

COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 29, ENDING 18 JULY 2020

Published 23 July 2020

SUMMARY FOR THE WEEK ENDING 18 JULY

- The number of people diagnosed with COVID-19 in NSW has increased with 63 locally-acquired cases reported in the week ending 18 July compared with eight cases in the previous week.
- Almost all cases are linked to known clusters introduced into NSW from Victoria.
- The low number of cases compared to the high volume of tests this week indicates that, to 18 July, transmission in the community is limited.
- The recently diagnosed cases have reported mild illness and have, compared to earlier cases, short incubation periods highlighting the importance of testing early in the illness even if only mildly unwell.

SECTION 1: THE RESPONSE TO COVID-19 IN NSW

Members of the community, laboratory, clinical and public health staff all have key roles in preventing the spread of COVID-19. For public health action to be effective in reducing transmission:

- Everyone with even mild respiratory symptoms or unexplained fever is strongly encouraged to seek medical attention promptly.
- Clinicians are strongly encouraged to promote COVID-19 testing amongst symptomatic people to ensure a COVID-19 diagnosis as close as possible to the time symptoms start. In addition, in certain circumstances, clinicians are encouraged to test people without symptoms for public health purposes.
- All people who undergo testing are advised to stay at home while they are waiting for test results to avoid spreading infection to others.
- Laboratories notifying new diagnoses promptly allows public health staff to interview cases and identify people potentially infected by a case (close contacts).
- Contact tracing (quarantining of close contacts) and compliance with quarantine by close contacts limits the spread of infection to the community.

The measures below are important to understand how effective we are in preventing the spread of COVID-19 in NSW.

	Week of symptom onset	
	Week ending 18 July	Week ending 11 July
Proportion of cases tested within 1 day of symptom onset	73% (19/26)	32% (8/25)
Number of COVID-19 tests	153,195	99,875
Proportion of new diagnoses notified to NSW Health		
- within 1 day of testing	60% (24/40)	58% (15/26)
- within 2 days of testing	90% (36/40)	89% (23/26)
Interviewed by public health staff within 1 day of notification	100% (40/40)	100% (26/26)

Interpretation: The marked increase in people undergoing testing within 1 day of symptoms suggests the community have responded to the advice given in public health alerts issued in response to the recent clusters. Despite the 53% increase in tests conducted between the two weeks, the time taken for laboratories to notify new diagnoses to NSW Health was stable. Public health staff are responding quickly, and cases are cooperating with providing the information required for contact tracing.

SECTION 2: HOW IS THE OUTBREAK TRACKING IN NSW?

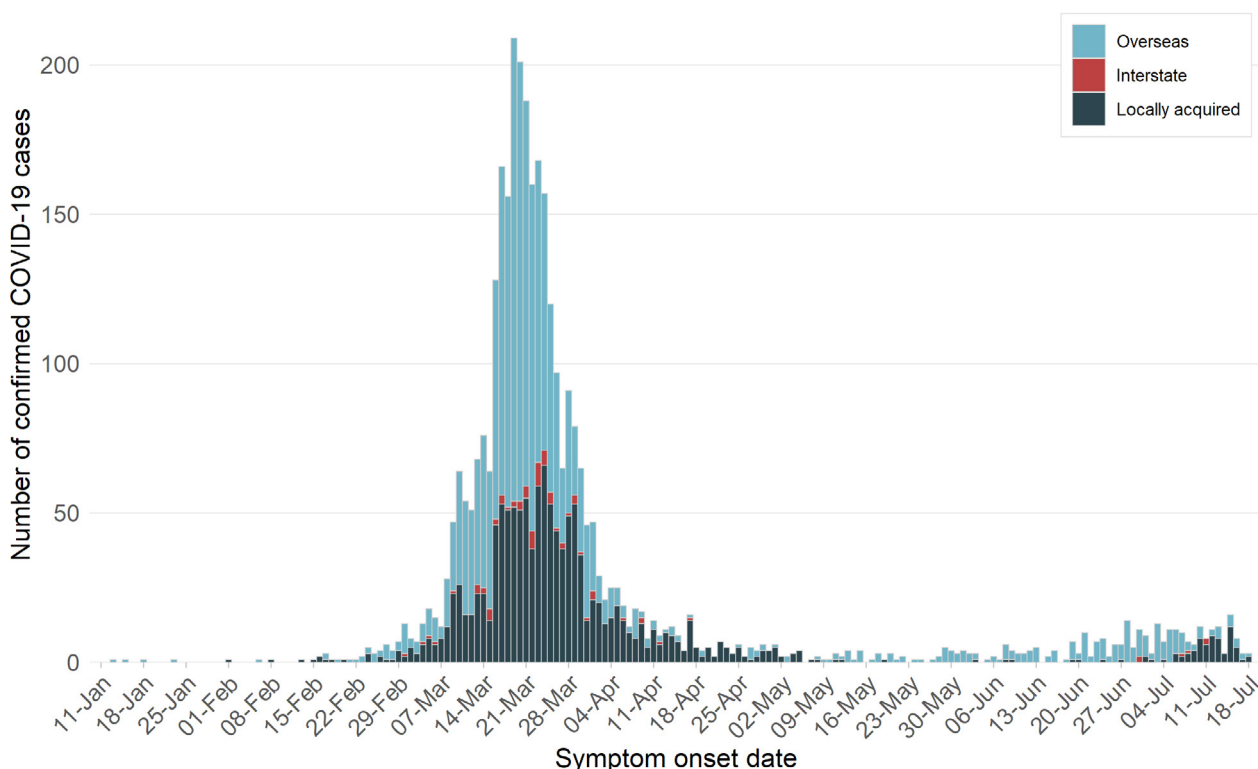
Table 1. COVID-19 cases and tests reported in NSW, up to 18 July 2020

	Week ending 18 July	Week ending 11 July	Total to 18 July
Number of cases	93	59	3,382
Overseas acquired	26	49	1,996
Interstate acquired	4	2	75
Locally acquired	63	8	1,311
Number of deaths	0	0	51
Number of tests	153,195	99,875	1,214,422

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

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, 2020



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

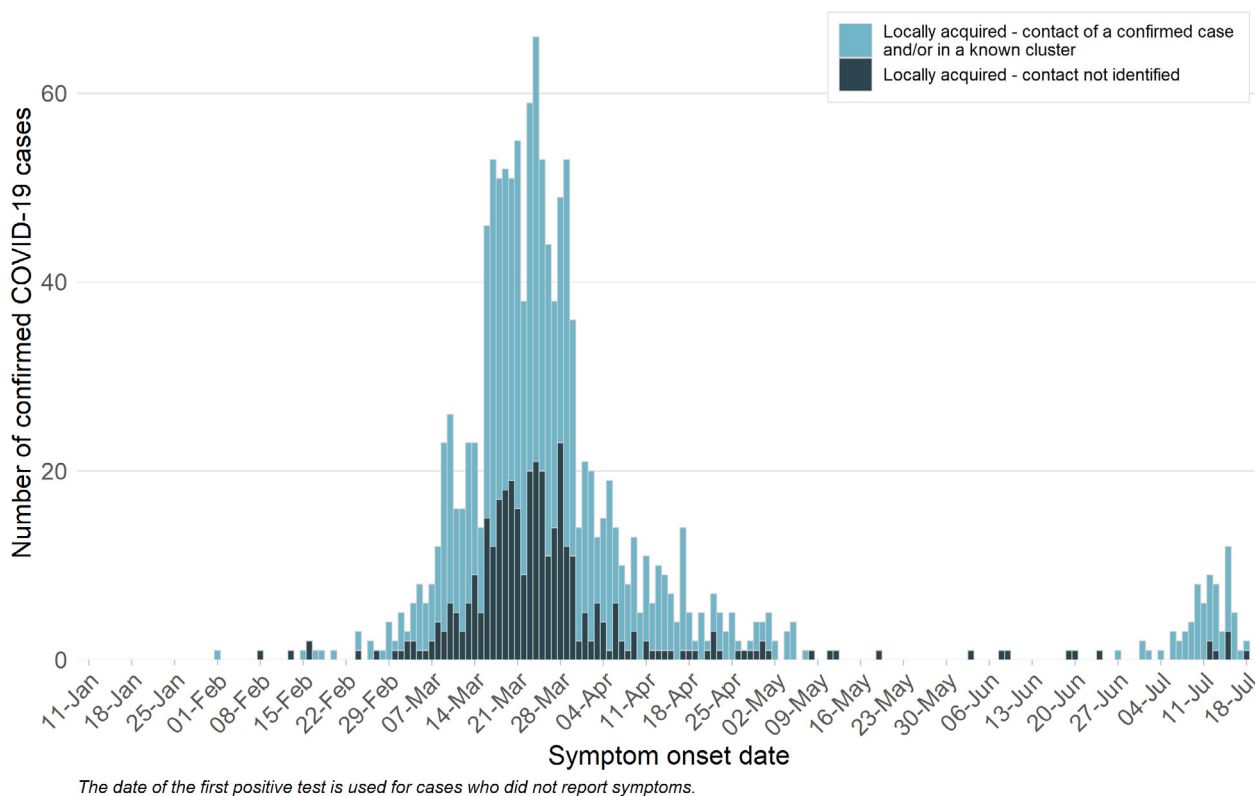
Interpretation: Approximately 60% of COVID-19 infections diagnosed in NSW to 18 July have been **overseas acquired** and the remaining 40% have been **locally acquired**. The number of new cases diagnosed in NSW decreased significantly following a peak in mid-March. The recent increase in overseas-acquired cases is largely due to a program of screening all overseas travellers 2 days and 10 days after arrival in NSW. Four cases reported in the week of 18 July acquired their infection in Victoria. In the last week, 63 locally-acquired cases were reported; most of these were associated with clusters associated with the Crossroads Hotel in Casula, Thai Rock restaurant in Wetherill Park and Soldiers Club in Batemans Bay.

How much transmission is occurring in NSW?

All new cases who have not travelled outside of NSW are investigated by public health staff to determine the likely source of infection and identify **clusters**. To understand the extent of community transmission, locally-acquired cases who have had contact with a case or who are part of a known cluster are considered separately to those with an unidentified source of infection. Cases with no source identified suggest that there are people infected with COVID-19 in the community who have not been diagnosed.

As new cases are diagnosed each day, public health efforts are focussed on contact tracing to limit further spread in the community and special attention is given to identifying the source of infection for every case. High rates of testing are needed to ensure cases are identified as quickly as possible.

Figure 2. Locally acquired COVID-19 cases by likely infection source and illness onset, NSW, 2020



Interpretation: The majority of cases with a symptom onset in the two weeks ending 18 July are linked to known clusters.

