

COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 36, ENDING 11 September 2021

Published 24 September 2021

Overview

Table 1. Number and proportion of COVID-19 cases in NSW by likely source of infection to week ending 11 September 2021

	2020		2021		Total
	Jan – Jun	July – Dec	01 Jan – 15 Jun	16 Jun – 11 Sep	
Locally acquired	1,236 (39 %)	807 (52 %)	51 (7%)	37,729 (99 %)	39,823 (92 %)
Interstate acquired	67 (2 %)	23 (1 %)	0 (0%)	6 (<1 %)	96 (<1 %)
Overseas acquired	1,892 (59 %)	714 (46 %)	641 (93%)	189 (0 %)	3,436 (8 %)
Total	3,195 (100 %)	1,544 (100 %)	692 (100%)	37,924 (100 %)	43,355 (100 %)
Deaths	51	5	0	180	236

Summary for the week 05 September to 11 September 2021 (inclusive)

- There were 9,792 locally acquired cases reported in the week ending 11 September 2021. Of these:
 - 1,871 (19%) cases were residents of Canterbury-Bankstown LGA
 - 1,379 (14%) cases were residents of Cumberland LGA
 - 1,001 (10%) cases were residents of Blacktown LGA
 - 3,111 (32%) cases were residents of other 9 LGAs of concern
 - 2,430 (25%) cases were residents across 56 other LGAs
- There were 9 cases reported in overseas returned travellers in the last week (down 10%).
- There were 50 deaths in people diagnosed with COVID reported this week.
- Since March 2021, 1,410 (3.7%) locally acquired cases have reported being fully vaccinated compared to 19,623 (52%) of locally acquired cases reporting no vaccination.
- Testing rates decreased compared to the previous week (down 7%), with continued high testing rates in the Nepean Blue Mountains, South Eastern Sydney, South Western Sydney, Sydney, and Western Sydney LHDs.
- In the week ending 11 September, 204 sewage samples were tested for fragments of SARS-CoV-2. Of these, there were 76 detections. Detections occurring with no known or recent cases in the catchment occurred in Bangalow, Brooklyn, Bonny Hills, Byron Bay, Dunbogan, Eden, Gerroa, Glen Innes, Harden, Karuah, Dungog, Lightning Ridge, Moruya, Port Macquarie, Tamworth, Trangie, Yass and Young. Cases were subsequently identified in Brooklyn, Gerroa and Glen Innes.

Indicators of effective prevention for COVID-19 in NSW for the week ending 11 September 2021

On receipt of a laboratory notification diagnostic of COVID-19, NSW Health now sends a text message to the case informing them that they and their close contacts are required to isolate and asking them to answer a short questionnaire.

Where a mobile number is not available, NSW Health works with the NSW Police to locate and inform the case as soon as possible

Table 2. Measures of public health action, NSW, for the period from 29 August to 11 September 2021

	Week ending 11 Sep	Week ending 04 Sep
Proportion locally acquired cases notified to NSW Health by the laboratory within 1 day of specimen collection	67% (6,601/9,792)	66% (5,962/9,000)
Locally acquired cases contacted by text message within 1 day of notification to NSW Health	87% (8,519/9,792)	91% (8,190/9,000)
Locally acquired cases fully interviewed by public health staff within 1 day of notification to NSW Health	31% (3,040/9,792)	28% (2,490/9,000)

Interpretation: In the week ending 11 September, 67% of cases were notified to NSW Health within a day of test, 31% of cases were fully interviewed within one day of notification and 87% of cases were sent a text message to advise them of their positive result, provide isolation requirements and to identify high risk exposure settings.

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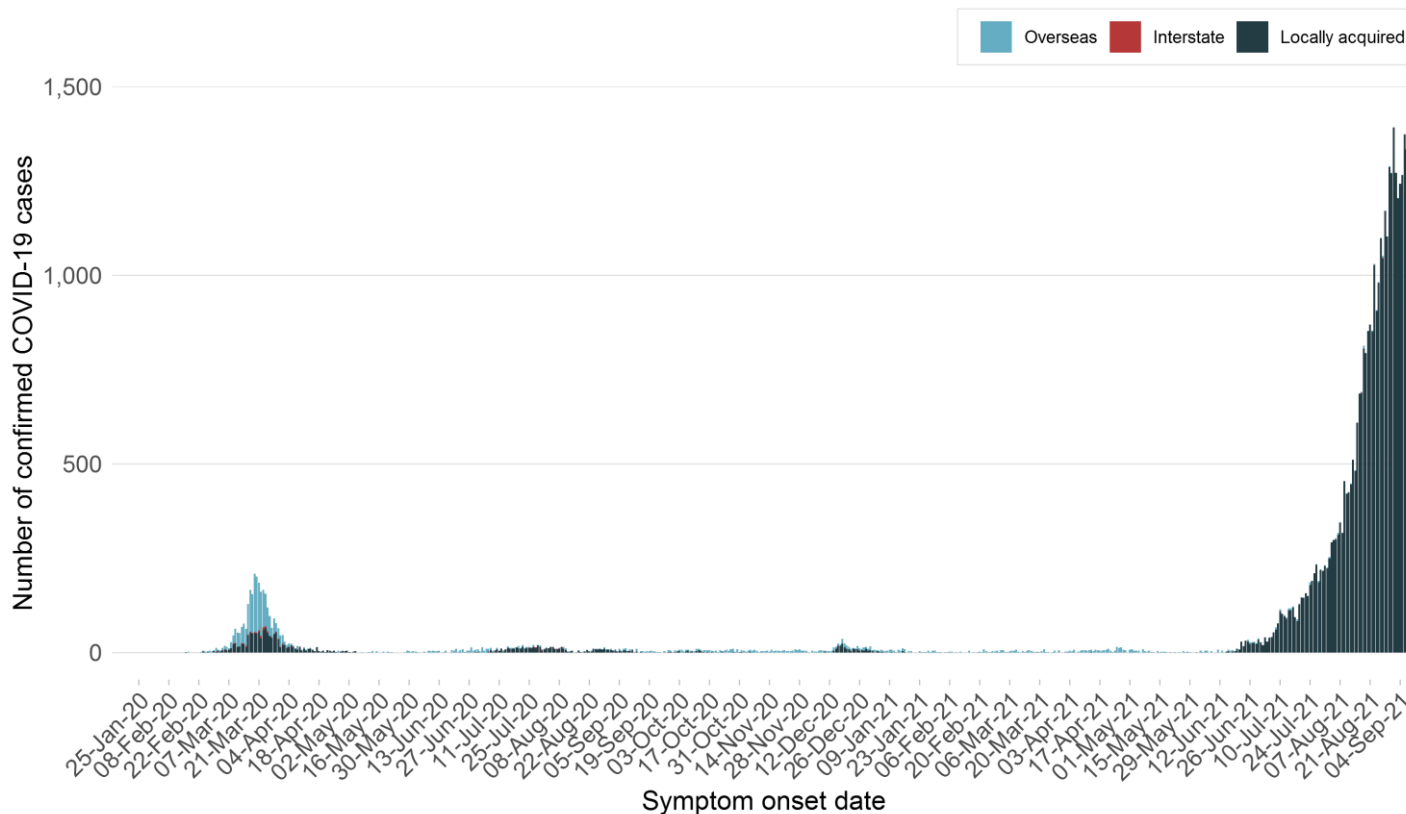
COVID-19 Vaccination program

- 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 11 September 2021



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

Interpretation: Between 13 January 2020 and 11 September 2021, there were 43,355 confirmed COVID-19 cases. Of those, 3,436 (8%) were overseas acquired, 96 (<1%) were interstate acquired, and 39,283 (92%) 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. Clusters have developed in the Central Coast, Hunter New England, Western NSW, Far Western NSW, and Southern NSW regions.

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, 15 August to 11 September 2021

Local Health District	Week ending				Total	Days since last case reported
	11 Sep	04 Sep	28 Aug	21 Aug		
South Western Sydney	3220	3034	2080	1436	9770	0
Western Sydney	2837	3076	2598	1795	10306	0
Sydney	1248	957	600	407	3212	0
South Eastern Sydney	929	607	341	221	2098	0
Nepean Blue Mountains	532	544	441	353	1870	0
Northern Sydney	217	182	150	82	631	0
Illawarra Shoalhaven	211	82	41	6	340	0
Central Coast	167	47	15	6	235	0
Western NSW	179	271	254	207	911	0
Hunter New England	60	48	19	53	180	0
Far West	50	34	51	23	158	0
Southern NSW	13	2	0	2	17	1
Mid North Coast	0	0	0	2	2	23
Northern NSW	0	0	0	0	0	165
Murrumbidgee	0	0	0	0	0	369
Correctional settings	107	102	48	8	265	0
NSW*	9792	9000	6641	4604	30037	0

*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 9,792 locally acquired cases reported in the week ending 11 September 2021. Most cases were residents of South Western Sydney LHD (3,220, 33%) followed by Western Sydney LHD (2,837, 29%), and Sydney LHD (1,248, 13%). Correctional settings include all cases residing in NSW correctional facilities.

Section 3: Epidemiology of local cases with COVID-19 from 16 June 2021 to 11 September 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.

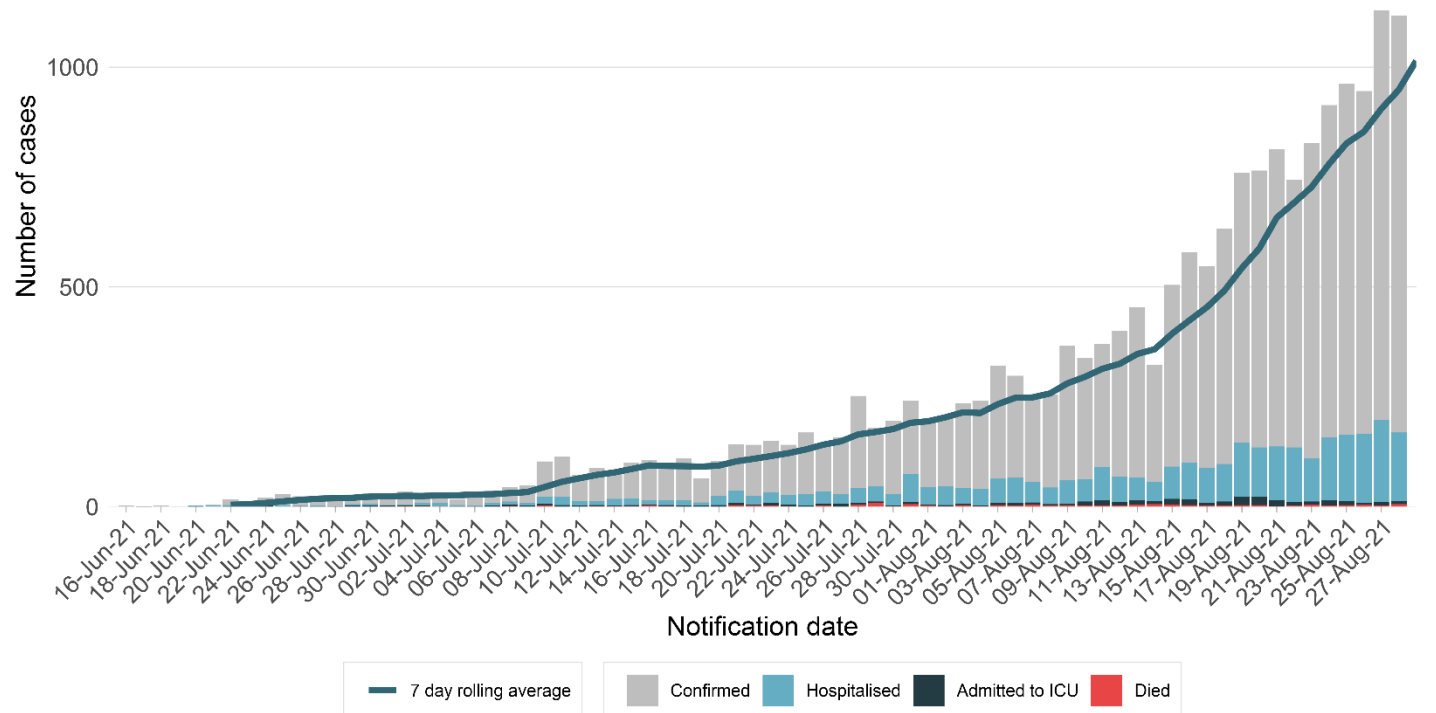
Table 4. COVID-19 cases and tests reported, NSW, from 1 January 2021 to 11 September 2021

	Week ending 11 Sep	Week ending 04 Sep	% change	Total 2021
Number of cases	9,801	9,011	9 %	38,616
Locally acquired	9,792	9,000	9 %	37,780
Known epidemiological links to other cases or clusters	1,451	2,498	-42 %	13,623
No epidemiological links to other cases or clusters	8,341	6,502	28 %	24,157
Overseas acquired	9	10	-10 %	830
Interstate acquired	0	1	-	6
Number of tests	873,164	935,356	-7 %	10,779,471

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 (30,037/30,096 cases, or 99.8%). Of the 9,792 locally acquired cases reported in the week ending 11 September 2021, 75% 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-19 cases notified each day to NSW Health, and their outcome as of 28 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. Because there can be a delay between a person being notified as a COVID-19 case and when they may require hospitalisation (currently, a median of 5 days) or between becoming ill and dying (currently, a median of 11 days), data is provided to 28 August, allowing sufficient time to capture the development of severe illness or death among the most recently notified cases.

