases.

In the week ending 28 August, 194 sewage samples were tested for fragments of SARS-CoV-2. The sewage treatment plants at Nambucca, Bellingen, Quirindi, Cowra, Condobolin, Lake Cargelligo, Trangie, Gilgandra, Baradine, Coolah, Dunedoo, South Kempsey, Branxton, Tanilba Bay and Temora were added as new sites.

There were 72 detections across the state. Fifty-four detections outside Sydney were taken from the Baradine, Bateau Bay, Bathurst (2), Bonny Hills, Bourke (2), Bowral, Brewarrina (2), Broken Hill (2), Broken Hill South (2), Byron Bay, Charmhaven (2), Cooma (2), Dubbo, Gilgandra, Gosford-Kincumber (2), Gulargambone, Branxton, Burwood Beach, Morpeth, Raymond Terrace, Shortland, Belmont, Farley, Kurri Kurri, Mannering Park, Merimbula (2), Moree, Mudgee (2), Nyngan, Orange, Parkes, Queanbeyan, Shellharbour (2), Tamworth (2), Temora, Trangie, Walgett (2), Wilcannia and Toukley (2) sewage treatment plants.

Results for Sydney sites may be delayed to prioritise analysis of regional sites. In Sydney there were detections from the sewage treatment plants in Castle Hill-Cattai, Castle Hill-Glenhaven, Hornsby Heights, Lithgow (2), McGraths Hill, Picton, South Windsor, Wallacia, West Hornsby, Winmalee (2), Wollongong (2). There were also detections from the sewage networks and pumping stations within Bellambi (2) and Port Kembla (2).

Detections from Baradine, Bonny Hills, Brewarrina, Byron Bay, Cooma, Merimbula, Moree, Tamworth, Temora and Trangie occurred with no known or recent cases in the catchment. Subsequently cases were identified in Brewarrina.

There were no detections in the catchment areas for: Brooklyn, Mittagong, Moss Vale, Bombo, Gerringong/Gerroa, Ulladulla, Bomaderry, Nowra, Vincentia, St Georges Basin, Cullburra Beach, Gwandalan, Wyong South, Woy Woy, Perisher, Thredbo, Jindabyne, Charlottes Pass, Albury (composite), Batemans Bay, Moruya, Narooma, Eden, Bermagui, Deniliquin, Moama, Yass, Wagga Wagga (composite), Griffith, Oberon, Forbes, Cowra, Coolah, Dunedoo, Balranald, Dareton, Buronga, Wentworth, Condobolin, Lake Cargelligo, Coonamble, Cobar, Armidale, Guyra, Uralla, Inverell, Glen Innes, Gunnedah, Quirindi, Muswellbrook, Narrabri, Tenterfield, Taree, Forster, Hallidays Point, Scone, Singleton, Boulder Bay, Dora Creek, Toronto, Edgeworth, Karuah, Dungog, Tanilba Bay, Cessnock, Lismore (composite), Casino, Nimbin, Byron Bay – Ocean Shores, Bangalow, Mullumbimby, Ballina, Lennox Head, Murwillumbah, Banora Point, Kingscliff, Hastings Point, Grafton (composite), Yamba, Nambucca Heads, Port Macquarie, Dunbogan, West Kempsey, South Kempsey, South West Rocks, Crescent Head, Bellingen, Woolgoolga, Coffs Harbour.