Figure 3. Locally acquired COVID-19 cases by LHD of residence and illness onset, NSW, 2020



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

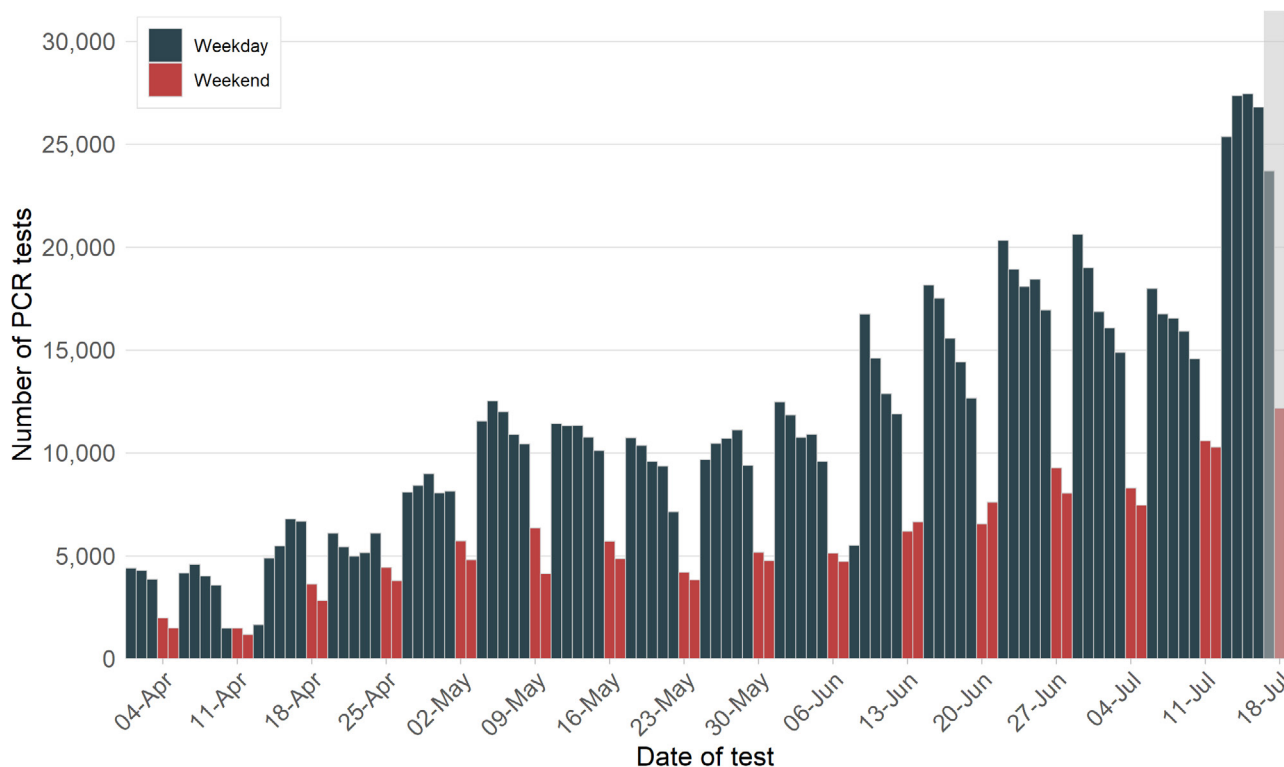
Interpretation: This week, cases in South Western Sydney, Nepean Blue Mountains and Western Sydney LHDs have been associated with clusters at the Crossroads Hotel in Casula and Thai Rock restaurant in Wetherill Park. For the week ending 11 July, the two cases in Murrumbidgee LHD were household contacts of a case who had returned from Melbourne; there have been no further cases in this LHD.

How much testing is happening?

High rates of testing are essential to identify and isolate people who are infectious and to allow contact tracing to limit the spread of infection. Testing is not recommended for people without symptoms except when recommended by public health for people who have been identified as a close contact of someone with COVID-19 or in an outbreak setting.

The bars on the graph below show the number of tests by the date a person presented for the test.¹ While public health facilities are open seven days a week, less testing occurs through GPs and private collection centres on weekends and public holidays. This explains the lower number of tests on weekends.

Figure 4. Number of PCR tests per day, NSW, 2020

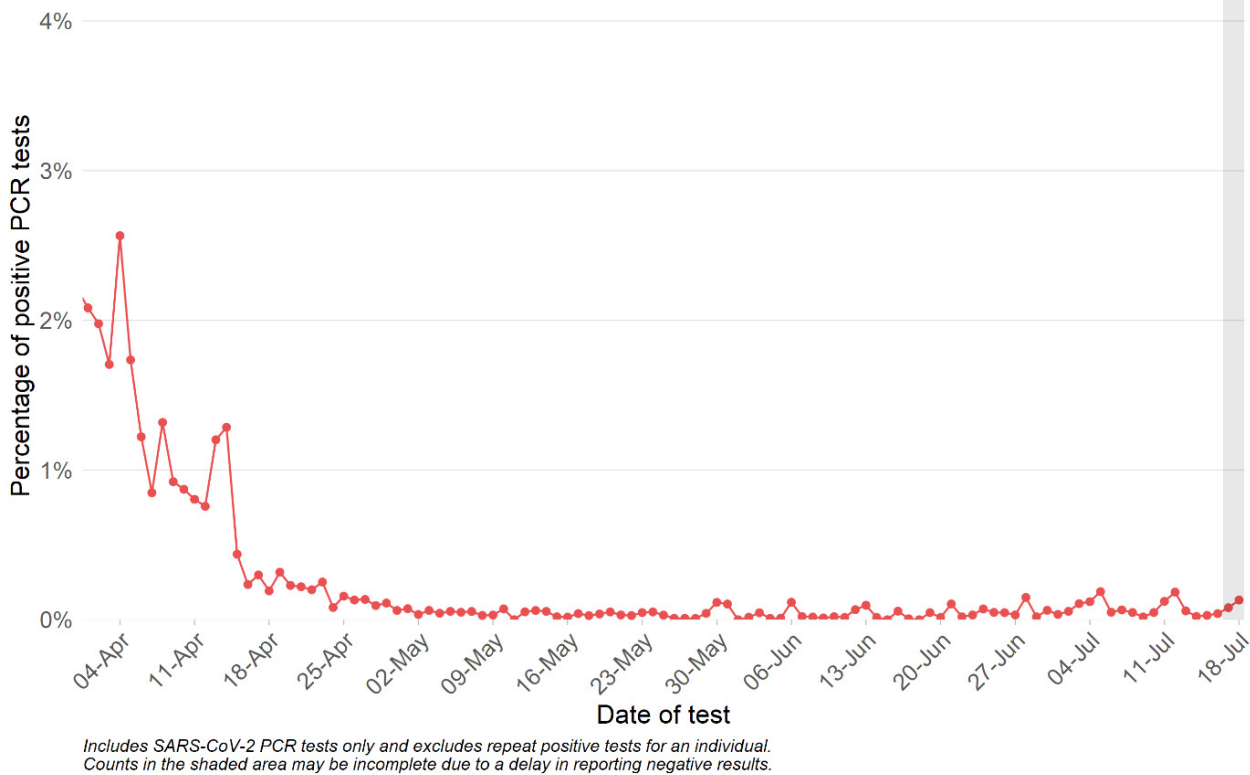


Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual. Counts in the shaded area may be incomplete due to a delay in reporting negative results.

Interpretation: COVID-19 testing has increased significantly since April in line with the changes in testing criteria and increased availability of testing. Early in the outbreak the focus was on returned travellers and close contacts of confirmed cases, whereas now testing is recommended for anyone with even mild respiratory symptoms or unexplained fever. Throughout June and July testing rates remain high and the week ending 18 July had the highest number of tests since the outbreak began. Wednesday 15 July recorded the highest number of daily tests to date, with a total of 27,458.

¹ 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.

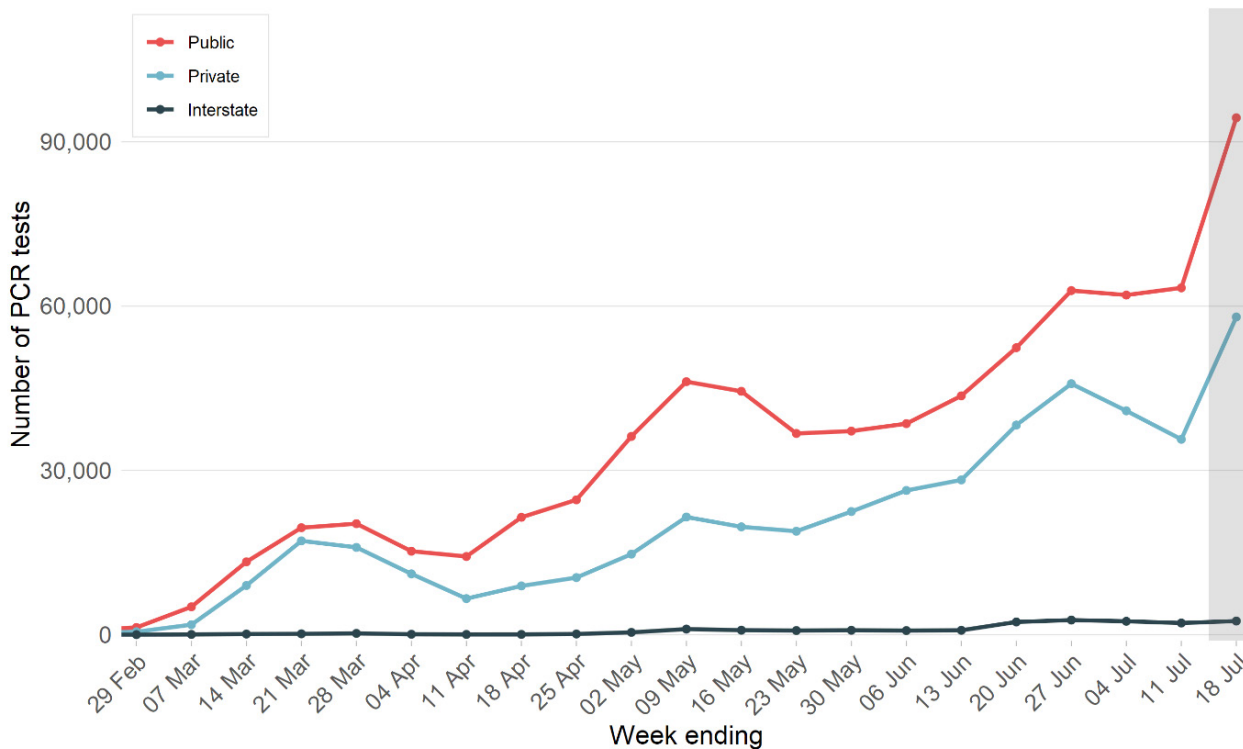
Figure 5. Proportion of PCR tests positive for COVID-19, NSW, 2020



Interpretation: The proportion of tests positive for COVID-19 in NSW declined in mid-March to early May, and then stabilised at very low levels. Despite high rates of testing in areas where clusters have been identified, the overall proportion of tests positive suggests low levels of transmission in the broader community.

Which laboratories are doing the testing?

Figure 6. Number of PCR tests by week and facility type, NSW, 2020



Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual. Counts in the shaded area may be incomplete due to a delay in reporting negative results.

Interpretation: In the week ending 18 July, testing in both public and private facilities increased significantly. Public laboratories accounted for approximately 60% of PCR tests during this period.