Local Government Areas

Table 5a. Top 20 metropolitan LGAs of residence, ordered by locally acquired COVID-19 cases in the last 7 days, per 100,000 population rate, NSW, 16 June to 11 September 2021

LGA name	Last 7 days		Current NSW outbreak (16 Jun-11 Sep 2021)	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Cumberland	1,379	571	6,388	2,645
Canterbury-Bankstown	1,869	495	7,265	1,922
Liverpool	936	411	3,125	1,373
Blacktown	1,001	267	4,153	1,109
Fairfield	553	261	3,187	1,505
Strathfield	98	209	274	584
Penrith	418	196	1,977	928
Sydney	443	180	915	371
Campbelltown	302	177	1,280	749
Randwick	229	147	514	330
Hawkesbury	98	146	236	351
Burwood	55	135	189	465
Camden	135	133	507	500
Georges River	206	129	719	451
Parramatta	324	126	1,328	516
Bayside	214	120	744	417
Hunters Hill	18	120	40	267
Shellharbour	65	89	107	146
Inner West	135	67	482	240
Canada Bay	62	65	218	227

Table 5b. Top 20 regional and rural LGAs of residence, ordered by locally acquired COVID-19 cases in the last 7 days, per 100,000 population rate, NSW, 16 June to 11 September 2021

LGA name	Last 7 days		Current NSW outbreak (16 Jun-11 Sep 2021)	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Central Darling	24	1,305	120	6,525
Bourke	20	772	88	3,398
Dubbo Regional	115	214	688	1,281
Walgett	11	185	17	286
Broken Hill	26	149	36	206
Narromine	6	92	21	322
Warren	1	37	16	593
Gilgandra	1	24	8	189
Mid-Western Regional	6	24	17	67
Bathurst Regional	10	23	41	94
Port Stephens	17	23	51	69
Cobar	1	21	1	21
Orange	6	14	38	90
Warrumbungle Shire	1	11	1	11
Goulburn Mulwaree	3	10	6	19
Newcastle	15	9	93	56
Singleton	2	9	7	30
Eurobodalla	3	8	3	8
Lake Macquarie	17	8	70	34
Parkes	1	7	13	88

Interpretation: The top 20 metropolitan LGAs contributed 87% of all cases in the week ending 11 September. The two 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, from 16 June to 11 September 2021

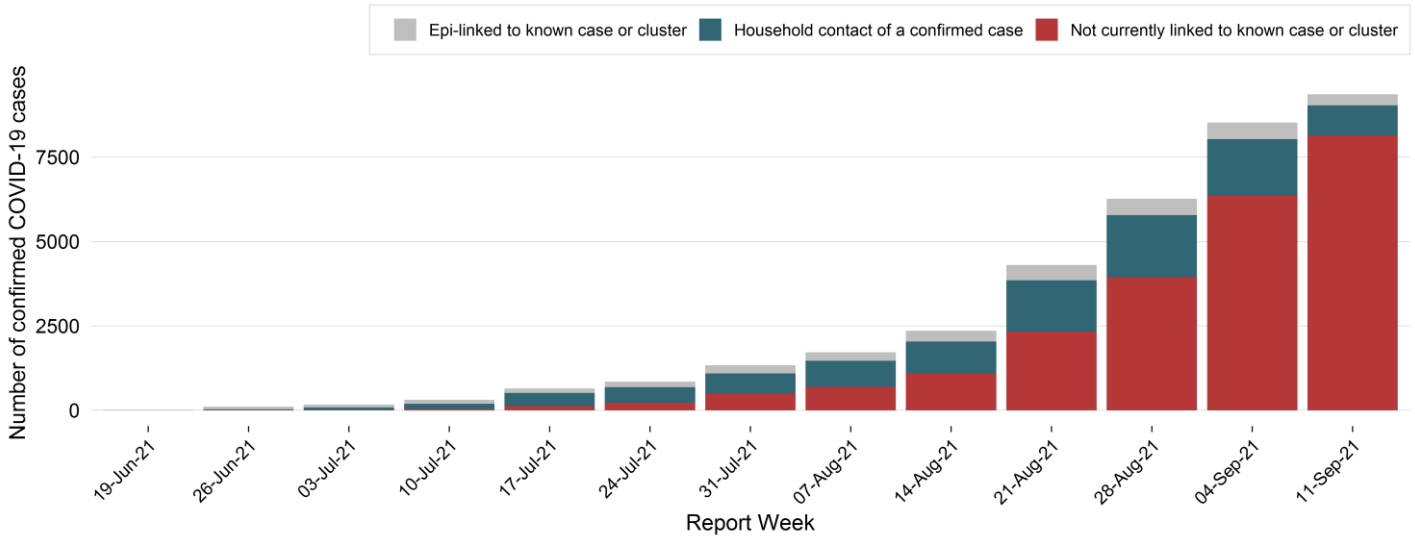
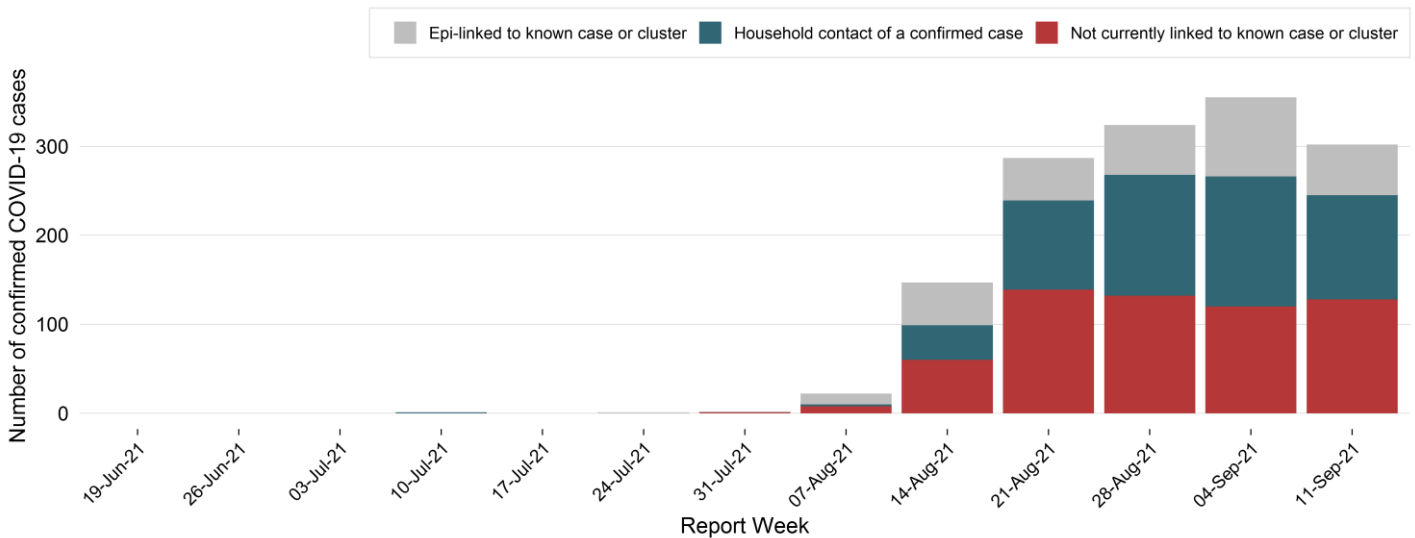


Figure 3b. Source of infection for locally acquired cases, rural and regional LHDs, from 16 June to 11 September 2021



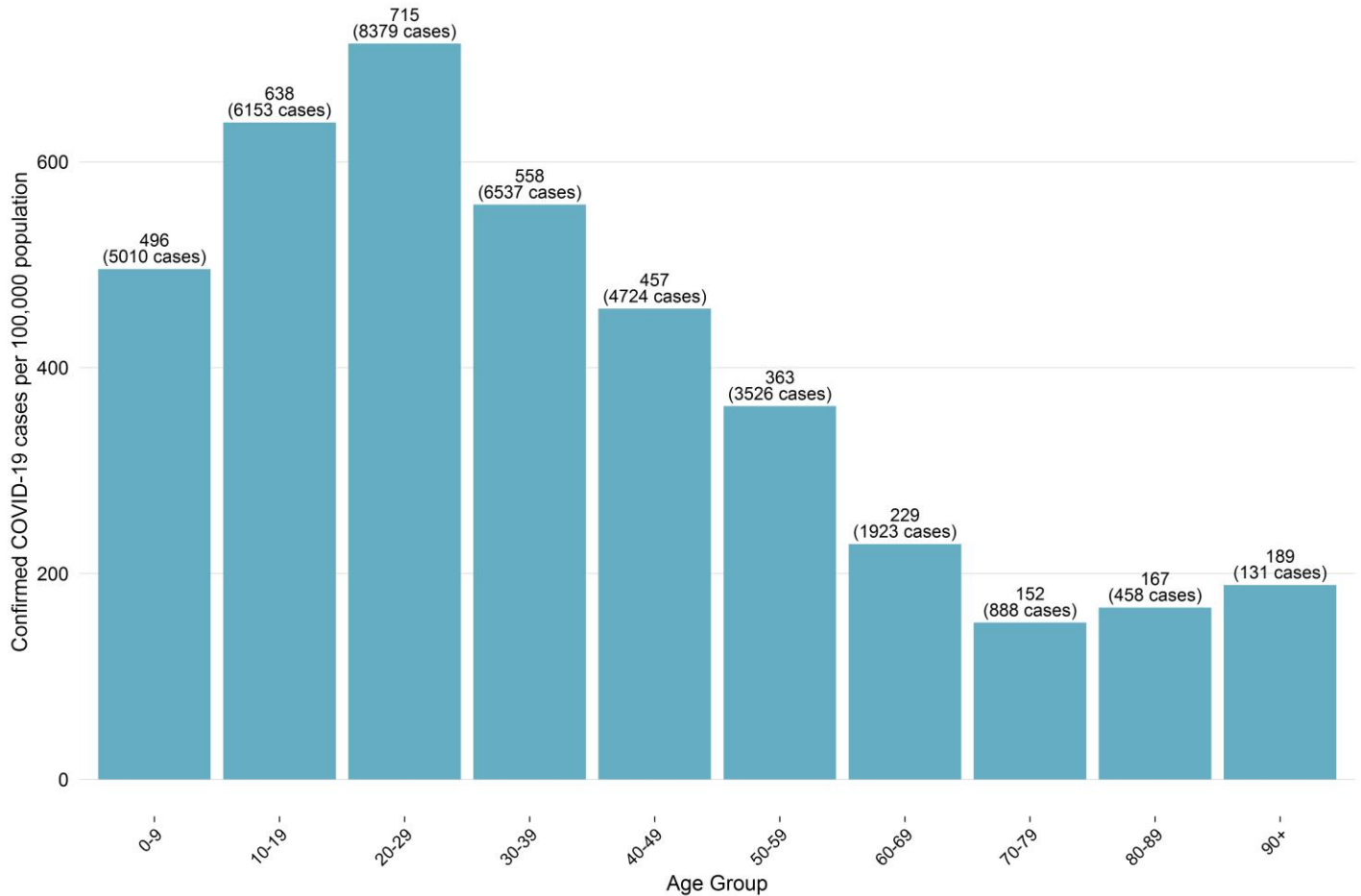
Note: This graph does not include cases in Justice Health and correctional facilities and those for whom LHD was not available at the time of data extraction