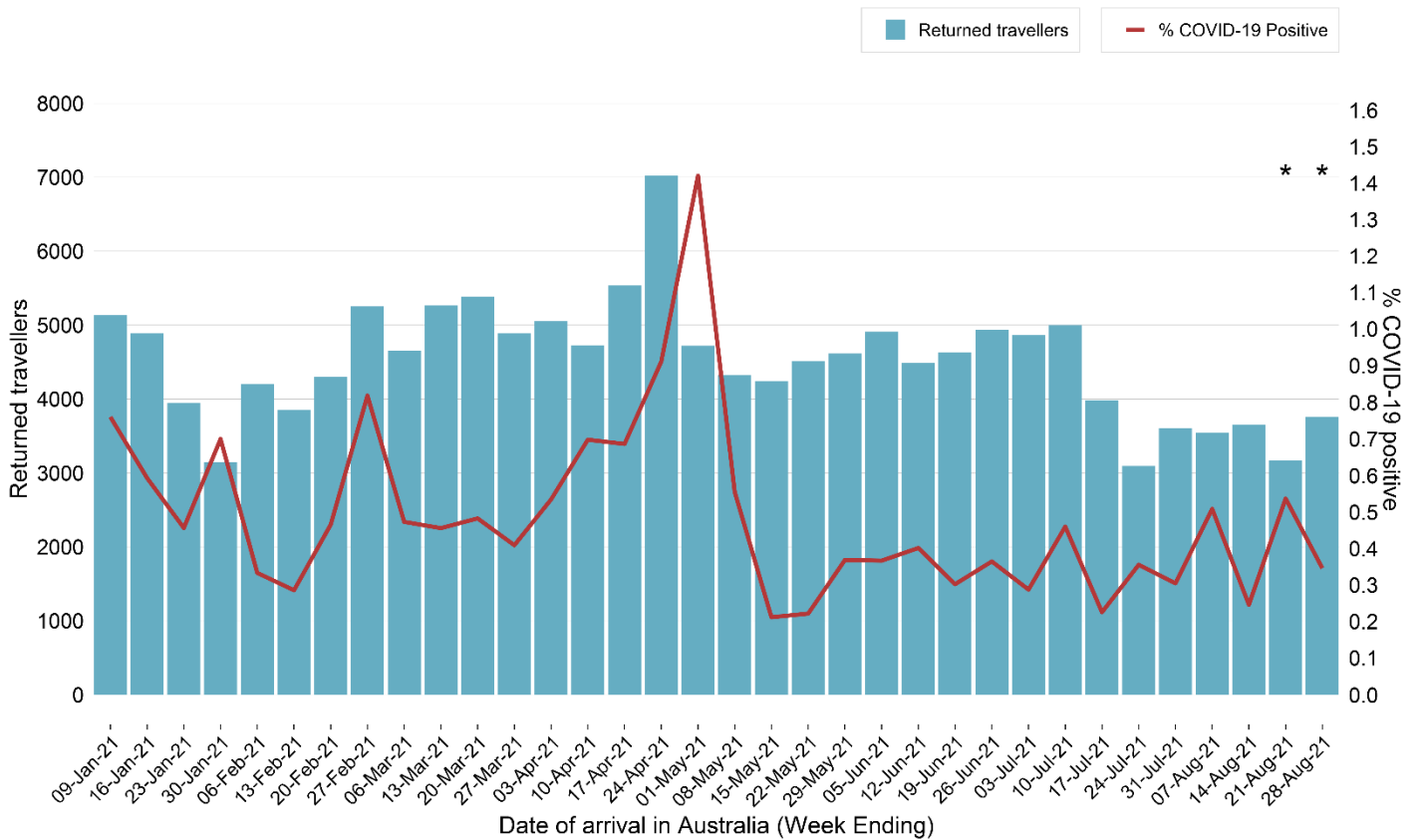
### Section 10: COVID-19 in returned travellers

To limit the spread of COVID-19 into NSW, travel restrictions were introduced for all non-Australian citizens and permanent residents in mid-March 2020. In addition:

- From 29 March 2020 returned travellers have been quarantined in hotels for a 14-day period and travellers who develop symptoms are isolated until no longer infectious. Returned travellers are screened on entry and exit from quarantine and following release from quarantine.
- From 22 January 2021 (local time at departure point) all people travelling to Australia on flights must provide proof of a negative COVID-19 PCR test result at the time of check-in.

The figure below shows the number of returned travellers screened at Sydney International Airport since 2021. Returned travellers include international flight crew who are required to be tested before leaving the airport.

**Figure 11. Returned travellers screened at Sydney International Airport by week of arrival and percent COVID-19 positive, NSW, 3 January 2021 to 28 August 2021**



\*Returned travellers entering Australia in the past 14 days are still in quarantine and may return a positive result prior to the end of their hotel quarantine period.

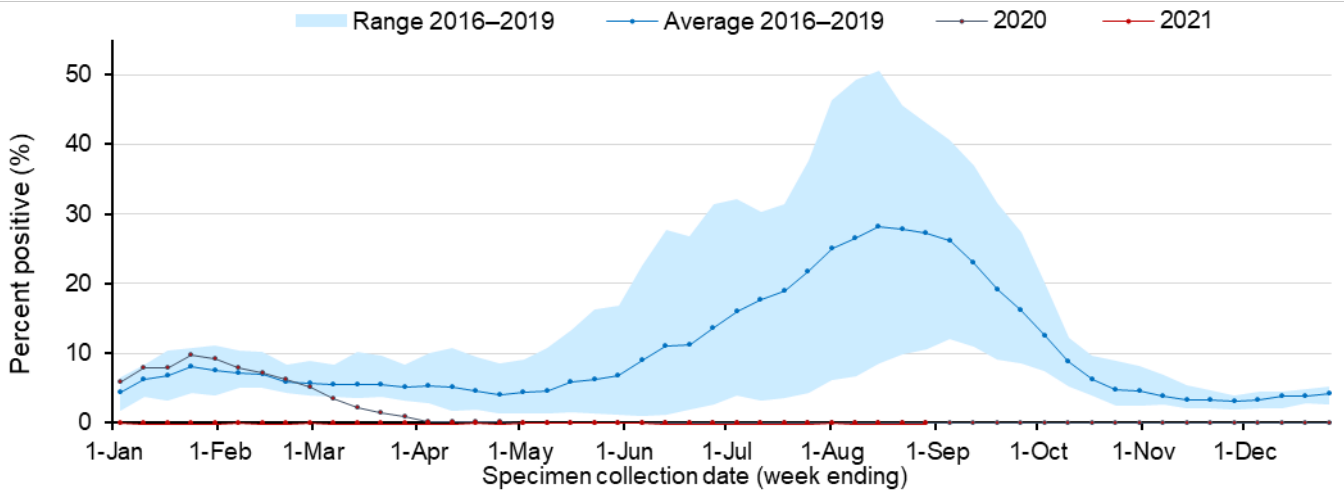
**Interpretation:** Since 3 January 2021, there has been on average 643 people screened on arrival through Sydney International Airport daily. In the last four weeks, 57 returned travellers have subsequently tested positive for COVID-19 while completing quarantine. The proportion of returned travellers who test positive for COVID-19 has been low. In the week ending 1 May 2021 the proportion increased to over 1% (1.4%) of returned travellers testing positive, but this has subsequently fallen back to lower levels.