SECTION 3: COVID-19 TRANSMISSION IN NSW IN THE LAST FOUR WEEKS

To understand the extent of COVID-19 transmission in the community, public health staff carefully consider information collected from each new case at the time of diagnosis. The following is a review of locally-acquired cases based on the date of symptom onset.²

Information from cases who became unwell in the last 28 days is used to understand where COVID-19 is spreading in the community. This takes into account the **incubation period** and the time it takes for people to seek testing and the laboratory to perform the test. Some people who test positive to COVID-19 do not report having any symptoms despite thorough investigation. As it is not possible to determine when these cases were infected they are excluded in a review of recent transmission.

Table 2. Locally-acquired COVID-19 cases in NSW, by week of onset* and source of infection, 21 June to 18 July 2020

Locally-acquired cases	Week of onset			
	18 July	11 July	4 July	27 June
Contact of a confirmed case or part of a known cluster	33	26	4	1
Source not identified	7	0	0	1
Total	40	26	4	2

* If cases are asymptomatic, the date of their earliest positive COVID-19 test is used.

Interpretation: Most cases with onset in the two weeks ending 18 July were linked to known clusters further described below. No source of infection was identified for seven cases with an onset in the week ending 18 July.

² This analysis differs from Table 1, which is presented by date of report.

COVID-19 clusters under investigation in NSW

In addition to the Crossroads Hotel Casula outbreak previously reported, an additional two currently unrelated clusters were identified at Thai Rock restaurant in Wetherill Park and Soldiers Club in Batemans Bay. Close contacts are being quarantined and investigations are ongoing.

Table 3. Locally-acquired COVID-19 cases associated with known clusters, up to 18 July 2020

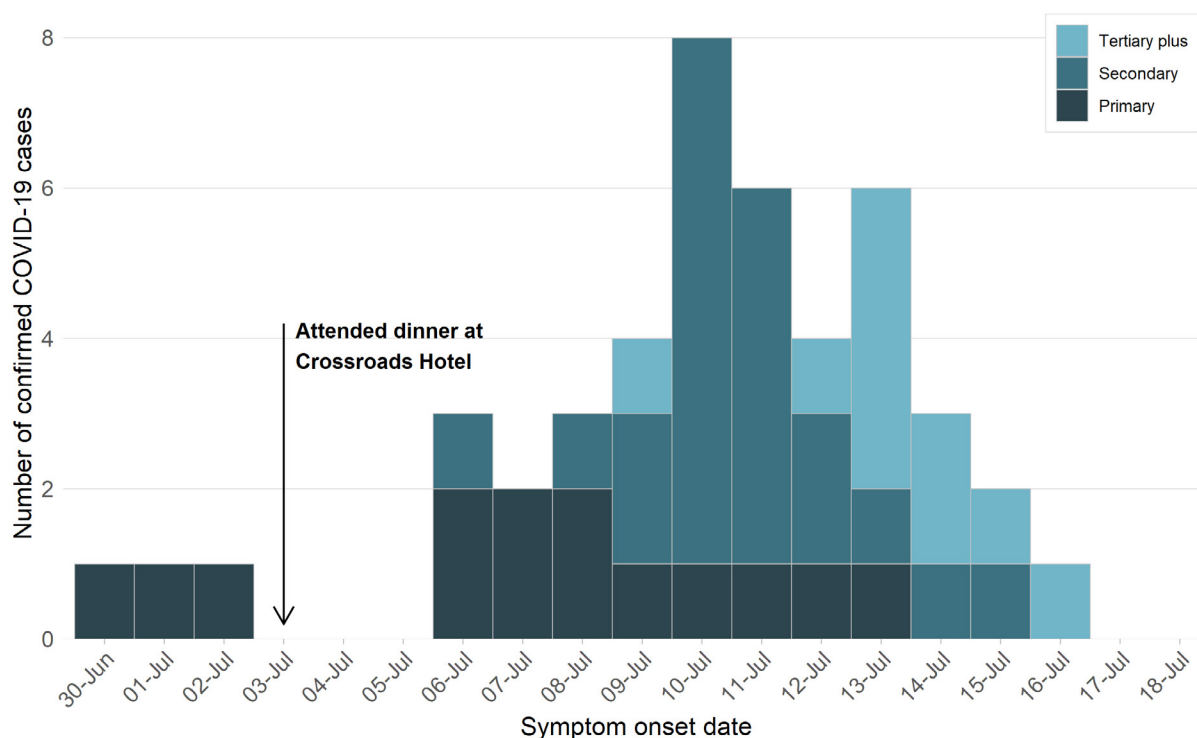
Name of venue	LGA	Primary cases	Secondary cases	Tertiary cases	Total
Crossroads Hotel Casula	Liverpool	14	21	10	45
Thai Rock	Fairfield	10	1	0	11
Soldiers Club Batemans Bay	Eurobodalla	4	0	0	4

Primary cases are those who were at the venue when transmission occurred. Secondary cases are those who had close contact with a case/s who had been at the venue. Tertiary cases are those who likely acquired their infection from secondary cases.

Crossroads Hotel Casula cluster

The cluster at Crossroads Hotel was identified following interviews of two seemingly unrelated cases who both attended the venue on 3 July. Attendees and staff were advised to undergo testing and self-isolate for 14 days to prevent the spread of infection.

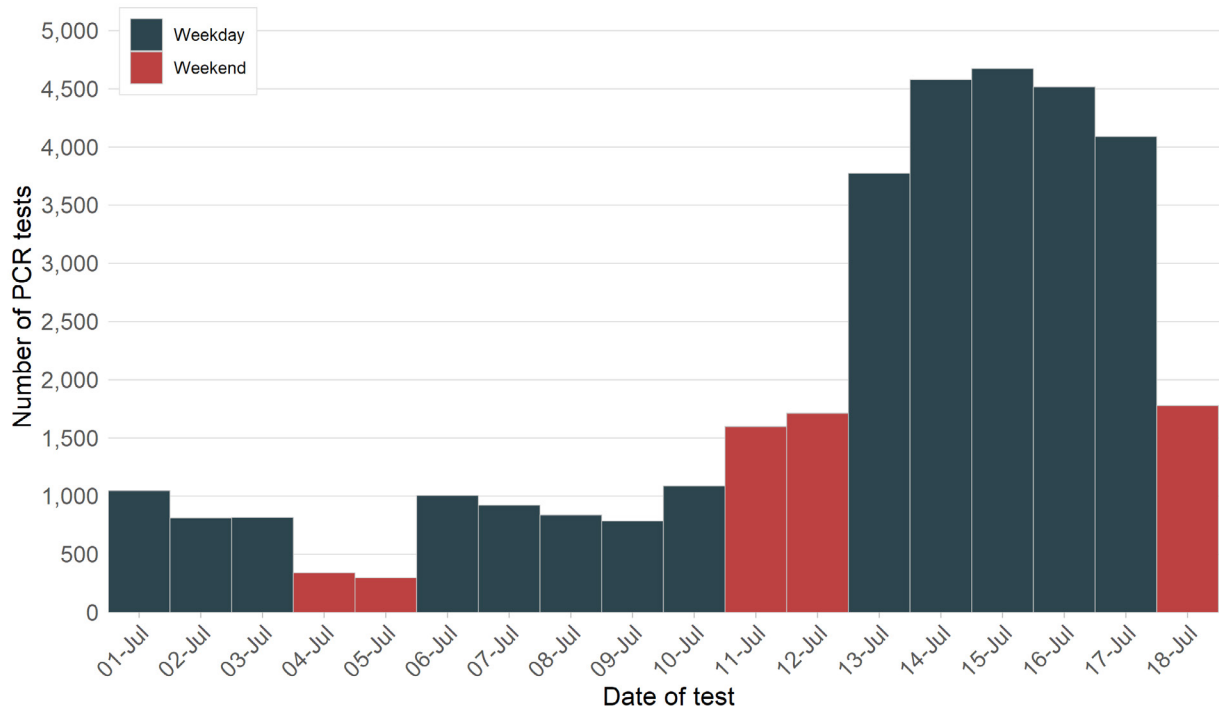
Figure 7. COVID-19 cases in Crossroads Hotel cluster by onset of illness, NSW, 2020



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

Interpretation: The first cases linked to the Crossroads Hotel Casula had a symptom onset of 1 and 2 July. The public health investigation suggests infection was spread to others on 3 July when these cases attended the hotel while infectious. A feature of this cluster has been the relatively short incubation period, with secondary cases experiencing symptoms within three days of exposure to an infected case.

Figure 8. COVID-19 PCR tests in Crossroads Hotel cluster associated areas, NSW, 2020



Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual. Counts in the shaded area may be incomplete due to a delay in reporting negative results. Areas included: Camden, Campbelltown, Fairfield and Liverpool LGAs.

Interpretation: A marked increase in testing of local residents followed the public health alert issued 12 July. The low proportion of additional cases identified indicated low levels of COVID-19 in the community.

Thai Rock, Wetherill Park

The Thai Rock cluster was identified when interviews revealed multiple cases had attended the venue in their incubation period. A total of 10 cases were identified in people who attended the restaurant between 9 and 11 July, including a case who attended Our Lady of Lebanon cathedral while infectious.

Soldiers Club Batemans Bay

The four cases associated with Soldiers Club in the reporting period were a family who dined there on 13 July. The public health investigation is ongoing.

COVID-19 cases with an unknown source of infection

Cases with no source identified suggest that there are people infected with COVID-19 in the community who have not been diagnosed. Testing of people with whom they have been in contact in the 14 days prior to symptom onset and more broadly in the local community is important to identify the source of the infection, detect other cases and prevent further transmission in the community.