Interpretation: In the week ending 11 September, cases increased by 10% in metropolitan LHDs (9,361 compared to 8,529 the previous week), and decreased by 15% in rural and regional LHDs (302 compared to 355 the previous week). Of the 9,361 cases reported this week in metropolitan LHDs, 890 (10%) were household contacts, 326 (3%) were epidemiologically linked but not household contacts and 8,145 (87%) were not currently linked to a case or cluster. There were 302 cases reported this week in rural and regional LHDs. Of these 117 (39%) are household contacts, 57 (19%) are epidemiologically linked but not household contacts and 128 (42%) have not currently been linked to a case or cluster.

Age breakdown of locally acquired cases, NSW, from 16 June - 11 September 2021

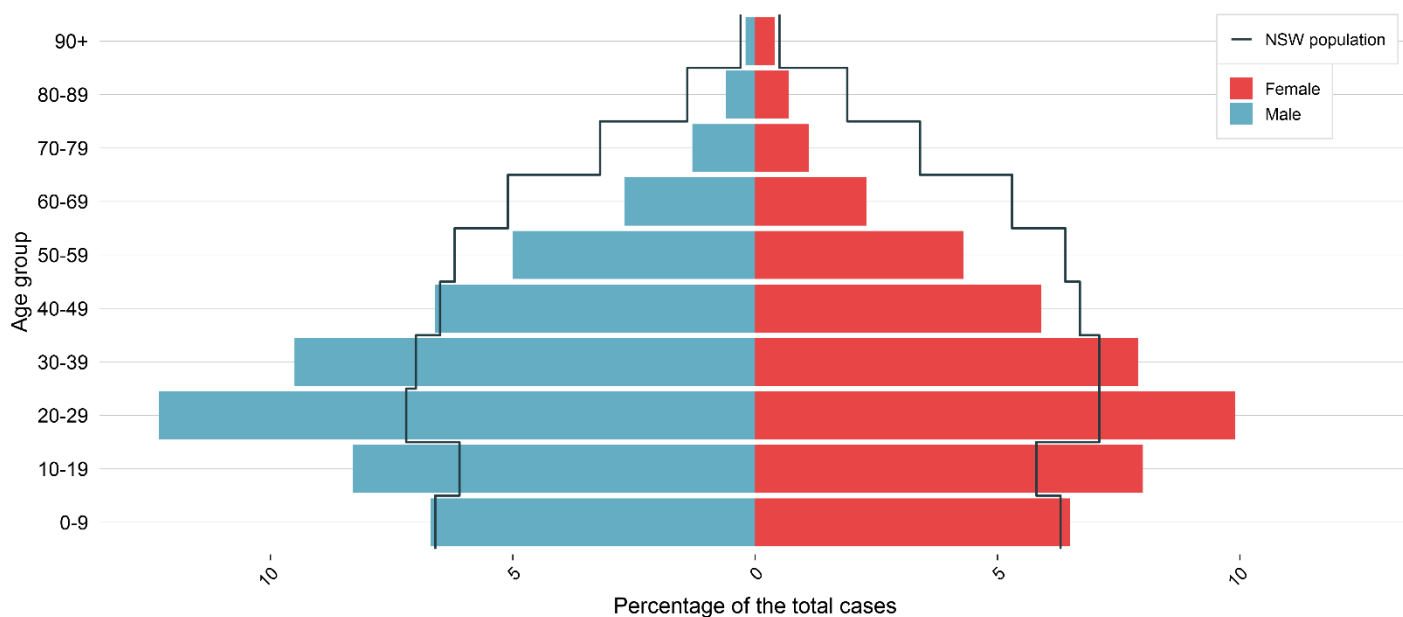
The median age of cases between 1 January 2020 and 15 June 2021 was 37 years (interquartile range (IQR) = 25-55 years). By contrast, between 16 June and 11 September 2021 the median age was 29 years (IQR = 17-44 years).

Figure 4. Rates of COVID-19 infection by age group, current outbreak, NSW, from 16 June 2021 to 11 September 2021



Interpretation: The age group with the highest rates of people diagnosed with COVID-19 is those aged 20-29 years (8,379 cases, or 715 per 100,000 people) and high rates are also seen in people aged 10-19 years (6,152 cases, or 638 per 100,000 people).

Figure 5. Current wave locally acquired case percentage (n = 37,562) by age and gender, NSW, from 16 June to 11 September 2021



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

Interpretation: In the current fourth wave from 16 June 2021, 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.

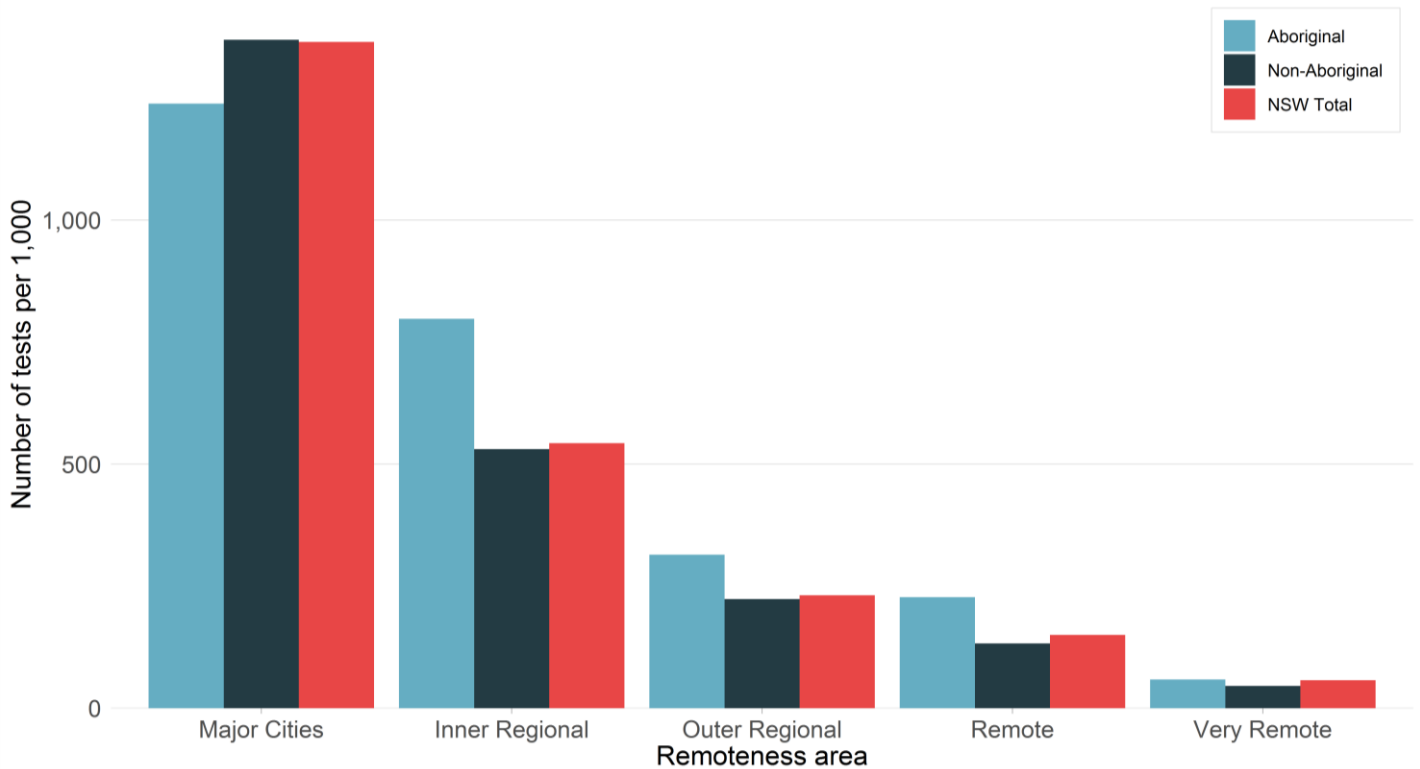
Section 4: COVID-19 in specific populations

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 420 locally acquired cases of COVID-19 reported in Aboriginal people in the week ending 11 September 2021. Of the 420 cases, 7 were fully vaccinated. In total there have been 1,551 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 04 September 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 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 11 September, 40 pregnant women were diagnosed with COVID-19. Since January 2020, 416 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. Five of the women were fully vaccinated at the time of their illness. Pregnant women of any age became a priority group eligible for vaccination on 22 July 2021, although some women may have been eligible before this date due to higher-risk occupations or being aged 40 years or more.

Correctional settings

There were 107 confirmed cases residing in correctional settings in the week ending 11 September. Since 16 June 2021, 267 people residing in correctional settings have been diagnosed with COVID-19 in NSW. Seven (2.6%) of these were fully vaccinated.

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 11 September, there were 95 healthcare workers diagnosed with COVID-19. Of these, 19 (20%) were potentially infected in a healthcare setting, 13 (14%) were social or household contacts of previously reported cases and 63 (66%) are currently not linked. Forty-six (48%) cases were fully vaccinated and 38 (40%) were partially vaccinated.

In total there have been 590 cases of COVID-19 in health care workers since August 2020. Of these, 110 were potentially infected in healthcare settings. A further 163 cases were linked to social or household contacts, and for 317 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-11 Sep 2021)		
	Number of HCWs	Fully vaccinated	Partially vaccinated	Number of HCWs	Fully vaccinated	Partially vaccinated
Healthcare acquired	19	13 (68%)	4 (21%)	85	31 (36%)	23 (27%)
Community acquired	13	6 (46%)	4 (31%)	146	46 (32%)	29 (20%)
Not currently linked	63	27 (43%)	30 (48%)	311	98 (32%)	100 (32%)
Total	95	46 (48%)	38 (40%)	542	175 (32%)	152 (28%)

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 (457/542, 84%). Of the 542 healthcare workers that have been diagnosed with COVID-19 in the current outbreak, 175 (32%) have been fully vaccinated and 152 (28%) have been partially vaccinated.

Aged care workers

There were 31 locally acquired cases in aged care workers in the week ending 11 September 2021. Nine cases acquired their infection while working in an aged care facility, 6 cases were social or household contacts of a known case and for 16 cases the source of infection is under investigation. Two of the nine cases who acquired their infection at work were fully vaccinated.