## Section 11: Other respiratory infections in NSW

### How much influenza is circulating?

The graph below shows the proportion of tests found to be positive for influenza with the red line showing weekly counts for 2021, the dark blue line showing counts for 2020, the light blue line showing the average for 2016 to 2019 and the shaded area showing the range recorded for 2016 to 2019.

Figure 12. Proportion of tests positive for influenza, NSW, 1 January 2016 to 29 August 2021

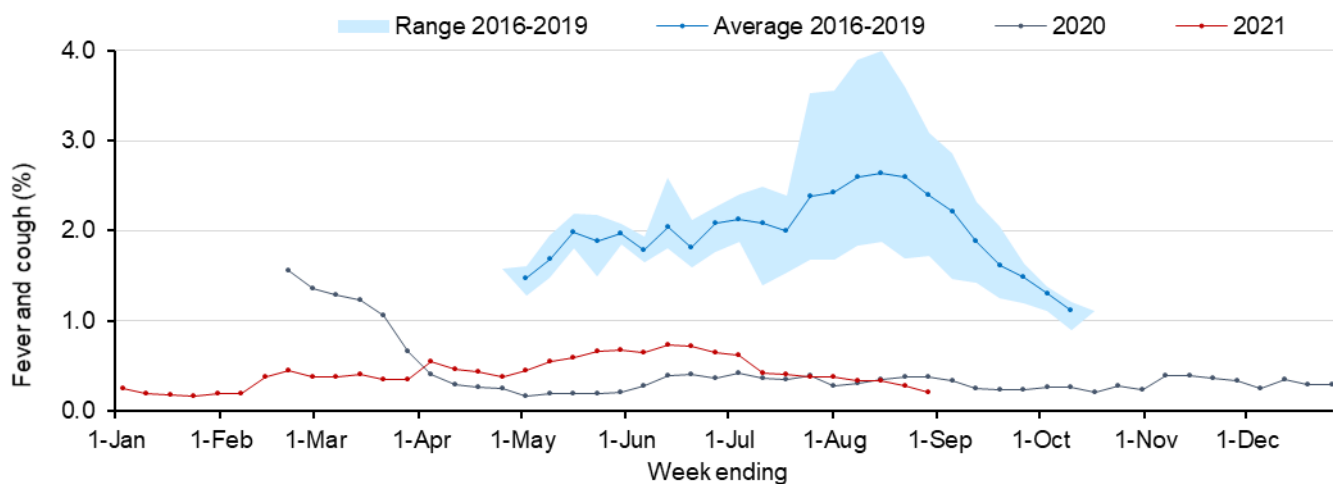


**Interpretation:** In the week ending 29 August, the percent of influenza tests that were positive continued to be very low (<0.01%), indicating limited influenza transmission in the community. Since early March 2020, this percentage has remained far lower than the usual range for the time of year. There have been 14 influenza cases reported in 2021.

### How many people have flu-like symptoms in the community?

FluTracking is an online survey that asks participants to report flu-like symptoms, such as fever or cough, in the last week. Across NSW approximately 25,000–30,000 people participate each week. The survey usually commences at the beginning of May in line with the flu season but has continued throughout the year due to the COVID-19 outbreak.

Figure 13. Proportion of FluTracker participants reporting influenza-like illness, NSW, 1 January 2016 to 29 August 2021