Cases and testing by LHD of residence

Table 4. Locally-acquired COVID-19 cases with an unknown source of infection by LHD of residence and week of onset, 21 June to 18 July 2020*

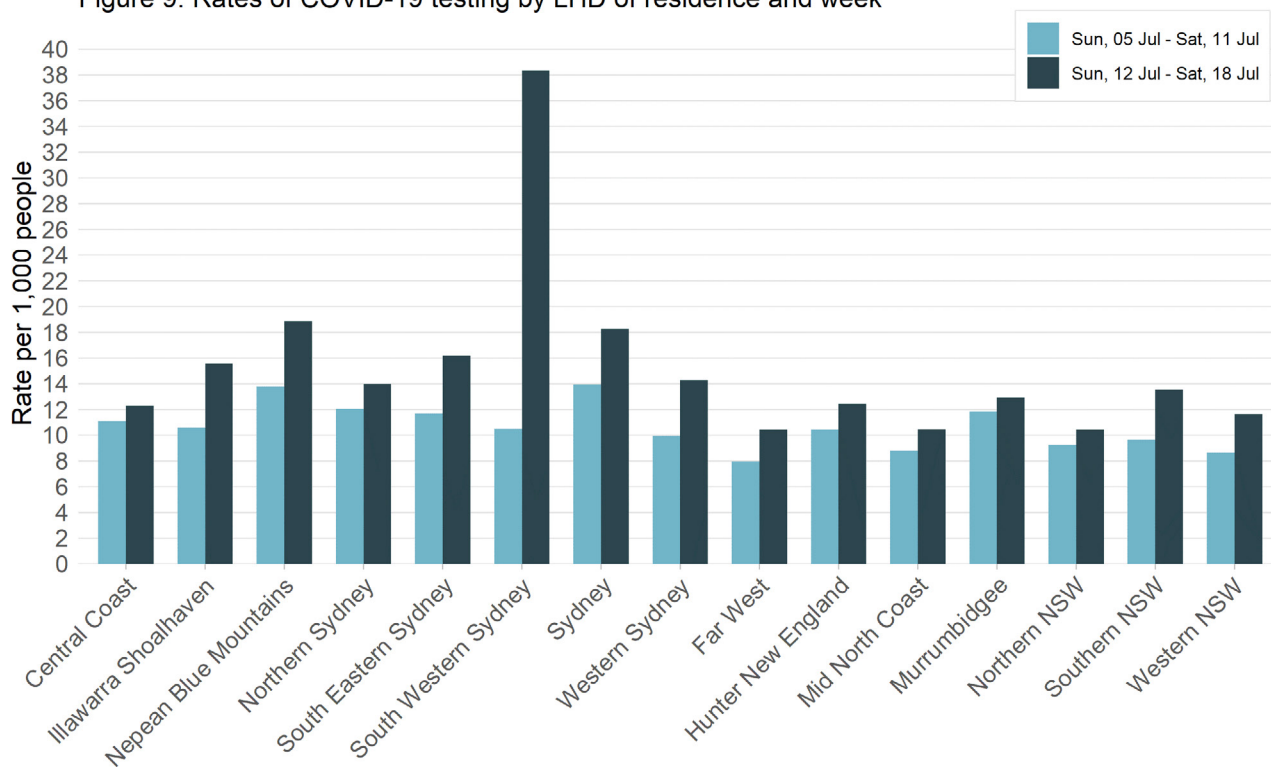
Local Health District	Week of onset				Total
	18 July	11 July	4 July	27 June	
Central Coast	0	0	0	0	0
Far West	0	0	0	0	0
Hunter New England	0	0	0	0	0
Illawarra Shoalhaven	1	0	0	0	1
Mid North Coast	0	0	0	0	0
Murrumbidgee	0	0	0	0	0
Nepean Blue Mountains	1	0	0	1	2
Northern NSW	0	0	0	0	0
Northern Sydney	0	0	0	0	0
South Eastern Sydney	0	0	0	0	0
South Western Sydney	3	0	0	0	3
Southern NSW	0	0	0	0	0
Sydney	0	0	0	0	0
Western NSW	1	0	0	0	1
Western Sydney	0	0	0	0	0
Grand Total	7	0	0	1	8

* One case in the week ending 18 July is a Victorian resident in care in NSW, so is not counted in an LHD total above.

Interpretation: The eight cases with no source identified and symptom onset in the last four weeks included three residents from South Western Sydney LHD, two from Nepean Blue Mountains LHD and one each from Illawarra Shoalhaven and Western NSW LHDs.

In total, 39,804 tests were conducted in residents of South Western Sydney LHD in the week ending 18 July, of which 36 (known and unknown source) were positive. This suggests that the amount of transmission in the broader community is very low.

Figure 9. Rates of COVID-19 testing by LHD of residence and week



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

Interpretation: Statewide testing rates in the week ending 18 July were significantly higher when compared to the previous week (19 per 1,000 vs 12 per 1,000). Testing has increased in all LHDs, most notably South Western Sydney LHD where two of the recent clusters have been identified.

Testing for COVID-19 in areas of residence of cases with an unknown source of infection

High rates of testing in areas where cases may have acquired their infection are necessary to identify other cases and enable public health action to limit the spread of infection. The following analysis is based on the date that the case was reported to NSW Health.

Table 5. Testing in local government areas (LGA) with locally-acquired cases where no source was identified, reported from 21 June to 18 July 2020

LGA	Cases				Tests				Tests per 1,000 population			
	18 July	11 July	4 July	27 June	18 July	11 July	4 July	27 June	18 July	11 July	4 July	27 June
Camden	1	0	0	1	5,506	1,574	1,887	2,546	54.3	15.5	18.6	25.1
Campbelltown	1	0	0	0	8,949	2,191	2,185	2,585	52.4	12.8	12.8	15.1
Penrith	1	0	0	1	4,450	3,066	3,610	4,106	20.9	14.4	17.0	19.3
Canterbury-Bankstown	1	0	0	0	7,338	3,351	3,653	3,551	19.4	8.9	9.7	9.4
Wollongong	1	0	0	0	3,597	2,315	2,855	3,102	16.5	10.6	13.1	14.2
Blacktown	1	0	0	0	5,833	4,218	5,114	5,745	15.6	11.3	13.7	15.3

Interpretation: Rates of testing in the six LGAs with cases where no source was identified were higher than or similar to the state rate each week for the week ending 18 July.

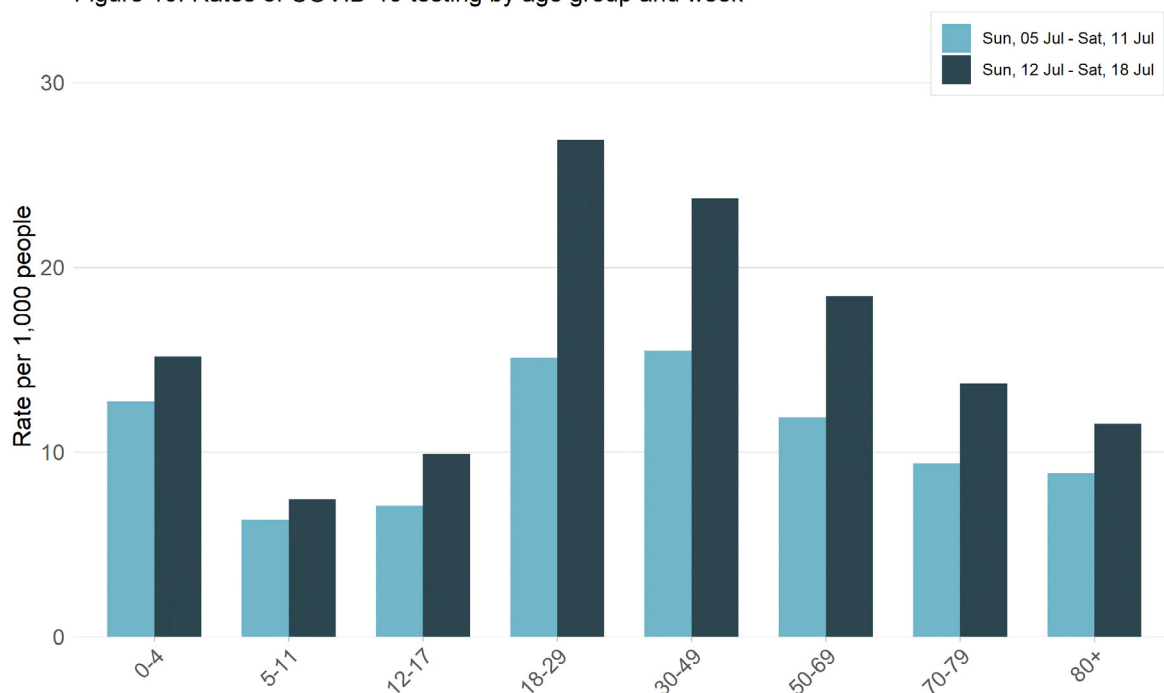
Cases and testing by age group

Table 6. Locally-acquired COVID-19 cases with an unknown source of infection by age group and week of onset, 21 June to 18 July 2020

Age group	Week ending				Total
	18 July	11 July	4 July	27 June	
0-4 years	0	0	0	0	0
5-11 years	0	0	0	0	0
12-17 years	0	0	0	0	0
18-29 years	5	0	0	0	5
30-49 years	2	0	0	0	2
50-69 years	0	0	0	0	0
70-79 years	0	0	0	1	1
80+ years	0	0	0	0	0
All ages	7	0	0	1	8

Interpretation: Seven of the eight cases in the last four weeks were aged between 18 and 49 years.

Figure 10. Rates of COVID-19 testing by age group and week



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

Interpretation: Testing rates have increased in all age groups for the week ending 18 July, particularly those between 18 and 49 years old.

Cases and testing by gender

The seven cases with an unknown source of infection included five males and two females.

Table 7. Rates of COVID-19 testing by gender, up to 18 July 2020*

Gender	Week ending 18 July		Week ending 11 July		Total to 18 July	
	No. tests	No. tests per 1,000 population	No. tests	No. tests per 1,000 population	No. tests	No. tests per 1,000 population
Female	83,159	20.4	54,559	13.4	676,325	166.0
Male	69,685	17.4	45,099	11.2	534,503	133.1

*Excludes cases with unavailable information on gender.

Interpretation: Testing increased for both males and females in the week ending 18 July compared with the previous week. Females continue to have a higher rate of testing compared to males.

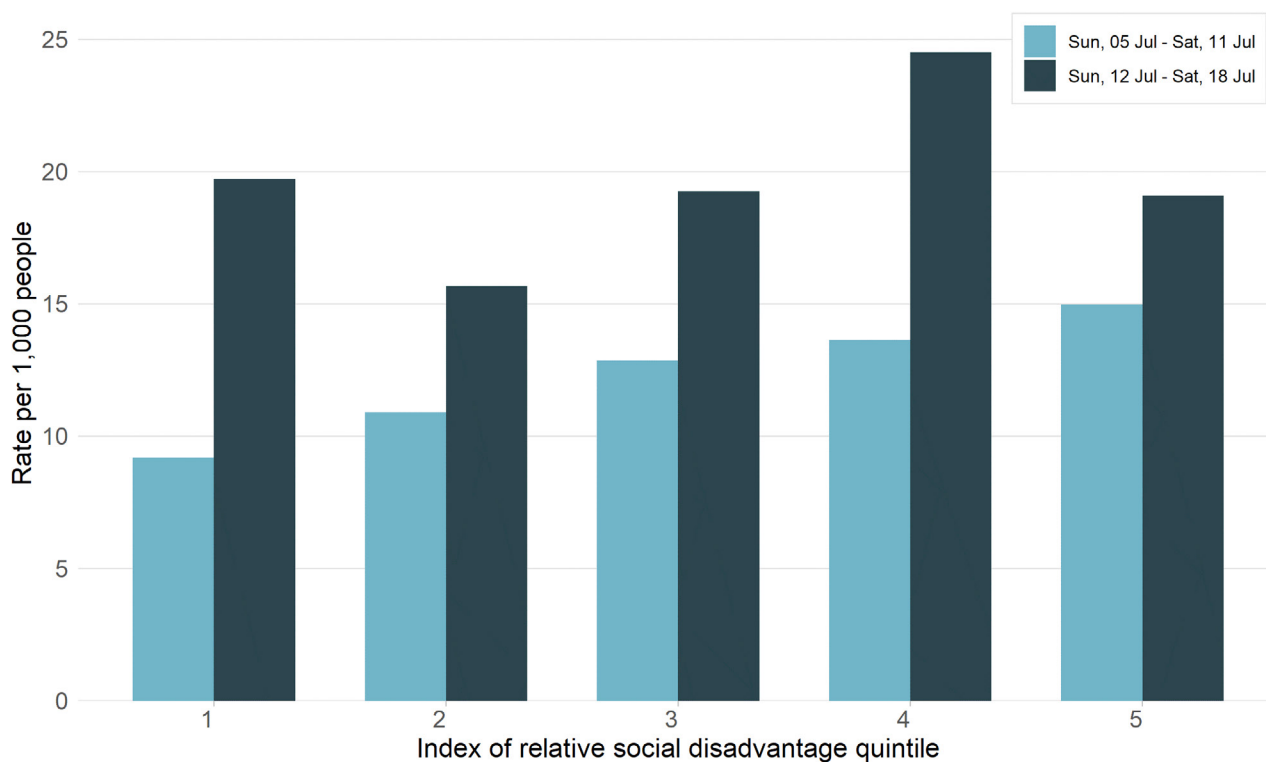
Who is accessing testing?