Since 16 June 2021, there have been 183 cases reported in aged care workers. Of these, 98 (54%) people have reported being partially vaccinated, and 42 (23%) were 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-11 Sep 2021)		
	Number of ACWs	Fully vaccinated	Partially Vaccinated	Number of ACWs	Fully vaccinated	Partially Vaccinated
Acquired at aged care facility	9	2 (22%)	6 (67%)	34	4 (12%)	21 (62%)
Community acquired	6	2 (33%)	4 (67%)	64	16 (25%)	30 (47%)
Not currently linked	16	3 (19%)	11 (69%)	85	22 (26%)	47 (55%)
Total	31	7 (23%)	21 (68%)	183	42 (23%)	98 (54%)

Interpretation: In the week ending 11 September there were 31 aged care workers diagnosed with COVID-19. Of these, 9 (29%) were infected in an aged care facility, 6 (20%) were social or household contacts of previously reported cases and 16 (52%) 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 11 September 2021

Vaccination Status	Week ending				01 Mar to 14 Aug 2021	Total from 1 Mar 2021
	11 Sep 21	04 Sep 21	28 Aug 21	21 Aug 21		
Fully Vaccinated	573 (5.9%)	358 (4.0%)	160 (2.4%)	125 (2.7%)	194 (2.5%)	1,410 (3.7%)
Partially Vaccinated	2,913 (29.7%)	2,465 (27.4%)	1,505 (22.7%)	686 (14.9%)	684 (8.9%)	8,253 (21.9%)
None	1,948 (19.9%)	3,694 (41.0%)	4,220 (63.5%)	3,358 (72.9%)	6,403 (83.1%)	19,623 (52%)
Under investigation*	4,358 (44.5%)	2,483 (27.6%)	756 (11.4%)	435 (9.4%)	420 (5.5%)	8,452 (22.4%)
Total	9,792	9,000	6,641	4,604	7,701	37,738

* Vaccination status are updated regularly according to both Australian Immunisation Register and patient's interview.

Interpretation: In the past week 5.9% of locally acquired cases were fully vaccinated. This compares with around 46.2% of the NSW population aged 16 and over who had received two doses of vaccine by 11 September (78.5% had received one dose by this date). Since 1 March 2021, there have been 1,410 (3.7%) locally acquired cases reported as being fully vaccinated and 8,253 (21.9%) 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 numbers of cases who are fully vaccinated will increase but this does not mean the vaccines are not working.

Of the 5,896 people hospitalised with COVID-19 in the current outbreak, 472 (8%) people were in ICU. Of these, 298 (63.1%) were unvaccinated, and 71 (15.0%) were partially vaccinated or had a single dose within 14 days. There were 9 (1.9%) fully vaccinated cases in ICU. For the remaining 94 (19.9%) people in ICU, vaccination status could not be determined, either through interview or searching the Australian Immunisation Register, suggesting they were unlikely to have been vaccinated in Australia.

Table 9. Hospitalisations and ICU admissions among people diagnosed with COVID-19, by vaccination status, NSW, from 16 June to 11 September 2021

Vaccination status	Hospitalised (%)	Hospitalised and in ICU (%)	Death (%)
Fully Vaccinated	222 (3.8%)	9 (1.9%)	21 (11.7%)
Partially vaccinated	1,223 (20.7%)	71 (15.0%)	35 (19.4%)
None	3,163 (53.6%)	298 (63.1%)	115 (63.9%)
Not stated	1,288 (21.8%)	94 (19.9%)	9 (5.0%)
Total	5,896 (100.0%)	472 (100.0%)	180 (100.0%)

Interpretation: Of the 5,896 people hospitalised, 222 (3.8%) are fully vaccinated, 1,223 (20.7%) were partially vaccinated and 4,451 (75.5%) were either not vaccinated or vaccination status has not yet been determined. The 21 deaths among people fully vaccinated were one person in their 50s, seven people in their 70s, six people in their 80s and seven 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 last 14 days, number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June to 11 September 2021

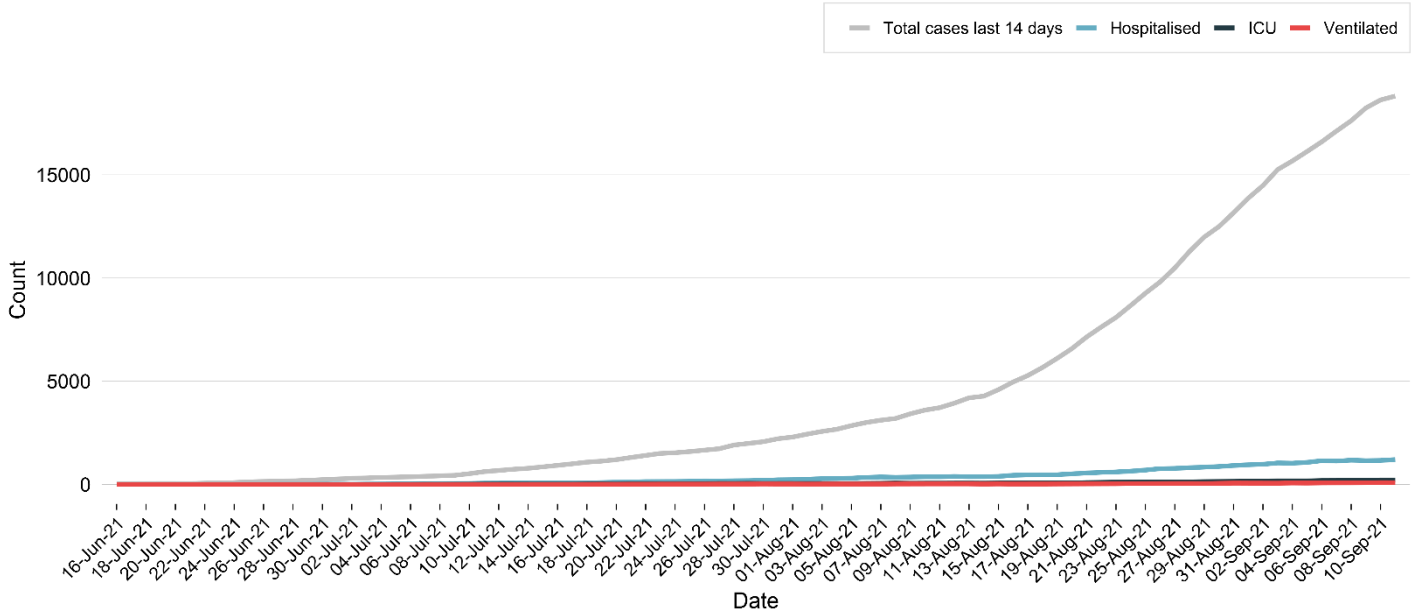
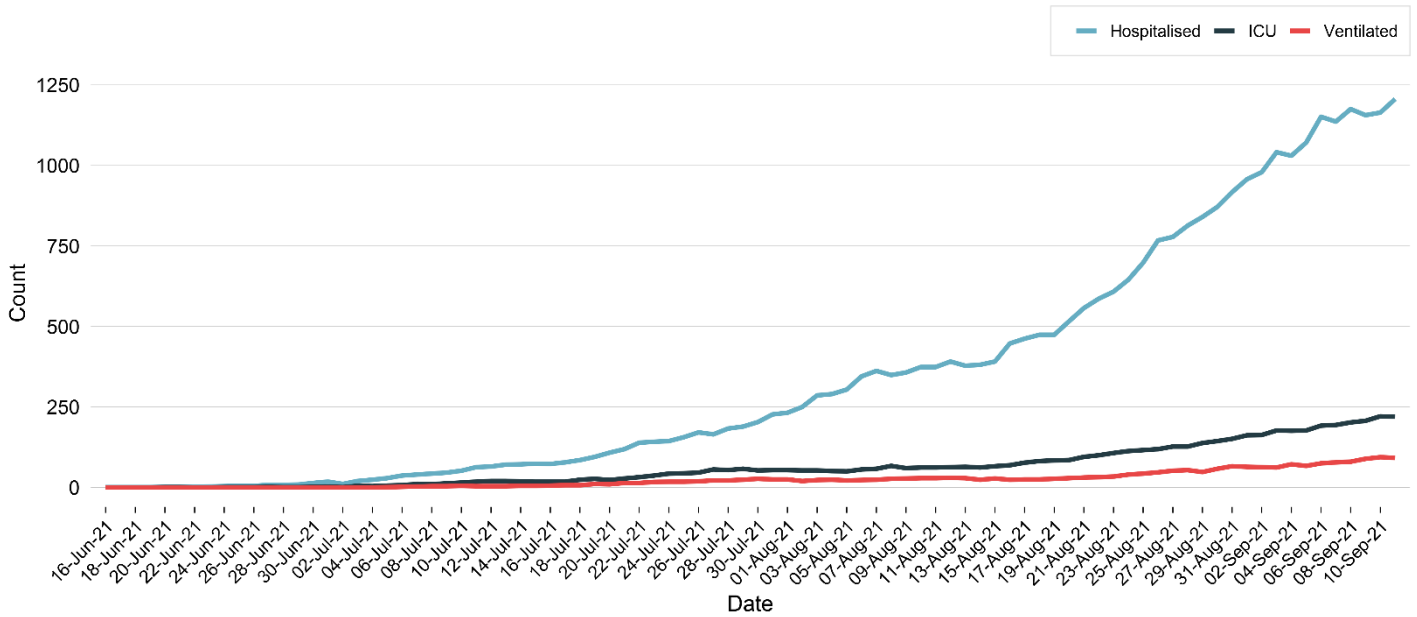


Figure 7b. Number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June to 11 September 2021



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 shows the number of 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 11 September 2021, of the 9,792 locally acquired cases, there were 1,112 people who had a diagnosis of COVID-19 who were also admitted to a hospital ward. In total, there have been 5,604 people with COVID-19 who were also hospitalised since the beginning of the current NSW outbreak.

Table 10. Hospitalisations among people diagnosed with 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 ¹	Hospitalised per 100,000 population	Hospitalised	Percentage of cases hospitalised ¹
0-9	259	5%	25.6	267	5%
10-19	337	5%	35.0	358	6%
20-29	879	10%	75.0	945	10%
30-39	997	15%	85.2	1077	14%
40-49	914	19%	88.5	1002	18%
50-59	860	24%	88.5	961	23%
60-69	592	31%	70.4	747	29%
70-79	401	45%	68.6	516	40%
80-89	284	62%	103.6	351	61%
90+	81	62%	116.8	99	57%
Total	5604	15%	69.3	6323	15%

Interpretation: The highest number of cases hospitalised are aged 30-39 years (997, 15%), followed by those aged 40-49 years (914, 19%). In NSW, cases aged 90 years and over have the highest rate of hospitalisation (116.8 per 100,000 people).

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

Table 11. ICU hospitalisations among people diagnosed with 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 ¹	ICU admission per 100,000 population	Admitted to ICU	Percentage of cases admitted to ICU ¹
0-9	5	<1%	0.5	5	<1%
10-19	19	<1%	2.0	20	<1%
20-29	44	1%	3.8	48	1%
30-39	58	1%	5.0	73	1%
40-49	73	2%	7.1	85	2%
50-59	113	3%	11.6	141	3%
60-69	88	5%	10.5	131	5%
70-79	56	6%	9.6	90	7%
80-89	14	3%	5.1	27	5%
90+	0	0%	0.0	0	0%
Total	470	1%	5.8	620	1%

Interpretation: The highest number of cases in ICU are aged 50-59 years (113, 3%). The highest rate of admission to ICU is for those aged 50-59 years (11.6 cases, 11.6 per 100,000 people).

¹ 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 (236 people) have died following a recent infection with COVID-19, most of whom were 80 years of age or older, including 41 residents of aged care facilities with known COVID-19 outbreaks. Approximately 5% (13/236) of the deaths were in overseas acquired cases.

There were 50 deaths in people diagnosed with COVID-19 reported this week including 6 fully vaccinated people, 7 partially vaccinated people, and 37 un-vaccinated people.