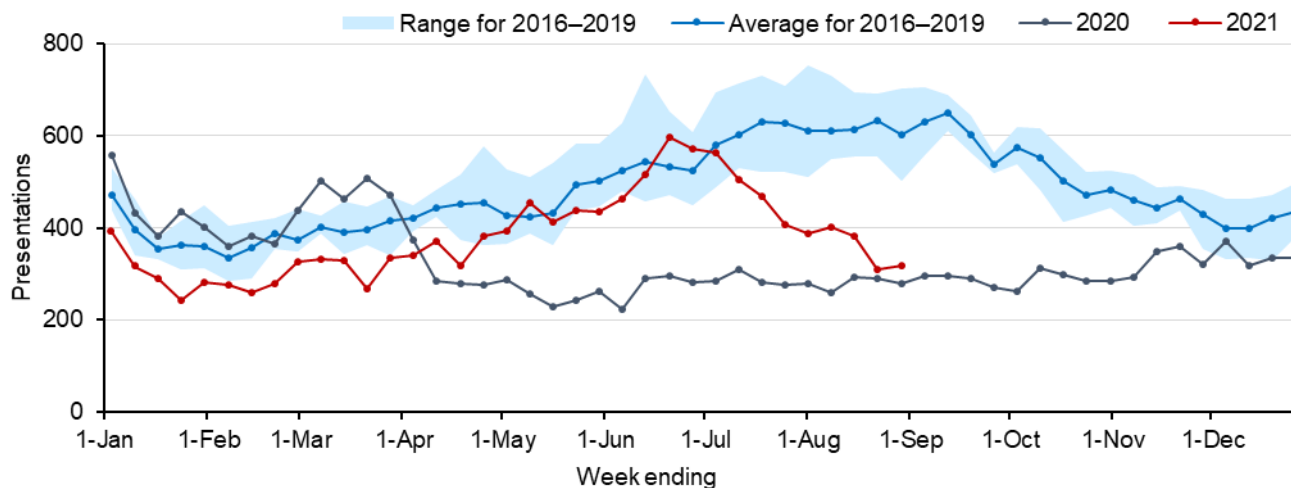
**Interpretation:** In NSW in the week ending 29 August July 2021, of the 23,903 people surveyed, 49 people (0.20%) reported flu-like symptoms. In the last four weeks, 58% (159/275) of new cases of flu-like illness reported having a COVID-19 test. The proportion of people with flu-like symptoms being tested for COVID-19 has decreased since January 2021, when 80% reported being tested, and has remained at around 50% since early April 2021.

### How are emergency department presentations tracking?

Improved hygiene and social distancing measures implemented during the COVID-19 pandemic have impacts on a broad range of other viral and bacterial infections.

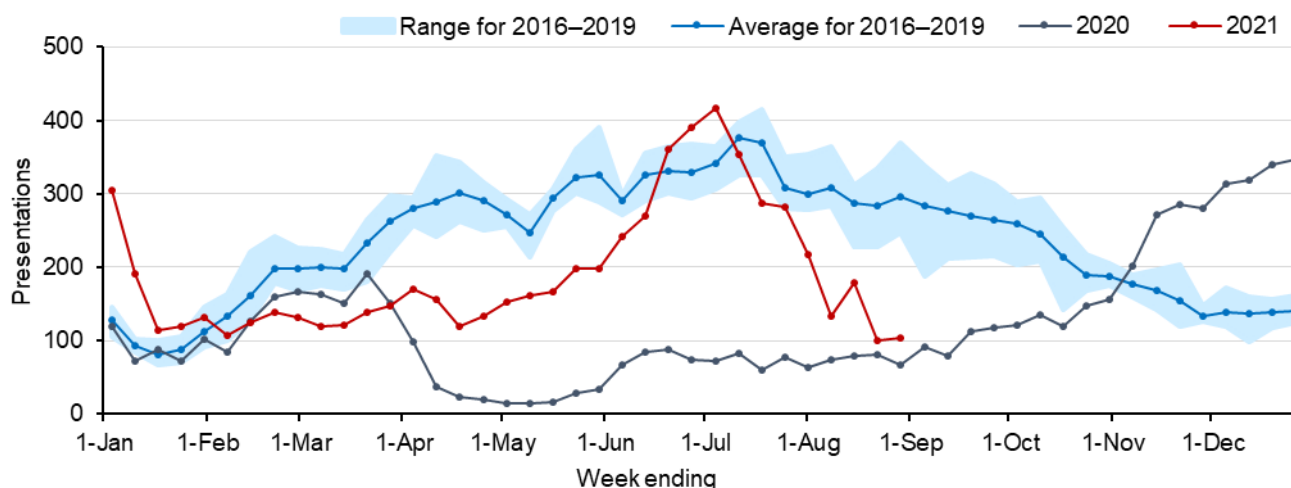
The figures below show weekly pneumonia and bronchiolitis presentations to Emergency Departments in NSW, using PHREDSS<sup>4</sup>. The red line shows the weekly counts for 2021, the dark blue line showing counts for 2020, the light blue line showing the average for 2016 to 2019 and the shaded area showing the range recorded for 2016 to 2019.

Figure 14. Emergency Department pneumonia presentations, NSW, 1 January 2016 to 29 August 2021



**Interpretation:** Pneumonia presentations 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. In the week ending 29 August, pneumonia presentations remain significantly below the seasonal range for this time of year.

Figure 15. Emergency Department bronchiolitis presentations, NSW, 1 January 2016 to 29 August 2021



**Interpretation:** 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. In the week ending 29 August remain below the seasonal range for this time of year.