Testing by Index of Relative Socio-economic Disadvantage (IRSD)

As defined by the ABS, the Index of Relative Socio-economic Disadvantage (IRSD) is a socio-economic index that summarises information about the economic and social conditions of people and households within an area.

Low scores indicate relatively greater disadvantage. Areas with a low score could have many households with low income, many people with no qualifications or many people in low skill occupations. Inversely, areas have a high score if there are few households with low incomes, and few people with no qualifications or low skilled occupations. For more information, visit the [ABS website](#).

Figure 11. Rates of COVID-19 testing by IRSD* quintile and week, NSW, 2020



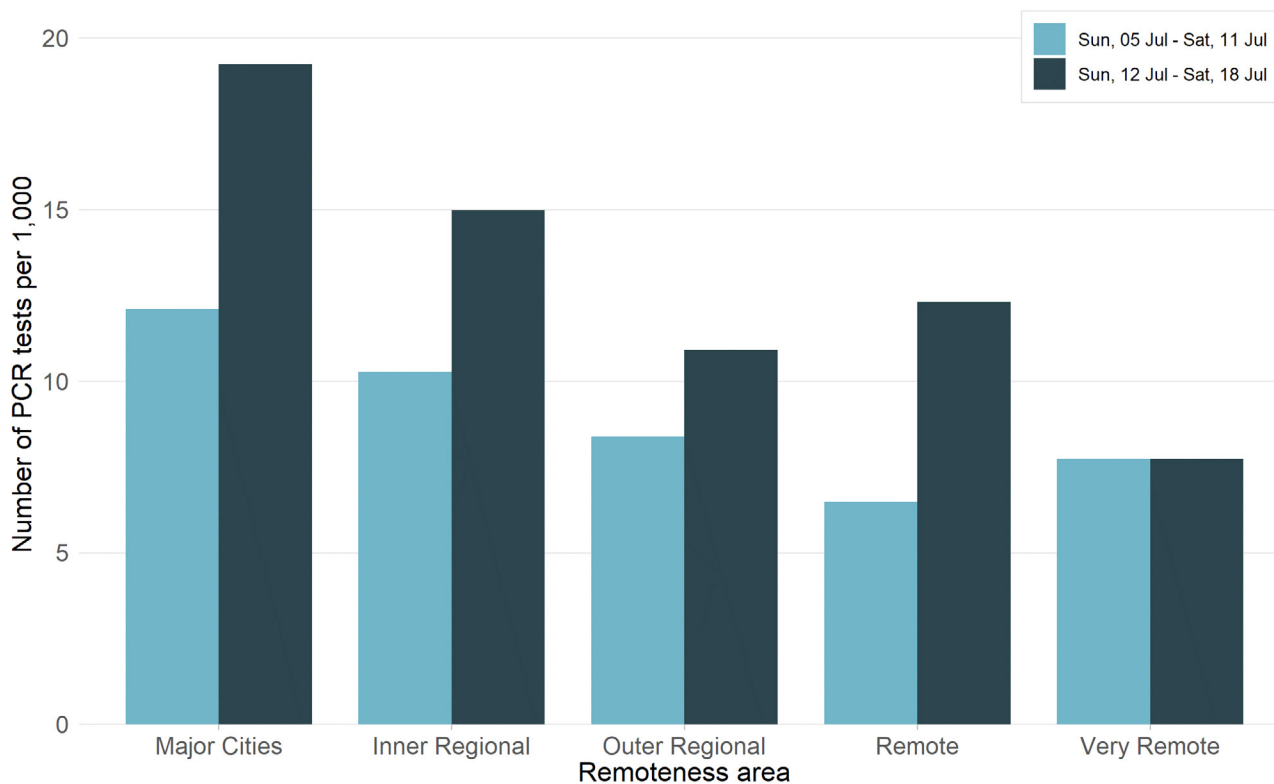
*Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.
Index of Relative Social Disadvantage.

Interpretation: Rates of testing have increased in all population groups for the week ending 18 July. However, the largest increase was noted for people with greater disadvantage – more than doubling relative to last week.

Testing by remoteness

Remoteness areas classify geographical areas of Australia based on relative access to services. For more detailed information and a map of remoteness areas see the [ABS website](#).

Figure 12. Rates of COVID-19 testing by remoteness area and week, NSW, 2020



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

Interpretation: Testing has increased in almost all remoteness areas for the week ending 18 July, while it remains stable in very remote areas.

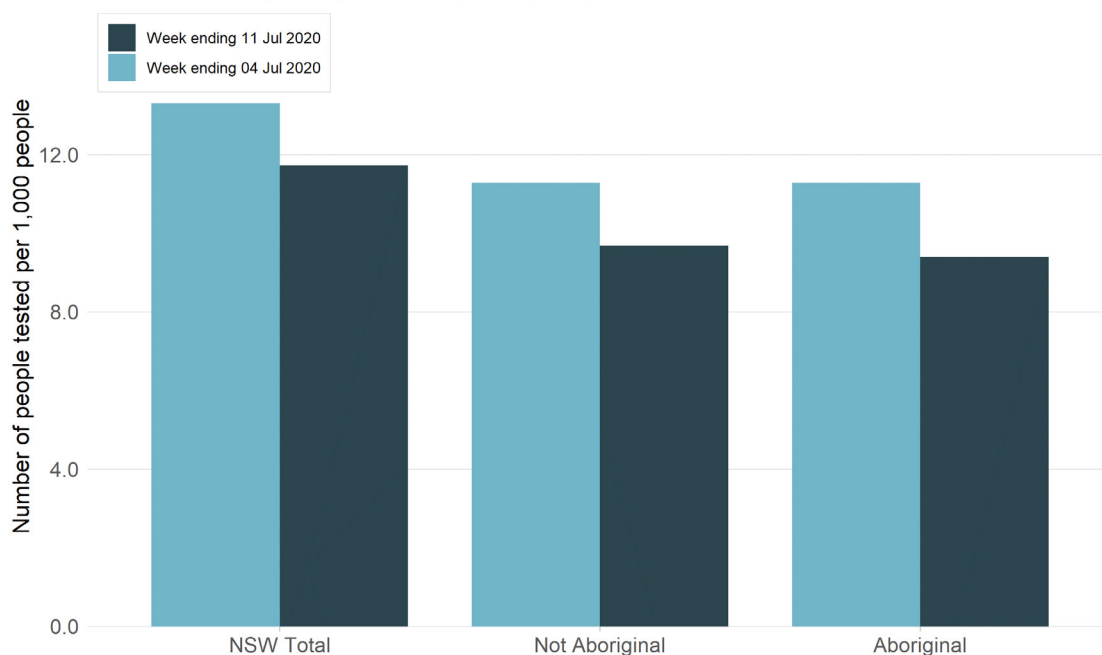
Cases and testing in Aboriginal people

Three Aboriginal cases were notified in the week ending 18 July including two close contacts of cases linked to the Crossroads Hotel and one case who likely acquired their infection in Victoria. In total, 34 Aboriginal people have been diagnosed with COVID-19, representing 1% of all cases in NSW.

All three cases had mild respiratory symptoms not requiring hospitalisation and were self-isolating at home.

While Aboriginal status is collected by public health staff on interview with the case at the time of diagnosis, those who test negative are not interviewed. Aboriginal status for those tested can be ascertained through linkage with other health information systems but there is a delay in getting this information. Results of the most recent linkage are available for people tested up to 11 July 2020 with Aboriginal status ascertained for approximately 90% of all COVID-19 test records.

Figure 13. Testing Rate per 1,000 by Aboriginality and week, NSW



Note: NSW Total includes persons tested in NSW without Aboriginality recorded.

*Total rates include people with unknown Aboriginality status.

Interpretation: Testing rates decreased slightly in the week ending 11 July compared with the previous week. A decline in testing rates among non-Aboriginal people was also observed in the same time period.

Cases in pregnant women

There were three cases in pregnant women (all in their third trimester) reported in the week ending 18 July. Two had visited the Crossroads Hotel and one acquired their infection overseas. All three women experienced mild illness not requiring admission to hospital.

Cases in children

Ten locally-acquired cases were reported in children in the week ending 18 July. Eight children were linked to the Crossroads Hotel cluster including one infant, two primary-aged children and five high school-aged children. The remaining two children were part of the Soldiers Club cluster in Batemans Bay.

SECTION 4: DEATHS

How many people have died as a result of COVID-19?

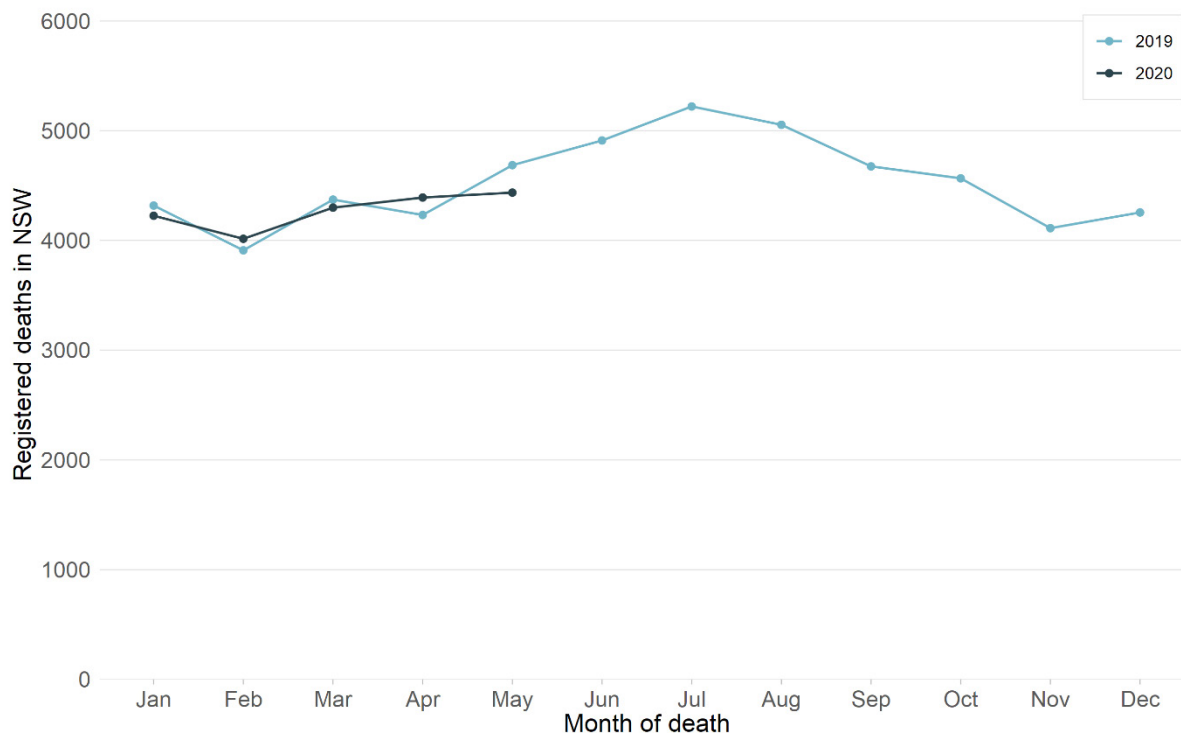
In total, 1.5% of cases (51 people) have died as a result of COVID-19 infection, most of whom were 70 years of age or older, including 28 residents of aged care facilities with known COVID-19 outbreaks. Approximately one-quarter of the deaths were in overseas-acquired cases.