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 ²	Number of deaths	Case fatality rate ²
0-9	0	0%	0.0	0	0%
10-19	1	<1%	0.1	1	<1%
20-29	3	<1%	0.3	3	<1%
30-39	7	<1%	0.6	7	<1%
40-49	8	<1%	0.8	8	<1%
50-59	15	<1%	1.5	16	<1%
60-69	21	1%	2.5	25	1%
70-79	45	5%	7.7	60	5%
80-89	58	13%	21.1	79	14%
90+	21	16%	30.3	37	21%
Total	179	<1%	2.2	236	1%

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.

² 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.

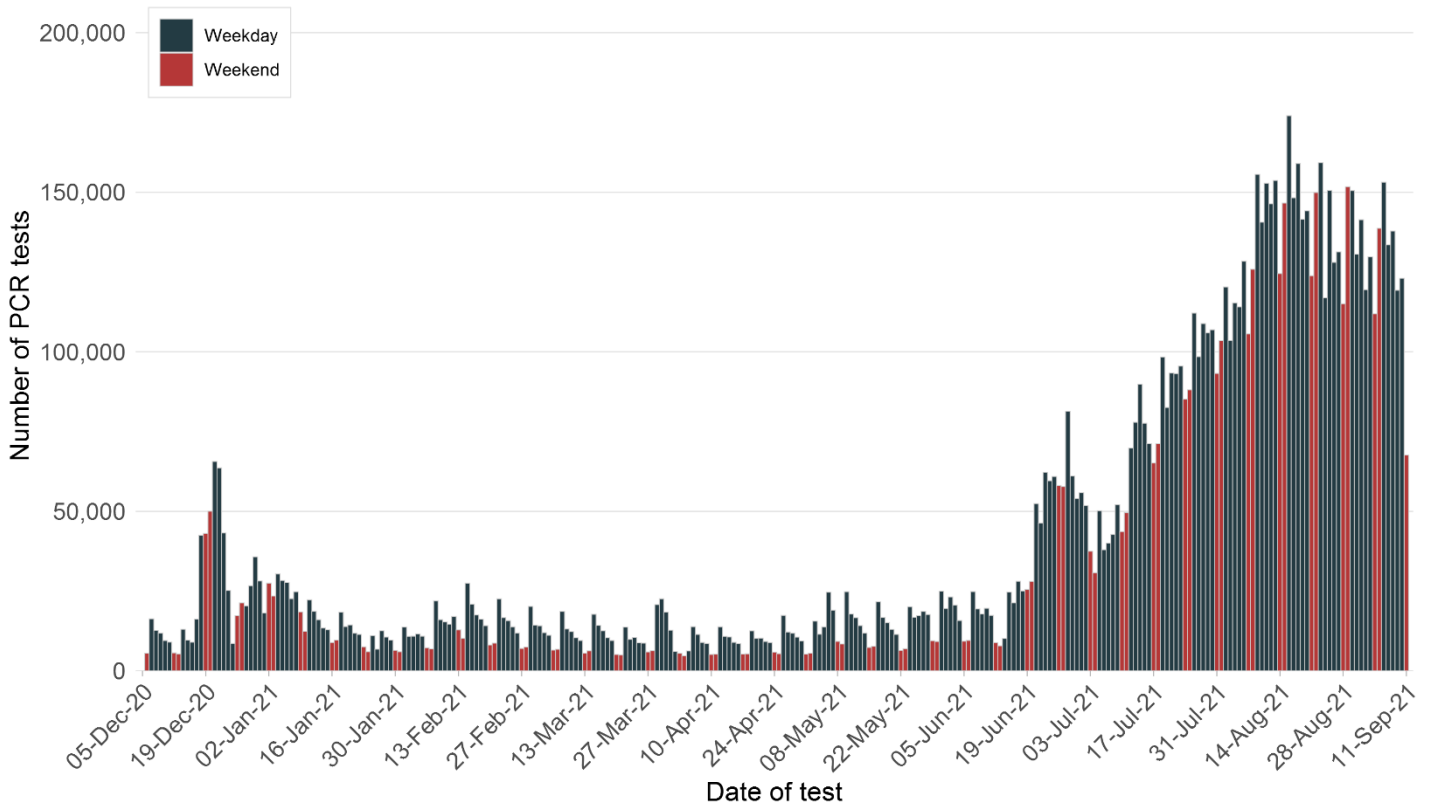
Section 7: COVID-19 testing in NSW

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.³ 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 are not included, these are reported in the “Border and quarantine workers – saliva testing screening program” section.

Figure 8. Number of PCR tests per day, NSW, ~~0524 November-December~~ 2020 to 11 September 2021



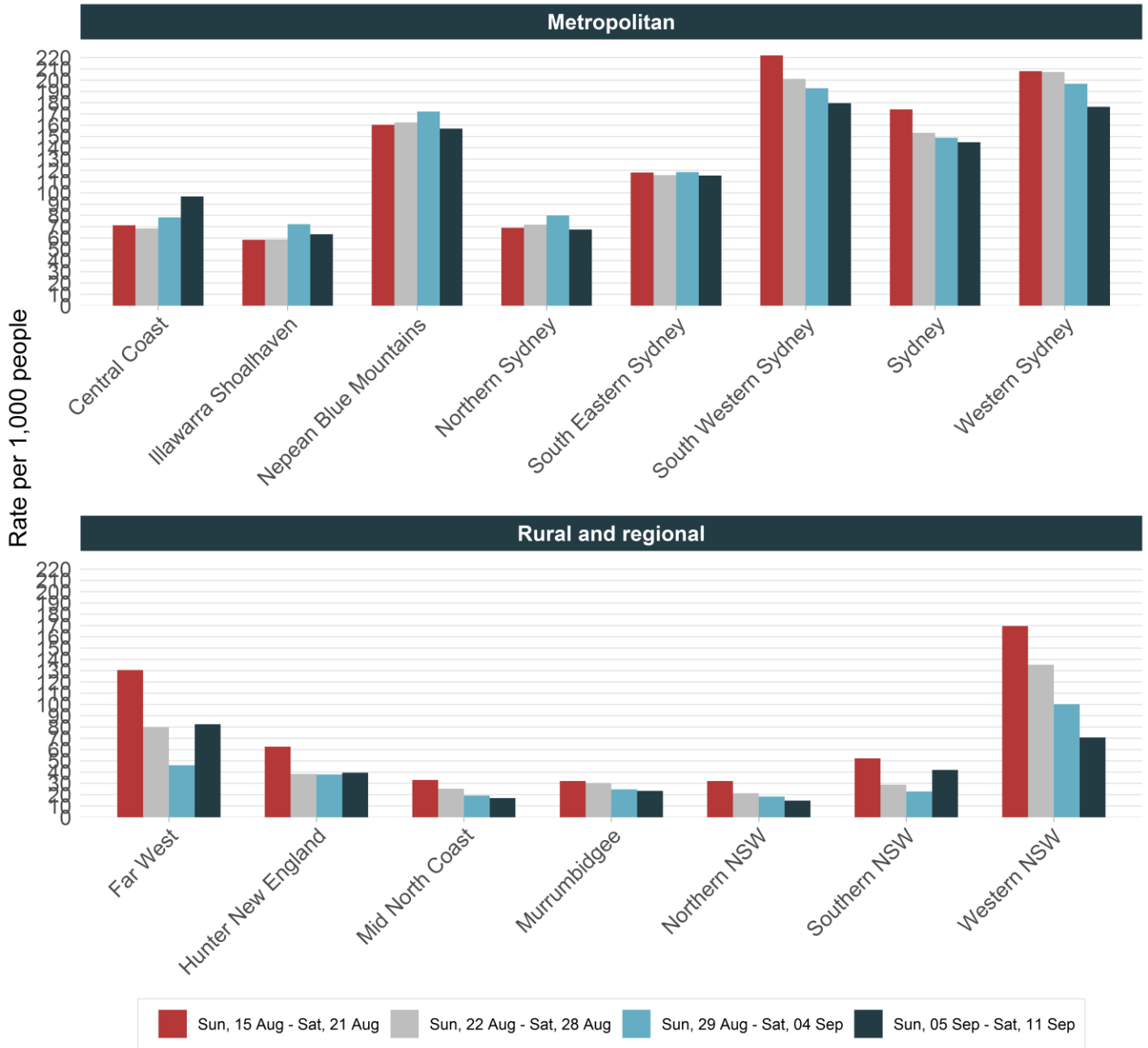
Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: Testing numbers decreased in the week ending 11 September 2021 (down 7%) compared to the previous week. The average daily testing rate of 15.4 per 1,000 people in NSW each day decreased compared to the previous week of 16.8 per 1,000 people.

³ 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, 15 August to 11 September 2021

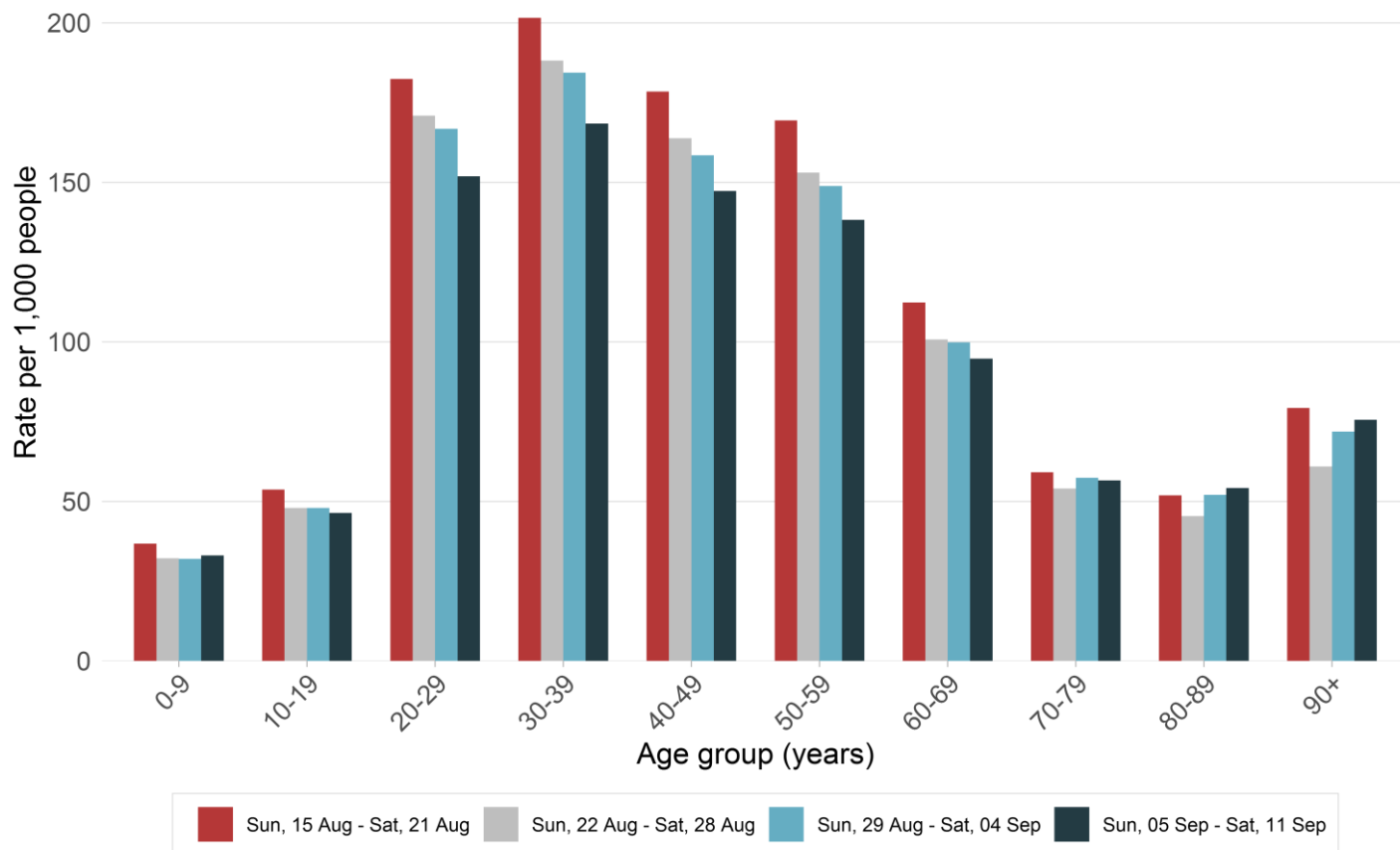


Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

Interpretation: State-wide weekly testing rates in the week ending 11 September decreased in most LHDs compared to the previous week (107.9 per 1,000 people compared to 115.6 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. Notable increases occurred in the Central Coast and Far West LHDs.