<sup>4</sup> NSW Health Public Health Rapid, Emergency Disease and Syndromic Surveillance (PHREDSS) system, CEE, NSW Ministry of Health. Comparisons are made with data for the preceding 5 years. Includes unplanned presentations to 67 NSW emergency departments (accounts for 87% of total public ED activity).



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

		Week ending				Total since January 2021		
		28-Aug		21-Aug				
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population	
<b>Central Coast</b>	<i>LHD Total<sup>2</sup></i>	24131	68.39	25150	71.27	440317	1247.84	
	Balranald	73	31.22	133	56.89	1343	574.42	
	Broken Hill	1690	96.69	2807	160.59	17369	993.71	
<b>Far West</b>	Central Darling	479	260.47	713	387.71	2058	1119.09	
	Wentworth	158	22.40	280	39.70	5480	776.97	
	<i>LHD Total<sup>2</sup></i>	2400	79.62	3933	130.47	26250	870.82	
	Armidale Regional	688	22.35	1341	43.57	30294	984.24	
	Cessnock	1803	30.06	2450	40.84	39663	661.22	
	Dungog	243	25.79	355	37.67	6464	685.98	
	Glen Innes Severn	152	17.13	184	20.74	4867	548.64	
	Gunnedah	231	18.22	445	35.09	8769	691.51	
	Gwydir	84	15.69	92	17.19	2076	387.82	
	Inverell	328	19.42	460	27.24	11086	656.36	
	Lake Macquarie	10352	50.28	15401	74.80	254542	1236.23	
	Liverpool Plains	209	26.45	264	33.41	5247	663.93	
	Maitland	5190	60.94	10233	120.15	118674	1393.44	
	Mid-Coast	2095	22.33	3073	32.75	58875	627.42	
<b>Hunter New England</b>	Moree Plains	400	30.16	405	30.54	9706	731.92	
	Muswellbrook	284	17.34	519	31.69	11185	682.97	
	Narrabri	212	16.14	363	27.64	6652	506.43	
	Newcastle	7915	47.80	14658	88.53	234953	1419.05	
	Port Stephens	2550	34.70	4222	57.46	70441	958.63	
	Singleton	843	35.93	1312	55.92	22843	973.66	
	Tamworth Regional	2237	35.77	3015	48.21	59967	958.84	
	Tenterfield	126	19.11	116	17.59	2719	412.34	
	Upper Hunter Shire	285	20.10	526	37.09	10071	710.23	
	Uralla	121	20.13	161	26.78	3723	619.26	
	Walcha	68	21.70	108	34.46	2498	797.06	
		<i>LHD Total<sup>2</sup></i>	36386	38.21	59682	62.67	974759	1023.50
		Kiama	1013	43.32	1323	56.57	27934	1194.48
	<b>Illawarra Shoalhaven</b>	Shellharbour	5087	69.46	6909	94.34	94381	1288.78
Shoalhaven		2737	25.91	3504	33.17	87878	831.80	
Wollongong		15557	71.33	12746	58.44	274538	1258.69	
<i>LHD Total<sup>2</sup></i>		24394	58.13	24482	58.34	484731	1155.18	
	Bellingen	262	20.16	368	28.32	9525	732.92	
<b>Mid North Coast</b>	Coffs Harbour	1476	19.10	1783	23.07	51646	668.32	
	Kempsey	1399	47.03	1671	56.18	22914	770.35	
	Nambucca	430	21.71	424	21.41	11734	592.48	
	Port Macquarie-Hastings	2113	25.00	3202	37.88	64653	764.90	
	<i>LHD Total<sup>2</sup></i>	5680	25.17	7448	33.00	160472	711.11	
	Albury	1501	27.62	1588	29.22	43859	806.93	
	Berrigan	194	22.17	155	17.71	3832	437.94	
	Bland	238	39.85	196	32.82	3500	586.07	
	Carrathool	149	53.23	118	42.16	1014	362.27	
	Coolamon	291	67.04	135	31.10	3179	732.32	
	Cootamundra-Gundagai Regional	278	24.74	400	35.60	7780	692.48	
<b>Murrumbidgee</b>	Edward River	308	33.91	188	20.70	5267	579.81	
	Federation	329	26.45	302	24.28	7274	584.87	
	Greater Hume Shire	357	33.17	331	30.75	8249	766.35	
	Griffith	571	21.13	810	29.97	20473	757.45	
	Hay	66	22.38	61	20.68	1251	424.21	
	Hilltops	527	28.18	848	45.34	13233	707.50	
	Junee	144	21.55	158	23.64	3536	529.10	
	Lachlan <sup>1</sup>	446	73.42	378	62.22	2952	485.93	