Internationally it is estimated that 4.2% of COVID-19 cases are reported to have died as a result of their infection.³ Countries such as Italy, the United Kingdom and Spain have reported higher mortality rates (14.3%, 15.4% and 10.9%), while NSW reports similar rates to South Korea (2.1%) and New Zealand (1.8%).

How many people have died in NSW from any cause of death?

NSW Health receives notifications of all deaths notified to the NSW Registry of Births Deaths and Marriages. Deaths from any cause are seasonal, increasing in winter and decreasing in summer. On average there is a delay of about 14 days for a death to be registered and notified to NSW Health, and deaths referred to a coroner may take longer to register.

Figure 14. Deaths from any cause registered in NSW up to 16 July, 2020



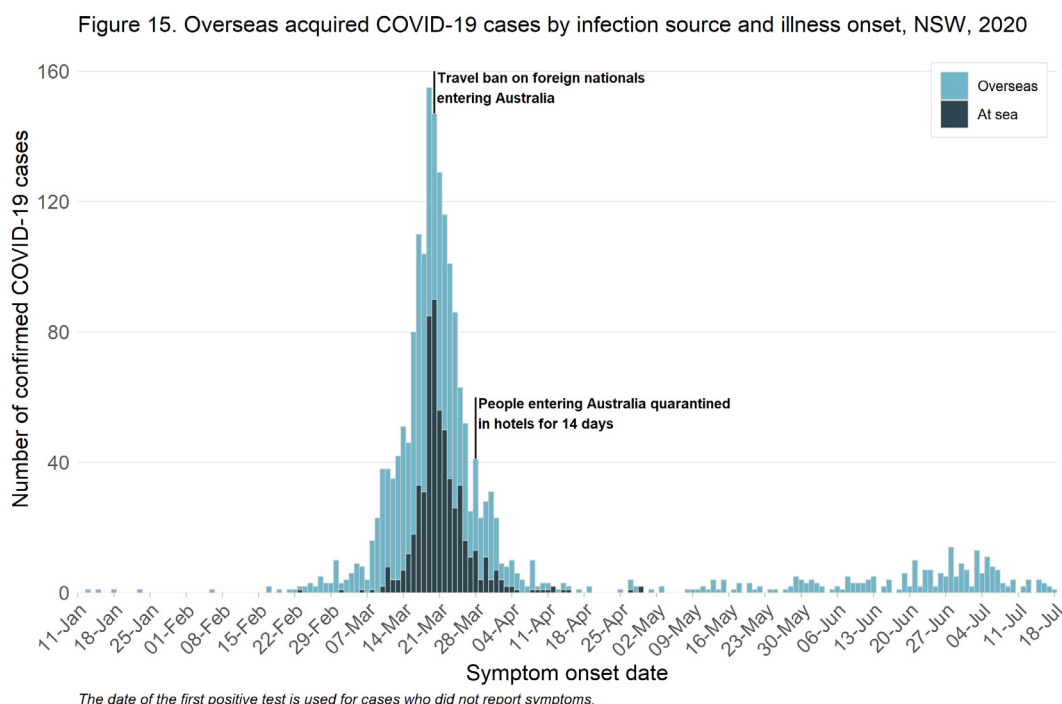
Interpretation: When compared to the same period in 2019, the numbers of registered deaths were slightly higher in April, but lower in May. While there is a lag in notification of deaths, there is no indication to date that the COVID-19 pandemic in NSW is causing an overall increase in mortality.

³ WHO Coronavirus disease (COVID-19) Situation Report - 182
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

SECTION 5: 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 addition, since 28 March returned travellers have been quarantined in hotels for a 14-day period and travellers who develop symptoms are isolated until no longer infectious.

The graph below shows the number of cases in returned travellers by the date of symptom onset. Cases acquired at sea refers to those cruise ship passengers who acquired their infection prior to disembarking in NSW.



Interpretation: Up to 18 July, cruise ship passengers accounted for the largest number of overseas-acquired infections (581 cases). Following this, cases were most commonly returning from the United Kingdom (333 cases), United States (283 cases) and Pakistan (107 cases).

Overall, the number of new cases in returned travellers has decreased markedly in line with travel restrictions. Returned travellers account for around two-thirds of all cases (66%, 159 cases) reported in NSW in the last four weeks.

Most travellers diagnosed in quarantine are returning Australian nationals and the country where people acquired their infection in recent weeks can be influenced by the numbers and size of arriving repatriation flights. Effective hotel quarantine minimises the risk of transmission to the community. In the four weeks ending 18 July, cases had most commonly returned from Pakistan (56 cases).

Airport screening

Health screening of returning travellers was introduced for people returning from particular countries early in the outbreak but was expanded to all returning travellers on 21 March 2020. As part of the health screening passengers are asked to complete a questionnaire about their health upon arrival into Sydney International Airport. People with symptoms are assessed by an onsite health team and tested for COVID-19.

During the week ending 18 July, a total of 3,562 people were screened at Sydney International Airport and 23 were referred for testing. Since screening began on 2 February, a total of 99,427 people have been screened with 1,157 referred for onsite health assessment and testing.

SECTION 6: OTHER RESPIRATORY INFECTIONS IN NSW

Influenza and other respiratory virus cases and tests reported in NSW, up to 12 July 2020

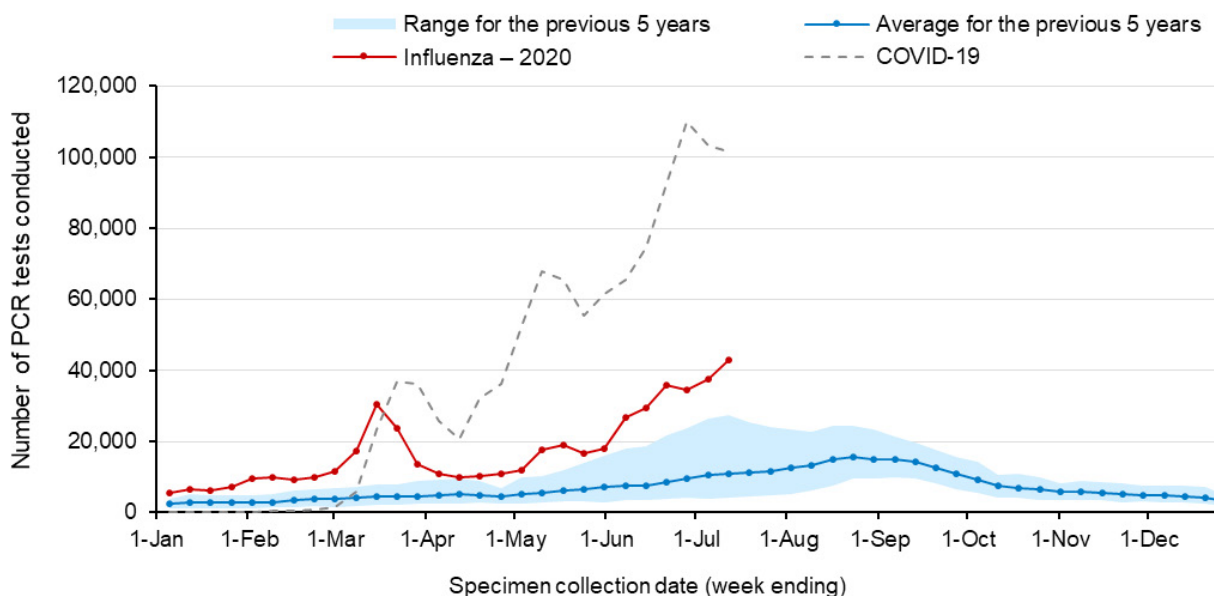
In NSW, routine surveillance for influenza and other respiratory viruses is conducted through sentinel laboratories. The number of all PCR tests (positive and negative) are provided to NSW Health by participating laboratories each week. Testing counts reflect the number of influenza PCR tests conducted; not all samples are tested for all respiratory viruses.

The most recent data available is for testing carried out to 12 July. A total of 493,625 influenza tests have been performed at participating laboratories to 12 July, with 43,044 tests conducted in the most recent week. Refer to Appendix B for PCR testing results for a range of respiratory viruses.

How much influenza testing is happening?

The red line in the figure below shows the number of PCR tests for influenza carried out each week. The blue line shows the average number of tests carried out for the same week in the last five years and the shaded area shows the range of counts reported in the previous five years. The grey line shows the number of COVID-19 tests.