Testing by age group

Figure 10. Rates of COVID-19 testing by age group and week, NSW, 15 August to 11 September 2021



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

Interpretation: In the week ending 11 September 2021, testing rates remained highest overall among those aged 20-59. All age groups under 70 years of age showed a slight decrease in testing rates over the past month, while those aged 70+ have remained stable over that time.

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 11 September 2021

Variant	Week ending				29 Nov to 14 Aug	Total since 29 November
	11 Sep*	04 Sep*	28 Aug	21 Aug		
Total variants identified	709	796	992	855	4,822	8,174
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)	709	796	992	855	4,822	8174

***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 11 September 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.

New collection sites

In the week ending 11 September, 204 sewage samples were tested for fragments of SARS-CoV-2. The sewage treatment plants at Wee Waa, Lightning Ridge, Gulgong, Harden, Corowa and Mulwala were added as new sites.

Detections outside Sydney

There were 76 detections across the state. Sixty-seven detections outside Sydney were taken from the Bangalow, Bateau Bay, Batemans Bay (2), Bathurst, Bomaderry, Bonny Hills, Bourke, Brewarrina, Broken Hill (2), Broken Hill South (2), Byron Bay, Charmhaven, Culburra Beach, Dubbo, Dunbogan, Eden, Forbes, Gerroa, Glen Innes, Gosford-Kincumber, Goulburn, Harden, Boulder Bay, Branxton, Burwood Beach, Dora Creek, Edgeworth, Karuah, Morpeth, Raymond Terrace, Shortland, Toronto, Belmont, Dungog, Farley, Kurri Kurri, Jindabyne, Lightning Ridge, Mannering Park, Mittagong, Moruya (2), Narromine, Nyngan, Orange, Parkes, Port Macquarie, Shellharbour, St Georges Basin, Tamworth (2), Trangie, Walgett, West Kempsey, Wilcannia, Woy Woy, Wyong-Toukley, Wyong South, Yass (2) and Young sewage treatment plants.

Sydney detections

Results for Sydney sites may be delayed to prioritise analysis of regional sites. In Sydney there were detections from the sewage treatment plants in Brooklyn, Lithgow, McGraths Hill, Picton, South Windsor, Winmalee, and Wollongong. There were also detections from the sewage networks and pumping stations within Bellambi and Port Kembla.

Detections with no known cases

Detections occurring with no known or recent cases in the catchment occurred in Bangalow, Brooklyn, Bonny Hills, Byron Bay, Dunbogan, Eden, Gerroa, Glen Innes, Harden, Karuah, Dungog, Lightning Ridge, Moruya, Port Macquarie, Tamworth, Trangie, Yass and Young. Cases were subsequently identified in Brooklyn, Gerroa and Glen Innes.

Sampled sites with no detections

There were no detections in the catchment areas for Bowral, Moss Vale, Ulladulla, Nowra, Vincentia, Gwandalan, Perisher, Thredbo, Cooma, Tumut, Charlottes Pass, Albury (composite), Corowa, Mulwala, Narooma, Bega, Merimbula, Bermagui, Deniliquin, Moama, Wagga Wagga (composite), West Wyalong, Gundagai, Narrandera, Cootamundra, Junee, Leeton, Griffith, Temora, Oberon, Blayney, Cowra, Coonabarabran, Coolah, Dunedoo, Baradine, Balranald, Dareton, Buronga, Wentworth, Condobolin, Lake Cargelligo, Coonamble/Gulargambone, Cobar, Warren, Armidale, Guyra, Uralla, Inverell, Gunnedah, Quirindi, Muswellbrook, Narrabri, Tenterfield, Moree, Mungindi, Taree, Forster, Hallidays Point, Scone, Singleton, Tanilba Bay, Cessnock, Lismore (composite), Kyogle, Woodenbong, Casino, Coraki, Evans Head, Byron Bay – Ocean Shores, Mullumbimby, Ballina, Lennox Head, Wardell, Alstonville, Murwillumbah, Banora Point, Kingscliff, Hastings Point, Grafton (composite), Yamba, Nambucca Heads, Wauchope, South Kempsey, South West Rocks, Bellingen, Woolgoolga, and Coffs Harbour.

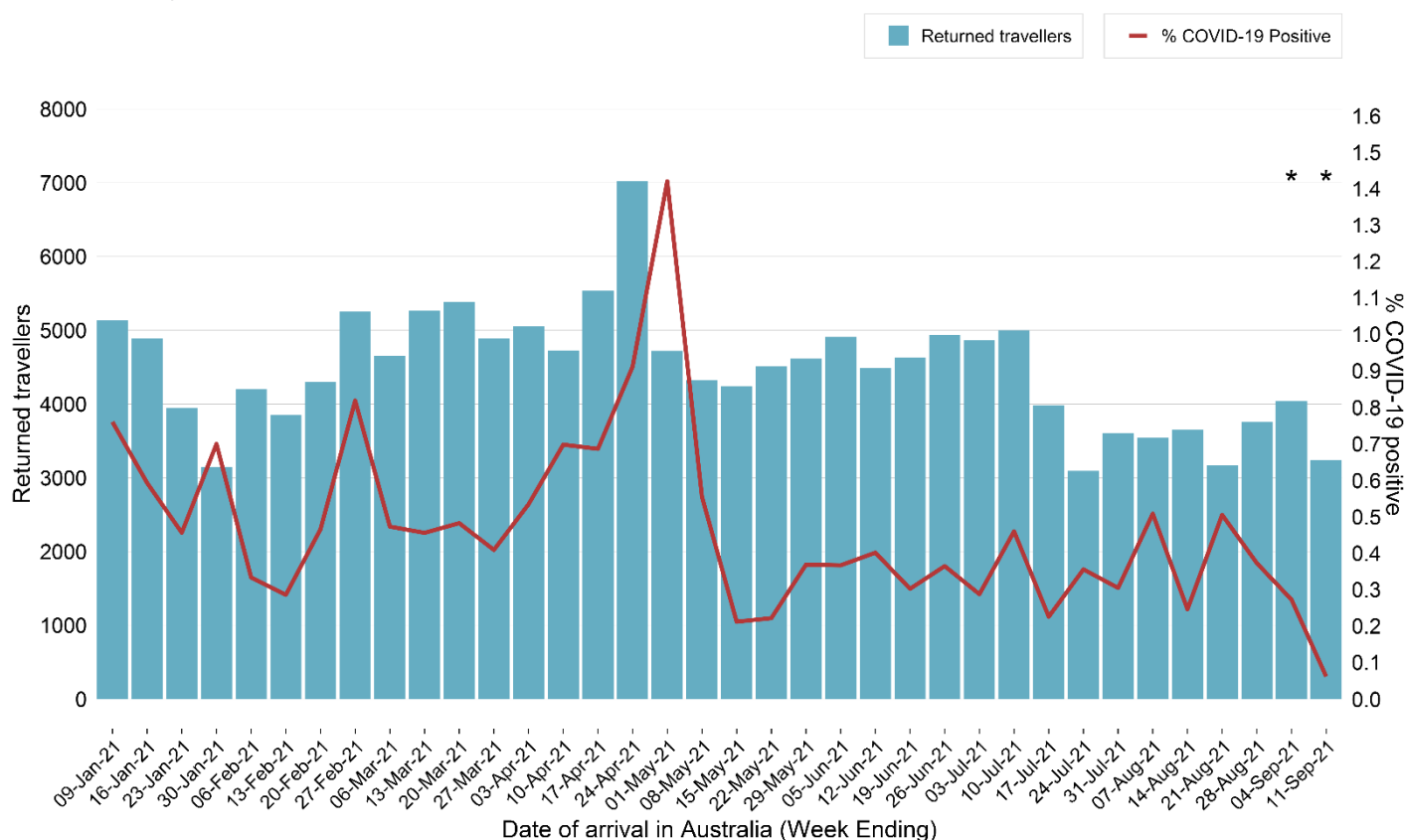
Section 10: COVID-19 in returned travellers

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 11 September 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.

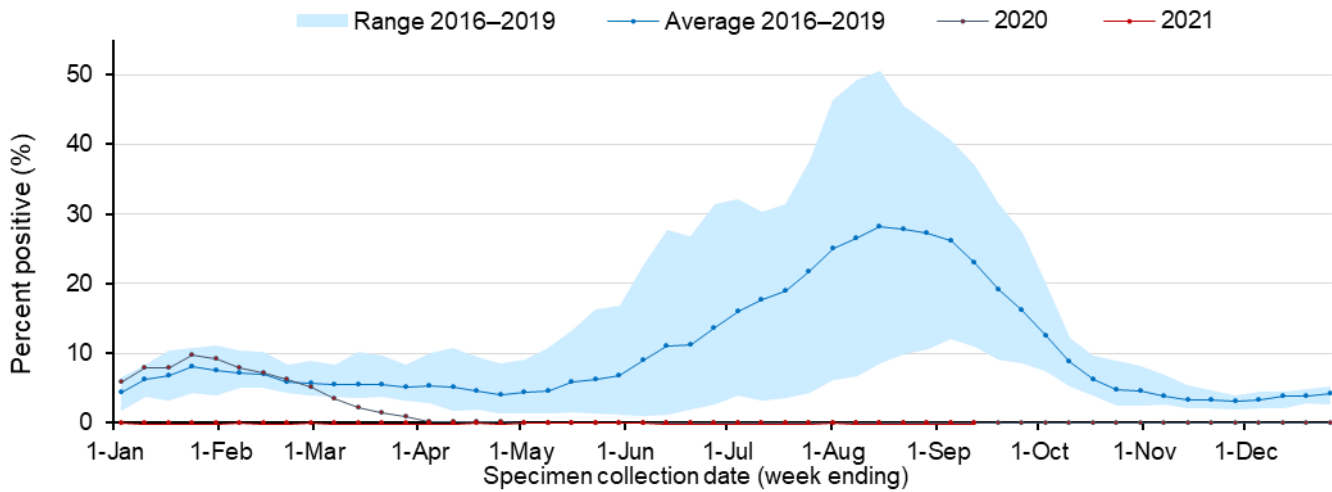
Interpretation: Since 3 January 2021, there has been on average 637 people screened on arrival through Sydney International Airport daily. In the last four weeks, 43 returned travellers have subsequently tested positive for COVID-19 while completing quarantine. The proportion of returned travellers who 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 12 September 2021