		Week ending				Total since January 2021	
		28-Aug		21-Aug			
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Nepean Blue Mountains	Leeton	215	18.79	273	23.85	6236	544.87
	Lockhart	120	36.53	108	32.88	2095	637.75
	Murray River	111	9.16	46	3.80	1883	155.39
	<i>LHD Total<sup>2</sup></i>	77	19.66	107	27.32	1924	491.19
	Narrandera	109	18.48	108	18.31	2490	422.11
	Snowy Valleys	314	21.69	417	28.80	9039	624.28
	Temora	517	81.97	153	24.26	3244	514.35
	Wagga Wagga	2355	36.09	2904	44.50	63632	975.08
	<i>LHD Total<sup>2</sup></i>	9048	30.35	9588	32.16	214095	718.18
	Blue Mountains	7047	89.07	6402	80.92	118869	1502.43
	Hawkesbury	12258	182.15	12140	180.40	109575	1628.25
	Lithgow	1896	87.76	933	43.18	16064	743.53
	Penrith	42676	200.38	44093	207.03	400711	1881.48
	<i>LHD Total<sup>2</sup></i>	62935	160.96	62613	160.14	637598	1630.74
	Northern NSW	Ballina	973	21.80	1825	40.89	46691
Byron		747	21.29	1631	46.49	40044	1141.47
Clarence Valley		970	18.78	1549	29.98	28412	549.96
Kyogle		131	14.89	140	15.92	4421	502.61
Lismore		916	20.96	1314	30.07	38065	871.21
Richmond Valley		759	32.35	881	37.55	18619	793.48
Tenterfield		126	19.11	116	17.59	2719	412.34
Tweed		2090	21.55	2613	26.94	63945	659.22
<i>LHD Total<sup>2</sup></i>		6619	21.33	9979	32.15	240785	775.82
Northern Sydney	Hornsby	8771	57.68	8621	56.70	185664	1221.00
	Hunters Hill	2667	178.04	2010	134.18	44186	2949.67
	Ku-ring-gai	7451	58.60	7899	62.12	231089	1817.41
	Lane Cove	4460	111.07	3945	98.24	114107	2841.66
	Mosman	1471	47.48	1396	45.06	46864	1512.67
	North Sydney	3142	41.88	3105	41.39	91025	1213.33
	Northern Beaches	17206	62.91	17068	62.41	579637	2119.34
	Parramatta <sup>1</sup>	36323	141.23	35688	138.76	384544	1495.13
	Ryde	15946	121.47	14609	111.29	220068	1676.44
	Willoughby	3220	39.66	3075	37.87	92234	1136.04
<i>LHD Total<sup>2</sup></i>	68552	71.71	66021	69.07	1668905	1745.87	
South Eastern Sydney	Bayside	31275	175.31	32482	182.08	288282	1615.97
	Georges River	24181	151.63	26402	165.56	258889	1623.42
	Randwick	17902	115.02	17364	111.56	313734	2015.65
	Sutherland Shire	19896	86.28	20242	87.78	361630	1568.14
	Sydney <sup>1</sup>	23281	94.51	22884	92.89	461102	1871.79
	Waverley	6145	82.71	5979	80.48	174441	2347.95
	Woollahra	4330	72.91	3906	65.77	136768	2303.00
	<i>LHD Total<sup>2</sup></i>	110865	115.59	113046	117.87	1694027	1766.27
South Western Sydney	Camden	18425	181.64	16994	167.53	222571	2194.18
	Campbelltown	32925	192.61	34509	201.87	335596	1963.20
	Canterbury-Bankstown <sup>1</sup>	93894	248.45	121456	321.38	904122	2392.38
	Fairfield	49751	235.01	57196	270.18	514666	2431.17
	Liverpool	50973	223.97	51978	228.39	488520	2146.54
	Wingecarribee	2502	48.93	2896	56.64	66644	1303.32
	Wollondilly	5092	95.81	4953	93.19	62021	1166.93
<i>LHD Total<sup>2</sup></i>	208294	200.57	230375	221.83	2135940	2056.69	
Southern NSW	Bega Valley	809	23.47	797	23.12	21962	637.02
	Eurobodalla	654	17.00	1201	31.22	30900	803.16
	Goulburn Mulwaree	1169	37.55	1751	56.24	28274	908.20
	Queanbeyan-Palerang Regional	2241	36.68	5164	84.52	40076	655.91
	Snowy Monaro Regional	584	28.08	837	40.25	15746	757.20