Figure 16. Testing for influenza and COVID-19 by week, to 12 July 2020

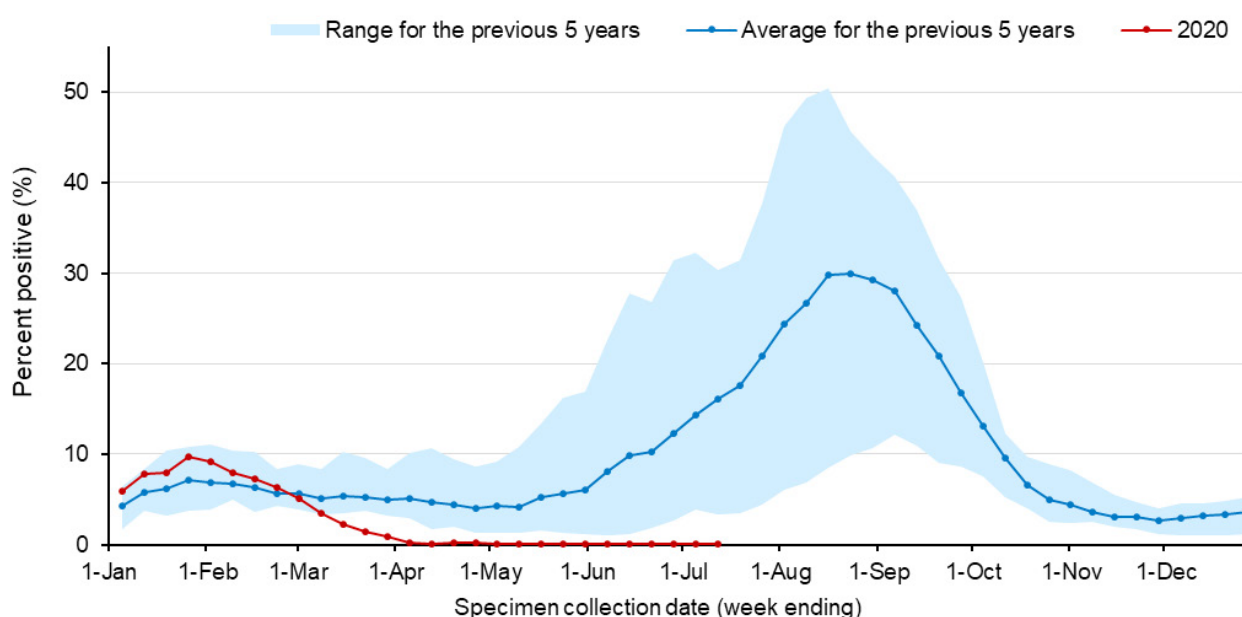


Interpretation: The number of influenza tests performed has exceeded the previous five-year average every week this year. The peak in March corresponds to an increase in testing for COVID-19 virus. The subsequent decline of influenza testing, and sharp increase in COVID-19 testing from April, reflects changes in testing practices for COVID-19 introduced in late March so that testing for influenza and other respiratory viruses was by exception to enable laboratories to increase COVID-19 testing using common equipment. Subsequently, testing for both influenza and COVID-19 has increased.

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 2020, the blue line showing the average for the past five years and the shaded area showing the range recorded in the previous five years.

Figure 17. Proportion of tests positive for influenza, to 12 July 2020



Interpretation: The percent of influenza tests that were positive in the week ending 12 July continues to be very low (less than 0.1%), indicating limited influenza transmission in the community.

How many people have died as a result of influenza?

No influenza deaths were reported in the week ending 12 July. The number of influenza-related deaths identified via Coroner’s reports and death registrations from 1 January to 12 July 2020 is lower than the same period last year (12 deaths in 2020 compared with 79 in 2019).⁴ Two-thirds of the deaths were in people aged 65 years and over.

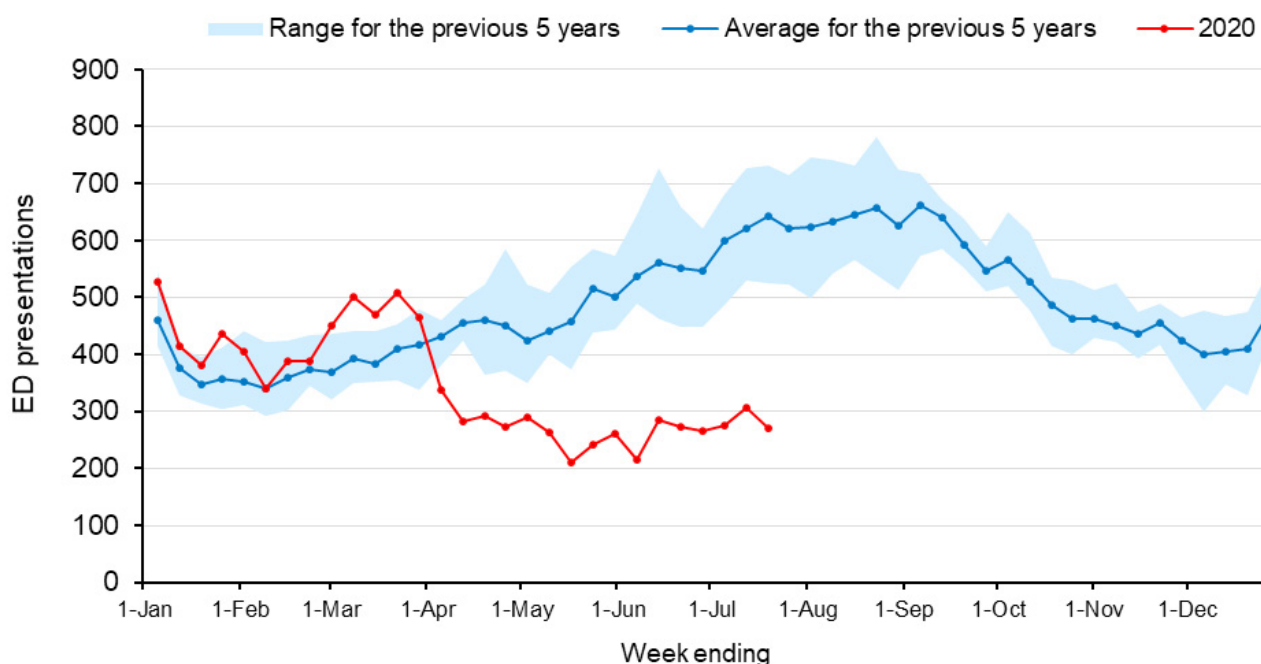
⁴ Includes deaths in people with laboratory-confirmed influenza.

How are emergency department presentations for pneumonia tracking?

The figure below shows weekly pneumonia presentations to Emergency Departments in NSW. This includes presentations 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 using PHREDSS.⁵

The red line shows the weekly counts for 2020, the blue line shows the average for the same week for the past five years and the shaded area shows the range recorded in the previous five years.

Figure 18. Emergency Department pneumonia presentations in NSW by week, to 19 July 2020



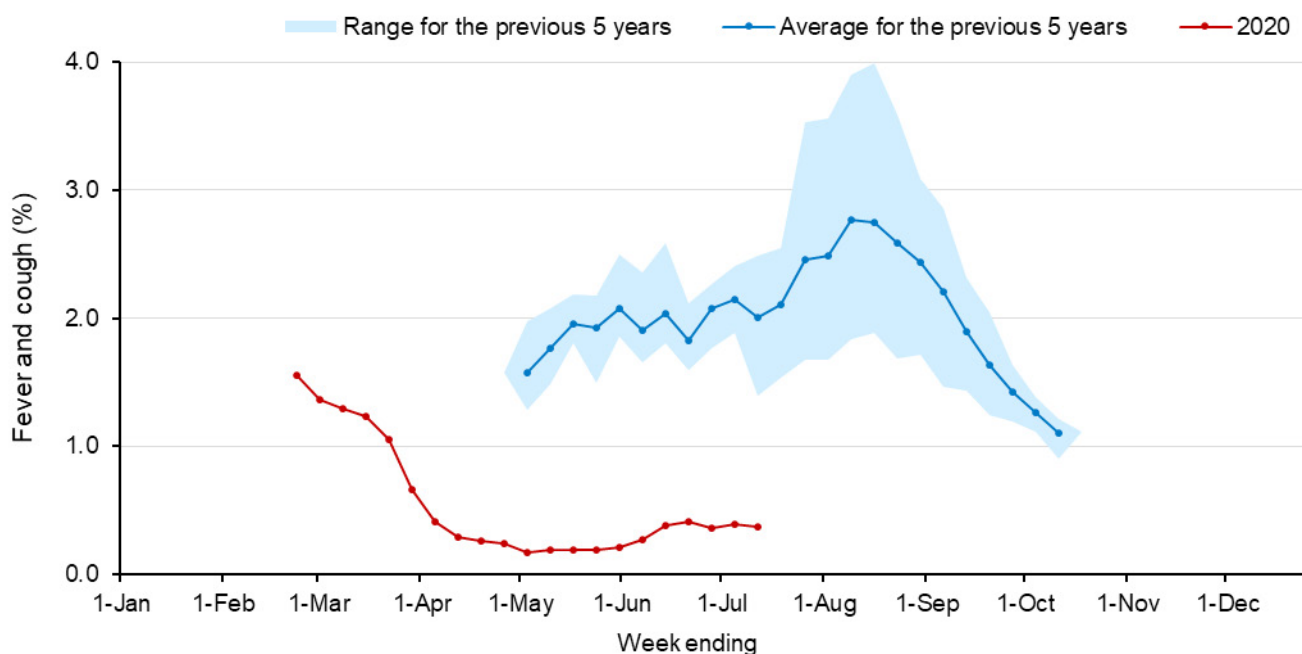
Interpretation: Pneumonia presentations decreased from the end of March and have continued to remain well below the usual range for this time of year.

⁵ 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).

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 commenced at the end of February this year given the COVID-19 outbreak.

Figure 19. Proportion of FluTracker participants in NSW reporting influenza-like illness, to 12 July 2020



Interpretation: In NSW in the week ending 12 July, of the 24,054 people surveyed, 89 people (0.4%) reported flu-like symptoms. The proportion of people reporting symptoms has increased in recent weeks but remains well below the usual range for this time of year.

APPENDIX A: COVID-19 PCR TESTS IN NSW

Local Health District	Local Government Area	Week ending				Total	
		18 July		11 July		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Central Coast	Central Coast/ <i>LHD Total</i> ²	4329	12.3	3921	11.1	50204	142.3
Far West	Balranald	24	10.3	24	10.3	146	62.5
	Broken Hill	159	9.1	130	7.4	1779	101.8
	Central Darling	21	11.4	17	9.2	130	70.7
	Wentworth	110	15.6	69	9.8	753	106.8
	<i>LHD Total</i> ²	314	10.4	240	8.0	2808	93.2
Hunter New England	Armidale Regional	288	9.4	240	7.8	4100	133.2
	Cessnock	606	10.1	493	8.2	6477	108.0
	Dungog	96	10.2	61	6.5	891	94.6
	Glen Innes Severn	73	8.2	64	7.2	865	97.5
	Gunnedah	126	9.9	92	7.3	985	77.7
	Gwydir	23	4.3	32	6.0	272	50.8
	Inverell	166	9.8	140	8.3	1774	105.0
	Lake Macquarie	2686	13.1	2341	11.4	31003	150.6
	Liverpool Plains	74	9.4	40	5.1	860	108.8
	Maitland	1357	15.9	1138	13.4	14554	170.9
	Mid-Coast	840	9.0	628	6.7	9406	100.2
	Moree Plains	77	5.8	89	6.7	1222	92.2
	Muswellbrook	219	13.4	162	9.9	1741	106.3
	Narrabri	130	9.9	71	5.4	1123	85.5
	Newcastle	2847	17.2	2498	15.1	30450	183.9
	Port Stephens	878	12.0	795	10.8	9820	133.6
	Singleton	400	17.1	302	12.9	3674	156.6
	Tamworth Regional	691	11.1	529	8.5	9366	149.8
	Tenterfield	37	5.6	31	4.7	414	62.8
	Upper Hunter Shire	152	10.7	132	9.3	1613	113.8
	Uralla	41	6.8	38	6.3	509	84.7
	Walcha	35	11.2	12	3.8	343	109.4
<i>LHD Total</i> ²	11829	12.4	9921	10.4	131369	137.9	
Illawarra Shoalhaven	Kiama	369	15.8	311	13.3	3695	158.0
	Shellharbour	1248	17.0	872	11.9	11450	156.4
	Shoalhaven	1314	12.4	935	8.9	12992	123.0
	Wollongong	3597	16.5	2315	10.6	29387	134.7
	<i>LHD Total</i> ²	6528	15.6	4433	10.6	57524	137.1
Mid North Coast	Bellingen	147	11.3	113	8.7	1391	107.0
	Coffs Harbour	734	9.5	652	8.4	7729	100.0
	Kempsey	313	10.5	267	9.0	3284	110.4
	Nambucca	167	8.4	155	7.8	1787	90.2
	Port Macquarie-Hastings	1003	11.9	797	9.4	8703	103.0
	<i>LHD Total</i> ²	2364	10.5	1984	8.8	22894	101.5