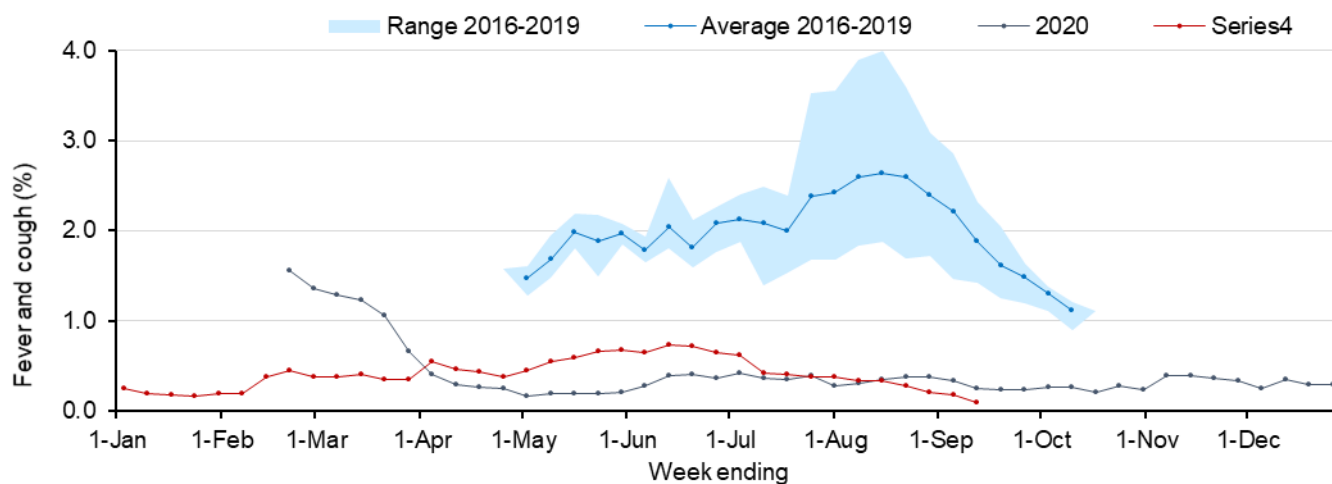


Interpretation: In the week ending 12 September, the percent of influenza tests that were positive continued to be very low (<0.01%), indicating limited influenza transmission in the community. Since early March 2020, this percentage has remained far lower than the usual range for the time of year. There 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 12 September 2021



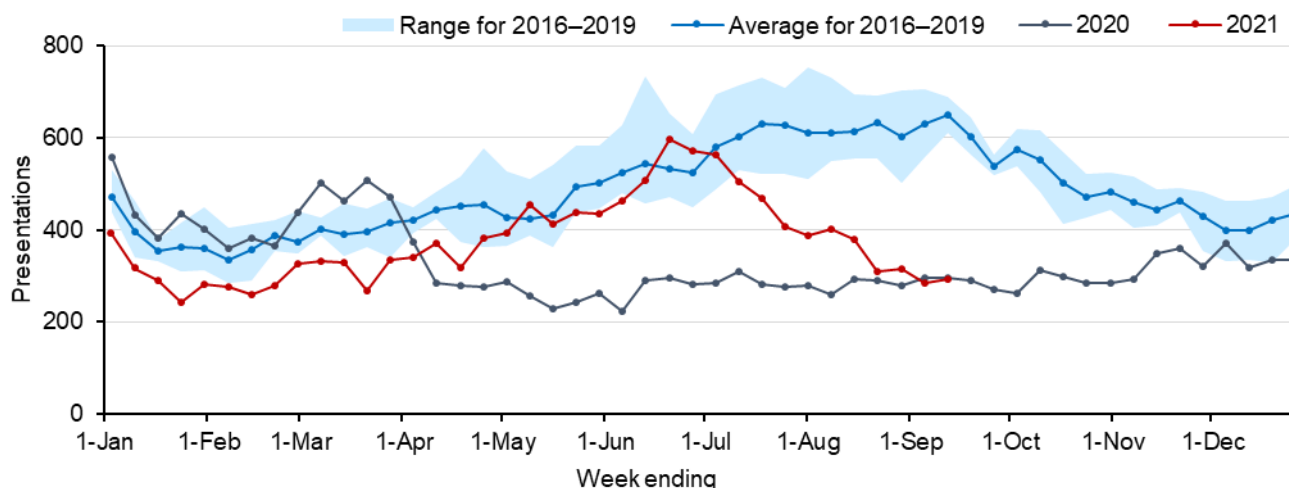
Interpretation: In NSW in the week ending 12 September 2021, of the 23,552 people surveyed, 22 people (0.09%) reported flu-like symptoms. In the last four weeks, 58% (104/180) of new cases of flu-like illness reported having a COVID-19 test. The proportion of people with flu-like symptoms being tested for COVID-19 decreased from January 2021, when 80% reported being tested, to around 50% between April and June 2021, and then increased to around 60% from June 2021 onwards.

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.

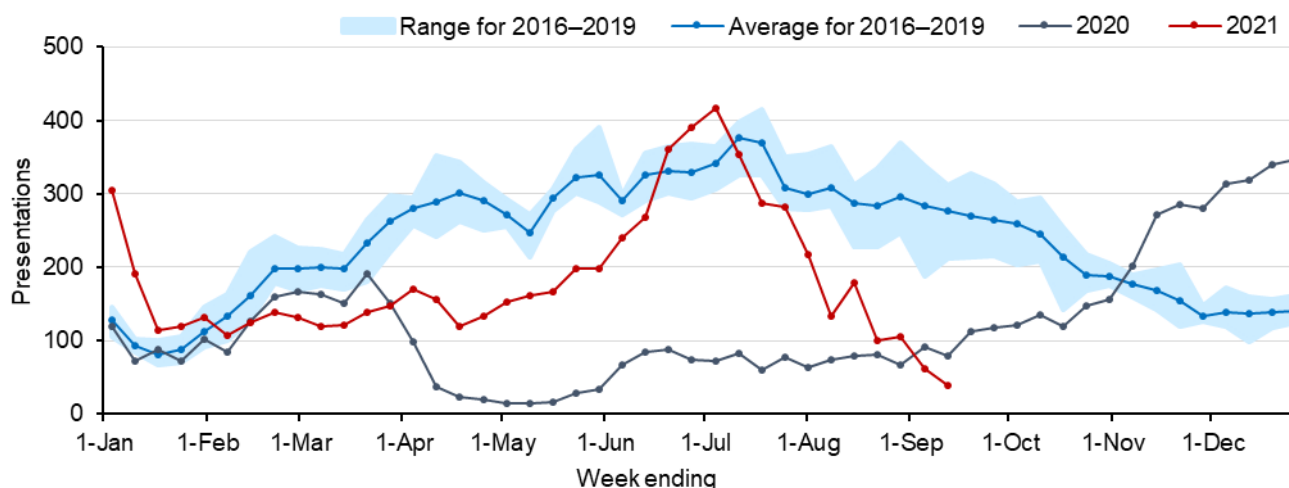
The figures below show weekly pneumonia and bronchiolitis presentations to Emergency Departments in NSW, using PHREDSS⁴. The red line shows the weekly counts for 2021, the dark blue line showing counts for 2020, the light blue line showing the average for 2016 to 2019 and the shaded area showing the range recorded for 2016 to 2019.

Figure 14. Emergency Department pneumonia presentations, NSW, 1 January 2016 to 12 September 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 12 September, pneumonia presentations remain significantly below the seasonal range for this time of year.

Figure 15. Emergency Department bronchiolitis presentations, NSW, 1 January 2016 to 12 September 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 12 September remain below the seasonal range for this time of year.

⁴ 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	
		11-Sep		04-Sep			
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	<i>LHD Total</i>	34194	96.90	27619	78.27	502167	1423.12
	Balranald	147	62.87	108	46.19	1599	683.92
	Broken Hill	2053	117.46	812	46.46	20240	1157.96
Far West	Central Darling	152	82.65	344	187.06	2564	1394.24
	Wentworth	135	19.14	126	17.86	5739	813.70
	<i>LHD Total</i>	2487	82.50	1390	46.11	30142	999.93
	Armidale Regional	490	15.92	709	23.04	31493	1023.20
	Cessnock	2139	35.66	2317	38.63	44133	735.73
	Dungog	242	25.68	218	23.13	6915	733.84
	Glen Innes Severn	162	18.26	149	16.80	5180	583.93
	Gunnedah	238	18.77	329	25.94	9336	736.22
	Gwydir	98	18.31	85	15.88	2261	422.38
	Inverell	220	13.03	229	13.56	11531	682.71
	Lake Macquarie	9707	47.14	9672	46.97	273992	1330.70
	Liverpool Plains	180	22.78	128	16.20	5555	702.90
	Maitland	5251	61.66	4701	55.20	128623	1510.26
Hunter New England	Mid-Coast	1556	16.58	1624	17.31	62053	661.29
	Moree Plains	346	26.09	462	34.84	10534	794.36
	Muswellbrook	673	41.09	265	16.18	12125	740.37
	Narrabri	289	22.00	191	14.54	7137	543.36
	Newcastle	6919	41.79	7291	44.04	249192	1505.05
	Port Stephens	5149	70.07	4149	56.46	79745	1085.25
	Singleton	1433	61.08	812	34.61	25091	1069.48
	Tamworth Regional	1877	30.01	2268	36.26	64112	1025.12
	Tenterfield	105	15.92	165	25.02	2991	453.59
	Upper Hunter Shire	333	23.48	265	18.69	10673	752.68
	Uralla	102	16.97	130	21.62	3956	658.02
	Walcha	66	21.06	62	19.78	2626	837.91
	<i>LHD Total</i>	37548	39.43	36145	37.95	1048595	1101.02
Illawarra Shoalhaven	Kiama	1158	49.52	1100	47.04	30193	1291.07
	Shellharbour	5441	74.30	7287	99.50	107145	1463.07
	Shoalhaven	4933	46.69	4606	43.60	97426	922.18
	Wollongong	15071	69.10	17321	79.41	307160	1408.25
	<i>LHD Total</i>	26603	63.40	30314	72.24	541924	1291.48
Mid North Coast	Bellingen	166	12.77	202	15.54	9893	761.23
	Coffs Harbour	976	12.63	1101	14.25	53724	695.21
	Kempsey	814	27.37	866	29.11	24599	827.00
	Nambucca	254	12.83	263	13.28	12252	618.63
	Port Macquarie-Hastings	1620	19.17	1904	22.53	68185	806.68
	<i>LHD Total</i>	3830	16.97	4336	19.21	168653	747.36
Murrumbidgee	Albury	1322	24.32	1351	24.86	46541	856.27
	Berrigan	125	14.29	173	19.77	4130	472.00
	Bland	134	22.44	344	57.60	3980	666.44
	Carrathool	22	7.86	32	11.43	1069	381.92

		Week ending				Total since January 2021	
		11-Sep		04-Sep			
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	99	22.81	142	32.71	3420	787.84
	Cootamundra-Gundagai Regional	285	25.37	219	19.49	8285	737.43
	Edward River	205	22.57	243	26.75	5715	629.13
	Federation	331	26.61	290	23.32	7898	635.04
	Greater Hume Shire	351	32.61	279	25.92	8880	824.97
	Griffith	422	15.61	470	17.39	21365	790.45
	Hay	28	9.49	107	36.28	1386	469.99
	Hilltops	853	45.61	407	21.76	14491	774.75
	Junee	134	20.05	148	22.15	3818	571.30
	Lachlan ¹	112	18.44	159	26.17	3224	530.70
	Leeton	182	15.90	200	17.47	6620	578.42
	Lockhart	103	31.35	105	31.96	2303	701.07
	Murray River	67	5.53	144	11.88	2095	172.88
	Murrumbidgee	69	17.62	72	18.38	2065	527.19
	Narrandera	88	14.92	111	18.82	2685	455.16
	Snowy Valleys	291	20.10	288	19.89	9618	664.27
	Temora	93	14.75	238	37.74	3575	566.83
	Wagga Wagga	1749	26.80	1980	30.34	67366	1032.30
	<i>LHD Total²</i>	6971	23.38	7374	24.74	228460	766.36
Nepean Blue Mountains	Blue Mountains	6981	88.24	9162	115.80	135064	1707.12
	Hawkesbury	13531	201.07	13921	206.86	137062	2036.70
	Lithgow	822	38.05	874	40.45	17759	821.99
	Penrith	40797	191.56	44283	207.92	486429	2283.95
	<i>LHD Total²</i>	61432	157.12	67365	172.29	767119	1962.00
Northern NSW	Ballina	517	11.58	638	14.30	47848	1072.15
	Byron	613	17.47	746	21.27	41402	1180.18
	Clarence Valley	636	12.31	762	14.75	29817	577.16
	Kyogle	93	10.57	112	12.73	4627	526.03
	Lismore	635	14.53	767	17.55	39466	903.28
	Richmond Valley	473	20.16	761	32.43	19862	846.45
	Tenterfield	105	15.92	165	25.02	2991	453.59
	Tweed	1553	16.01	1801	18.57	67299	693.80
	<i>LHD Total²</i>	4556	14.68	5684	18.31	251042	808.87
Northern Sydney	Hornsby	8285	54.49	9920	65.24	203886	1340.83
	Hunters Hill	2519	168.16	2711	180.97	49404	3298.00
	Ku-ring-gai	7157	56.29	7353	57.83	245602	1931.55
	Lane Cove	4068	101.31	4735	117.92	122920	3061.14
	Mosman	1340	43.25	1467	47.35	49672	1603.31
	North Sydney	3079	41.04	3876	51.67	98010	1306.43
	Northern Beaches	17042	62.31	22105	80.82	618797	2262.52
	Parramatta ¹	30984	120.47	34295	133.34	449990	1749.59
	Ryde	13804	105.16	16435	125.20	250378	1907.34
	Willoughby	3262	40.18	3599	44.33	99114	1220.78
	<i>LHD Total²</i>	64565	67.54	76395	79.92	1810040	1893.51