		Week ending				Total since January 2021	
		28-Aug		21-Aug		No.	Tests per 1,000 population
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Sydney	Upper Lachlan Shire	202	25.07	362	44.92	6046	750.22
	Yass Valley	578	33.83	1206	70.58	9936	581.49
	<i>LHD Total<sup>2</sup></i>	6245	28.77	11322	52.16	153036	705.00
	Burwood	5861	144.32	6138	151.14	54380	1339.01
	Canada Bay	9470	98.57	9769	101.68	158718	1652.04
	Canterbury-Bankstown <sup>1</sup>	93894	248.45	121456	321.38	904122	2392.38
	Inner West	18009	89.68	17277	86.04	345758	1721.81
	Strathfield	13743	292.87	14627	311.70	110462	2353.96
	Sydney <sup>1</sup>	23281	94.51	22884	92.89	461102	1871.79
	<i>LHD Total<sup>2</sup></i>	106647	153.06	121219	173.97	1412284	2026.90
Western NSW	Bathurst Regional	6265	143.63	3583	82.14	50209	1151.11
	Blayney	587	79.55	376	50.96	8259	1119.26
	Bogan	133	51.55	192	74.42	2228	863.57
	Bourke	556	214.67	1226	473.36	3329	1285.33
	Brewarrina	271	168.22	298	184.98	1250	775.92
	Cabonne	617	45.25	465	34.11	9312	683.00
	Cobar	279	59.90	291	62.47	3053	655.43
	Coonamble	388	98.03	297	75.04	3042	768.57
	Cowra	351	27.54	401	31.47	8140	638.78
	Dubbo Regional	15435	287.33	24173	449.99	91536	1703.98
	Forbes	694	70.06	400	40.38	6421	648.19
	Gilgandra	409	96.49	806	190.14	3784	892.66
	Lachlan <sup>1</sup>	446	73.42	378	62.22	2952	485.93
	Mid-Western Regional	1525	60.39	6905	273.45	28558	1130.97
	Narromine	761	116.77	1176	180.45	6880	1055.70
	Oberon	209	38.63	258	47.68	3813	704.68
	Orange	6821	160.68	3519	82.90	62488	1472.00
	Parkes	1583	106.69	1236	83.31	12207	822.74
	Walgett	386	64.84	541	90.88	4591	771.21
	Warren	551	204.30	882	327.03	4902	1817.58
Warrumbungle Shire	349	37.62	690	74.37	7114	766.76	
Weddin	115	31.83	145	40.13	2070	572.93	
<i>LHD Total<sup>2</sup></i>	38456	134.93	48062	168.63	325154	1140.84	
Western Sydney	Blacktown	80204	214.19	80220	214.23	721685	1927.31
	Cumberland	79860	330.65	81762	338.53	585384	2423.74
	Parramatta <sup>1</sup>	36323	141.23	35688	138.76	384544	1495.13
	The Hills Shire	22836	128.31	22184	124.65	347404	1952.05
<i>LHD Total<sup>2</sup></i>	217809	206.76	218952	207.85	1998996	1897.60	
<b>NSW Total<sup>3</sup></b>	<b>948383</b>	<b>117.23</b>	<b>1036750</b>	<b>128.15</b>	<b>8967508</b>	<b>1108.49</b>	

Source - Notifiable Condition Information Management System, accessed as at 8pm 31 Aug 2021

1 Local Government Area (LGA) spans multiple Local Health Districts.

2 Local Health District total counts and rates includes tests for LHD residents only. Murrumbidgee includes Albury LGA residents.

3 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 29 August 2021

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 2020–29 August 2021.

Specimen collection date	PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhino-virus	HMPV	Entero-virus
		No.	%Pos.	No.	%Pos.						
Total	1,586,777	4	<0.01%	10	<0.01%	7,041	18,437	17,417	55,660	4,964	6,299
<b>Month ending</b>											
31 January*	168,596	1	<0.01%	0	-	416	88	3,275	3,541	23	560
28 February	125,718	2	<0.01%	0	-	419	106	2,386	8,667	22	910
28 March	95,458	0	-	0	-	507	354	1,909	8,891	18	1,187
2 May*	112,962	0	-	3	<0.01%	802	1,515	1,653	8,141	48	1,128
30 May	131,316	0	-	6	<0.01%	946	3,129	1,491	8,982	78	843
27 June	243,351	1	< 0.01%	0	-	1,551	7,104	2,794	9,915	635	811
26 July	530,698	0	-	0	-	1,463	4,603	3,014	5,089	1,991	587
<b>Week ending</b>											
1 August	24,651	0	-	1	<0.01%	227	411	317	591	395	75
8 August	36,453	0	-	0	-	199	361	210	457	494	49
15 August	45,226	0	-	0	-	169	326	165	507	511	61
22 August	29,858	0	-	0	-	160	263	105	454	389	52
29 August	20,769	0	-	0	-	110	135	49	232	239	19

Notes: Preliminary laboratory data is provided by participating sentinel laboratories on a weekly basis and are subject to change. Serological diagnoses are not included.