Local Health District	Local Government Area	Week ending				Total	
		18 July		11 July		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Murrumbidgee	Albury	934	17.2	1069	19.7	5185	95.4
	Berrigan	118	13.5	91	10.4	748	85.5
	Bland	87	14.6	36	6.0	536	89.8
	Carrathool	13	4.6	12	4.3	96	34.3
	Coolamon	47	10.8	37	8.5	434	100.0
	Cootamundra-Gundagai Regional	113	10.1	99	8.8	1089	96.9
	Edward River	108	11.9	134	14.8	1011	111.3
	Federation	130	10.5	150	12.1	936	75.3
	Greater Hume Shire	163	15.1	196	18.2	1059	98.4
	Griffith	320	11.8	297	11.0	2770	102.5
	Hay	20	6.8	21	7.1	196	66.5
	Hilltops	207	11.1	142	7.6	1553	83.0
	Junee	66	9.9	45	6.7	416	62.3
	Lachlan ¹	43	7.1	36	5.9	334	55.0
	Leeton	84	7.3	66	5.8	845	73.8
	Lockhart	31	9.4	30	9.1	313	95.3
	Murray River	54	4.5	39	3.2	177	14.6
	Murrumbidgee	43	11.0	36	9.2	308	78.6
	Narrandera	51	8.7	34	5.8	382	64.8
	Snowy Valleys	199	13.7	130	9.0	1433	99.0
	Temora	67	10.6	46	7.3	543	86.1
Wagga Wagga	981	15.0	803	12.3	8969	137.4	
<i>LHD Total²</i>	<i>3854</i>	<i>12.9</i>	<i>3533</i>	<i>11.9</i>	<i>29143</i>	<i>97.8</i>	
Nepean Blue Mountains	Blue Mountains	1587	20.1	1300	16.4	16161	204.3
	Hawkesbury	1205	17.9	876	13.0	11170	166.0
	Lithgow	256	11.9	188	8.7	2507	116.0
	Penrith	4450	20.9	3066	14.4	41540	195.0
	<i>LHD Total²</i>	<i>7376</i>	<i>18.9</i>	<i>5390</i>	<i>13.8</i>	<i>70904</i>	<i>181.4</i>
Northern NSW	Ballina	525	11.8	503	11.3	5832	130.7
	Byron	580	16.5	442	12.6	4986	142.1
	Clarence Valley	399	7.7	368	7.1	4416	85.5
	Kyogle	65	7.4	48	5.5	572	65.0
	Lismore	576	13.2	473	10.8	5455	124.9
	Richmond Valley	260	11.1	271	11.6	2504	106.7
	Tenterfield	37	5.6	31	4.7	414	62.8
	Tweed	819	8.4	761	7.9	9466	97.6
<i>LHD Total²</i>	<i>3236</i>	<i>10.4</i>	<i>2872</i>	<i>9.3</i>	<i>33334</i>	<i>107.4</i>	

Local Health District	Local Government Area	Week ending				Total	
		18 July		11 July		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Northern Sydney	Hornsby	1586	10.4	1414	9.3	18517	121.8
	Hunters Hill	398	26.6	367	24.5	4863	324.6
	Ku-ring-gai	2172	17.1	1794	14.1	21807	171.5
	Lane Cove	1190	29.6	1100	27.4	13447	334.9
	Mosman	435	14.0	394	12.7	5309	171.4
	North Sydney	957	12.8	752	10.0	10027	133.7
	Northern Beaches	3581	13.1	3212	11.7	42229	154.4
	Parramatta ¹	2929	11.4	2198	8.6	26603	103.4
	Ryde	1697	12.9	1324	10.1	17687	134.7
	Willoughby	839	10.3	718	8.8	9153	112.7
	<i>LHD Total²</i>	13371	14.0	11526	12.1	148223	155.1
South Eastern Sydney	Bayside	2235	12.5	1551	8.7	19924	111.7
	Georges River	2191	13.7	1347	8.5	17641	110.6
	Randwick	2561	16.5	2027	13.0	29030	186.5
	Sutherland Shire	4789	20.8	3309	14.4	41008	177.8
	Sydney ¹	4155	16.9	3343	13.6	39268	159.4
	Waverley	1365	18.4	1092	14.7	18201	245.0
	Woollahra	1122	18.9	933	15.7	13979	235.4
	<i>LHD Total²</i>	15538	16.2	11225	11.7	151562	158.0
South Western Sydney	Camden	5506	54.3	1574	15.5	22503	221.8
	Campbelltown	8949	52.4	2191	12.8	30942	181.0
	Canterbury-Bankstown ¹	7338	19.4	3351	8.9	45816	121.2
	Fairfield	4863	23.0	1379	6.5	19123	90.3
	Liverpool	11313	49.7	2967	13.0	35885	157.7
	Wingecarribee	2420	47.3	689	13.5	10104	197.6
	Wollondilly	2755	51.8	420	7.9	7559	142.2
	<i>LHD Total²</i>	39804	38.3	10912	10.5	148981	143.5
Southern NSW	Bega Valley	887	25.7	571	16.6	3792	110.0
	Eurobodalla	663	17.2	392	10.2	4440	115.4
	Goulburn Mulwaree	398	12.8	301	9.7	3884	124.8
	Queanbeyan-Palerang Regional	484	7.9	441	7.2	5490	89.9
	Snowy Monaro Regional	311	15.0	213	10.2	2119	101.9
	Upper Lachlan Shire	83	10.3	64	7.9	796	98.8
	Yass Valley	113	6.6	107	6.3	1333	78.0
	<i>LHD Total²</i>	2940	13.5	2090	9.6	21858	100.7

Local Health District	Local Government Area	Week ending				Total	
		18 July		11 July		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Sydney	Burwood	390	9.6	302	7.4	3657	90.1
	Canada Bay	1633	17.0	1221	12.7	16474	171.5
	Canterbury-Bankstown ¹	7338	19.4	3351	8.9	45816	121.2
	Inner West	3719	18.5	3632	18.1	40277	200.6
	Strathfield	786	16.8	550	11.7	6430	137.0
	Sydney ¹	4155	16.9	3343	13.6	39268	159.4
	<i>LHD Total²</i>	12735	18.3	9720	14.0	116847	167.7
Western NSW	Bathurst Regional	599	13.7	459	10.5	5617	128.8
	Blayney	89	12.1	58	7.9	982	133.1
	Bogan	25	9.7	12	4.7	220	85.3
	Bourke	12	4.6	10	3.9	169	65.3
	Brewarrina	14	8.7	25	15.5	149	92.5
	Cabonne	92	6.8	105	7.7	952	69.8
	Cobar	51	11.0	34	7.3	275	59.0
	Coonamble	30	7.6	14	3.5	340	85.9
	Cowra	135	10.6	107	8.4	1120	87.9
	Dubbo Regional	646	12.0	474	8.8	5401	100.5
	Forbes	74	7.5	49	5.0	528	53.3
	Gilgandra	26	6.1	26	6.1	246	58.0
	Lachlan ¹	43	7.1	36	5.9	334	55.0
	Mid-Western Regional	297	11.8	272	10.8	2779	110.1
	Narromine	51	7.8	46	7.1	482	74.0
	Oberon	43	8.0	32	5.9	533	98.5
	Orange	569	13.4	451	10.6	5999	141.3
	Parkes	112	7.6	83	5.6	1046	70.5
	Walgett	138	23.2	54	9.1	639	107.3
	Warren	57	21.1	31	11.5	410	152.0
	Warrumbungle Shire	202	21.8	70	7.5	996	107.4
Weddin	28	7.8	32	8.9	255	70.6	
<i>LHD Total²</i>	3322	11.7	2461	8.6	29352	103.0	
Western Sydney	Blacktown	5833	15.6	4218	11.3	54353	145.2
	Cumberland	3620	15.0	2108	8.7	27028	111.9
	Parramatta ¹	2929	11.4	2198	8.6	26603	103.4
	The Hills Shire	3069	17.2	2348	13.2	29748	167.2
	<i>LHD Total²</i>	15070	14.3	10483	10.0	133462	126.7
NSW Total³		153,195	18.9	99,875	12.4	1,214,422	150.1

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

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

³NSW Total counts and rates 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, 1 JANUARY TO 12 JULY 2020

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.

Specimen collection date	Total PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhinovirus	HMPV**	Enterovirus
		No.	%Pos.	No.	%Pos.						
1 Jan–12 July 2020											
Total	493,625	6,589	1.3%	946	0.2%	4,010	8,912	4,640	82,206	1,942	3,570
Month ending											
3 February*	34,953	2,508	7.18%	401	1.15%	846	1,900	752	5,036	599	335
1 March	40,575	2,363	5.82%	315	0.78%	798	2,435	1,118	8,245	437	1,007
29 March	85,238	1,549	1.82%	200	0.23%	898	4,117	1,977	18,088	664	1,502
3 May *	54,128	70	0.13%	13	0.02%	175	273	410	2,250	48	210
31 May	71,525	35	0.05%	6	0.01%	237	62	115	3,511	27	112
28 June	126,768	48	0.04%	10	0.01%	628	81	178	28,191	112	241
Week ending											
5 July	37,394	12	0.03%	1	<0.01%	199	24	42	9,574	46	89
12 July	43,044	4	0.01%	0	0.00%	229	20	48	7,311	9	74

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

GLOSSARY

Term	Description
Case	<p>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).</p> <p>Case counts include:</p> <ul style="list-style-type: none"> - NSW residents diagnosed in NSW who were infected overseas or in Australia (in NSW or interstate), and - interstate or international visitors diagnosed in NSW who were under the care of NSW Health at the time of diagnosis.
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 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	<p>This date is provided to NSW Health by the laboratory. Laboratories prioritise notification of positive results to allow prompt public health action.</p> <p>Positive cases: The date of notification is collected by NSW Health on the day of notification. Cases are informed of their diagnosis by their doctor or public health staff as soon as the result is available. The date of notification to NSW Health is usually the same day as the date the case finds out about the result.</p> <p>Negative cases: Some laboratories notify NSW Health of negative results in batches at regular intervals. For these laboratories the date of notification to NSW Health does not reflect the date the negative result was available at the laboratory. NSW Health does not collect information on the date the person was informed of the result.</p>