		Week ending				Total since January 2021	
		11-Sep		04-Sep			
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
South Eastern Sydney	Bayside	27469	153.98	30072	168.57	345869	1938.77
	Georges River	21054	132.02	22802	142.99	302866	1899.19
	Randwick	18779	120.65	18131	116.49	350707	2253.19
	Sutherland Shire	22936	99.46	22276	96.60	406909	1764.48
	Sydney ¹	29112	118.18	26842	108.96	517125	2099.21
	Waverley	6503	87.53	6635	89.31	187595	2525.00
	Woollahra	5180	87.22	5245	88.32	147207	2478.77
	<i>LHD Total²</i>	110639	115.36	113672	118.52	1918686	2000.51
South Western Sydney	Camden	17505	172.57	18808	185.42	258932	2552.64
	Campbelltown	31073	181.77	33004	193.07	399789	2338.73
	Canterbury-Bankstown ¹	80342	212.59	84914	224.69	1069661	2830.41
	Fairfield	41229	194.76	46366	219.02	602423	2845.71
	Liverpool	45706	200.83	49271	216.49	583640	2564.49
	Wingecarribee	3237	63.30	2813	55.01	72696	1421.68
	Wollondilly	4794	90.20	5288	99.49	72122	1356.98
	<i>LHD Total²</i>	186427	179.51	200266	192.84	2523331	2429.70
Southern NSW	Bega Valley	1707	49.51	720	20.88	24390	707.45
	Eurobodalla	1280	33.27	565	14.69	32748	851.19
	Goulburn Mulwaree	2211	71.02	1070	34.37	31564	1013.88
	Queanbeyan-Palerang Regional	1612	26.38	1586	25.96	43281	708.36
	Snowy Monaro Regional	1642	78.96	577	27.75	17968	864.05
	Upper Lachlan Shire	258	32.01	171	21.22	6472	803.08
	Yass Valley	372	21.77	270	15.80	10577	619.01
	<i>LHD Total²</i>	9086	41.86	4964	22.87	167105	769.82
Sydney	Burwood	4664	114.84	5578	137.35	64634	1591.50
	Canada Bay	9788	101.88	9827	102.29	178372	1856.61
	Canterbury-Bankstown ¹	80342	212.59	84914	224.69	1069661	2830.41
	Inner West	19046	94.85	18833	93.78	383687	1910.69
	Strathfield	11143	237.46	12695	270.53	134326	2862.51
	Sydney ²	29112	118.18	26842	108.96	517125	2099.21
	<i>LHD Total²</i>	100930	144.85	103783	148.95	1617256	2321.08
Western NSW	Bathurst Regional	2873	65.87	4759	109.11	57863	1326.59
	Blayney	408	55.29	845	114.51	9528	1291.23
	Bogan	92	35.66	198	76.74	2520	976.74
	Bourke	456	176.06	509	196.53	4298	1659.46
	Brewarrina	127	78.83	372	230.91	1760	1092.49
	Cabonne	526	38.58	496	36.38	10349	759.06
	Cobar	131	28.12	177	38.00	3360	721.34
	Coonamble	94	23.75	138	34.87	3275	827.44
	Cowra	306	24.01	381	29.90	8845	694.11
	Dubbo Regional	8706	162.07	11276	209.91	111566	2076.84
	Forbes	321	32.40	459	46.34	7202	727.03
	Gilgandra	161	37.98	233	54.97	4186	987.50
	Lachlan ¹	112	18.44	159	26.17	3224	530.70
	Mid-Western Regional	574	22.73	1652	65.42	30971	1226.53

		Week ending				Total since January 2021	
		11-Sep		04-Sep		No.	Tests per 1,000 population
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population		
	Narromine	616	94.52	898	137.79	8391	1287.56
	Oberon	166	30.68	205	37.89	4184	773.24
	Orange	2963	69.80	3902	91.92	69391	1634.61
	Parkes	413	27.84	969	65.31	13600	916.63
	Walgett	499	83.82	196	32.92	5302	890.64
	Warren	300	111.23	390	144.61	5593	2073.79
	Warrumbungle Shire	206	22.20	286	30.83	7612	820.44
	Weddin	96	26.57	83	22.97	2251	623.03
	<i>LHD Total²</i>	20129	70.63	28557	100.20	374243	1313.08
Western Sydney	Blacktown	72469	193.53	79307	211.80	873776	2333.49
	Cumberland	62023	256.80	71919	297.78	719630	2979.58
	Parramatta ¹	30984	120.47	34295	133.34	449990	1749.59
	The Hills Shire	22064	123.98	23417	131.58	392937	2207.90
	<i>LHD Total²</i>	185815	176.39	207318	196.80	2392935	2271.56
NSW Total³		873164	107.93	935356	115.62	10779471	1332.47

Source - Notifiable Condition Information Management System, accessed as at 8pm 12 Sep 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 2021 to 12 September 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 2020–12 September 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	1,611,427	4	<0.01%	10	<0.01%	7,133	18,498	17,453	55,848	5,143	6,332
Month ending											
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
29 August	157,063	0	-	1	< 0.01%	869	1,497	852	2,252	2,035	259
Week ending											
1 August	24,651	0	-	1	-	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	20,875	0	-	0	-	114	136	55	243	246	22
5 September	23,303	0	-	0	-	87	68	54	212	192	20
12 September	22,962	0	-	0	-	73	34	25	158	101	27

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

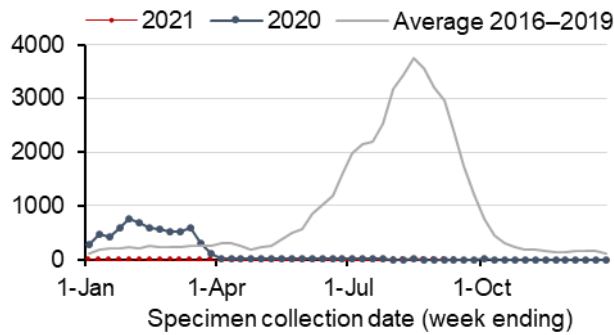
RSV - Respiratory syncytial virus

*Five-week period

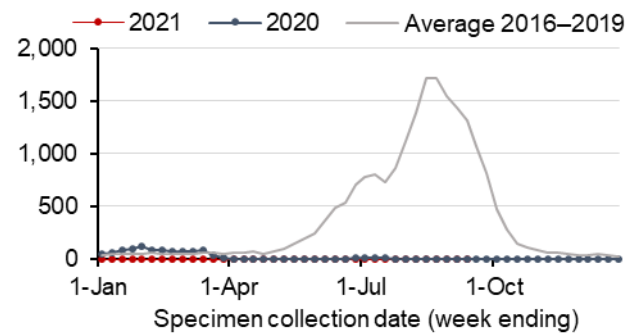
Appendix C: Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 12 September 2021

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

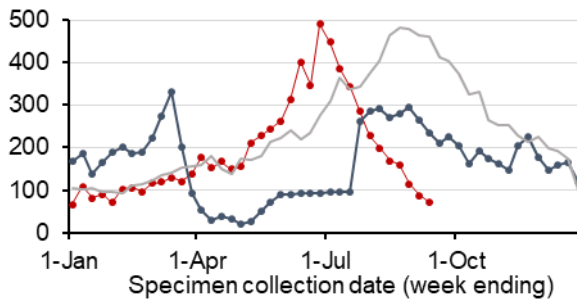
Influenza A



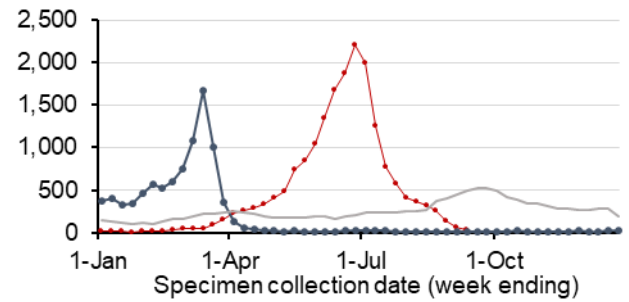
Influenza B



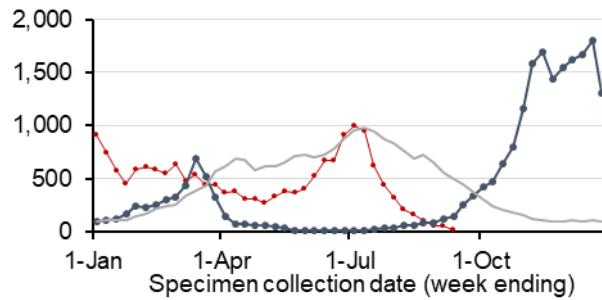
Adenovirus



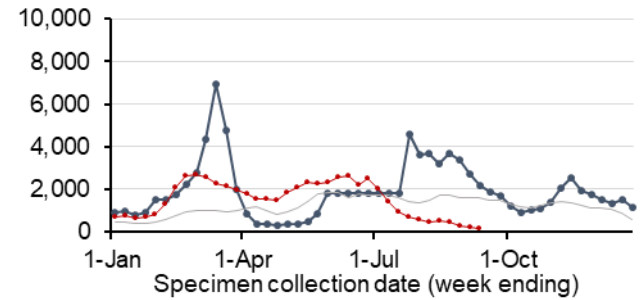
Parainfluenza



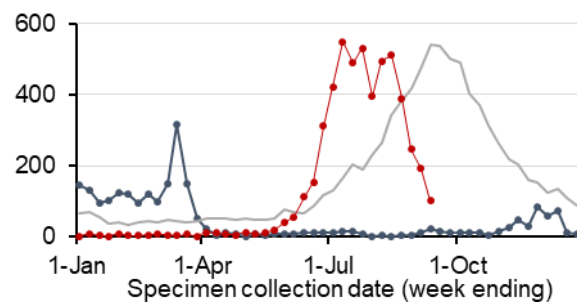
Respiratory Syncytial Virus



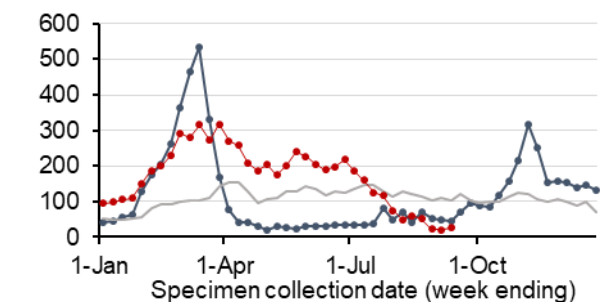
Rhinovirus



Human metapneumovirus



Enterovirus



Note: Preliminary laboratory data is 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.