HMPV – Human metapneumovirus

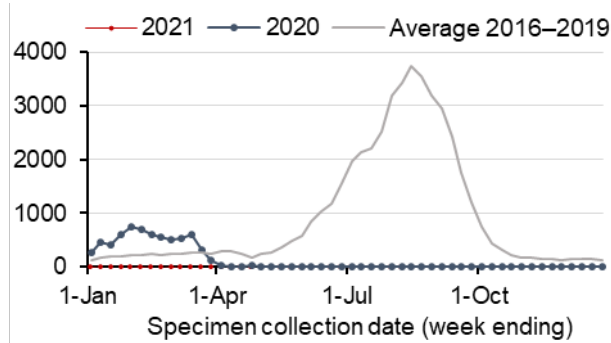
RSV - Respiratory syncytial virus

\*Five-week period

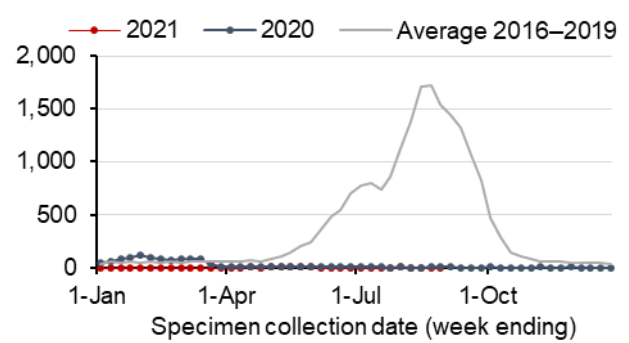
## Appendix C: Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 29 August 2021

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

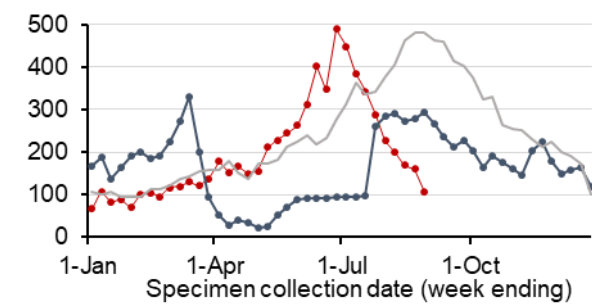
Influenza A



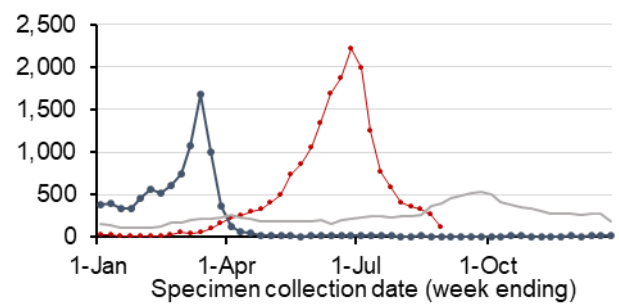
Influenza B



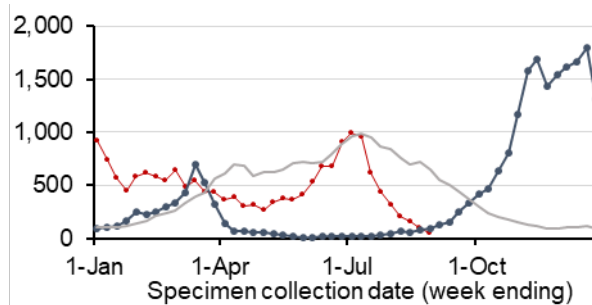
Adenovirus



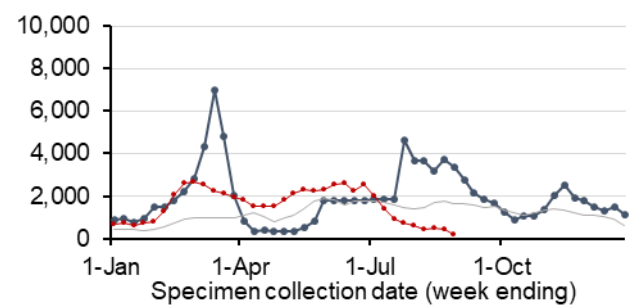
Parainfluenza



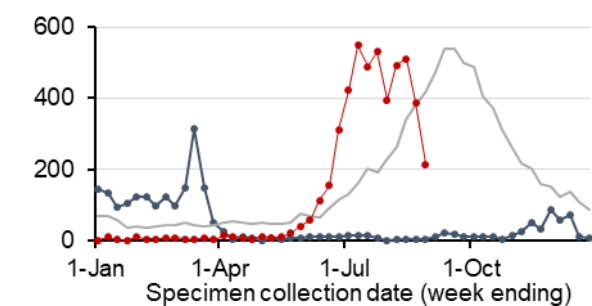
Respiratory Syncytial Virus



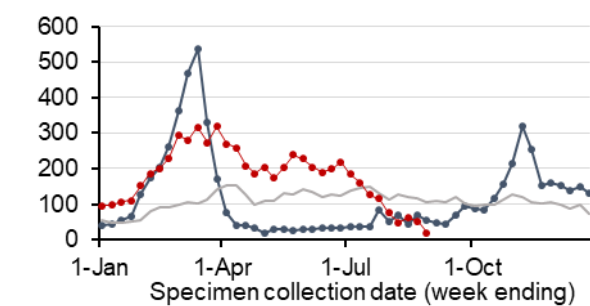
Rhinovirus



Human metapneumovirus



Enterovirus



Note: Preliminary laboratory data are provided by participating sentinel laboratories on a weekly basis and are subject to change. Serological diagnoses are not included.

## 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.
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.

## 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.