

# COVID-19 WEEKLY SURVEILLANCE IN NSW

## EPIDEMIOLOGICAL WEEK 22, ENDING 30 MAY 2020

Published 3 June 2020

### SUMMARY FOR THE WEEK ENDING 30 MAY

- The number of new COVID-19 cases remain low in NSW and mainly in overseas travellers.
- Testing rates were higher this week across most local health districts and increased significantly this week in school aged children.
- The small proportion of COVID-19 tests in the week that were positive indicates that the spread of infection within the community continues to be limited.
- Two of the newly notified cases were students who attended school during their infectious period. The cases were promptly isolated and all close contacts at the two schools have been quarantined. All close contacts of the students are being monitored in quarantine.
- Community restrictions and physical distancing measures in place to control the spread of COVID-19 have had a positive impact on the transmission of other respiratory illnesses:
  - The number of people diagnosed with influenza has been declining since early February.
  - Presentations for pneumonia to NSW emergency departments have decreased below the usual range for this time of year.
  - There is a decrease in reported typical flu-like symptoms for this time of year.
- Continued high rates of testing are necessary to detect and reduce the spread of COVID-19 in the community.
- NSW Health urges people of all ages, including children, to undergo COVID-19 testing and isolate themselves as soon as mild symptoms of respiratory infection or fever appear.

### In Focus - COVID-19 in Aboriginal people: 1 January to 30 May 2020

A review of COVID-19 cases in Aboriginal people up to 30 May found:

- Thirty-one Aboriginal people have been diagnosed with COVID-19. This represents a small proportion of all COVID-19 cases (1%).
- The population rate of COVID-19 is lower for Aboriginal people (11 confirmed cases for every 100,000) in NSW than the rest of the NSW population (39 confirmed cases for every 100,000 population).
- Of the 31 cases, half most likely acquired their infection overseas and the remaining acquired their infection locally in NSW. Around 75% of all cases who acquired their infection locally are linked to another confirmed case.
- Most symptoms reported were mild, and at least 93% of cases have already recovered.
- Testing rates have generally been increasing for Aboriginal people. Up to 23 May, there were 13,976 COVID-19 tests conducted for Aboriginal people in NSW. Most tests were done by public laboratories.
- Testing rates were similar for Aboriginal and non-Aboriginal people under 60 years old. In older individuals, testing rates were higher in Aboriginal people than in non-Aboriginal people.
- Aboriginal people living in metropolitan local health districts tend to have higher testing rates than Aboriginal people in regional areas.

## SECTION 1: HOW IS THE OUTBREAK TRACKING IN NSW?

Confirmed COVID-19 cases (people infected with the SARS-CoV-2 virus) includes NSW residents diagnosed in NSW who were infected overseas and in Australia (in NSW and interstate) and interstate or international visitors diagnosed in NSW who are under the care of NSW Health.

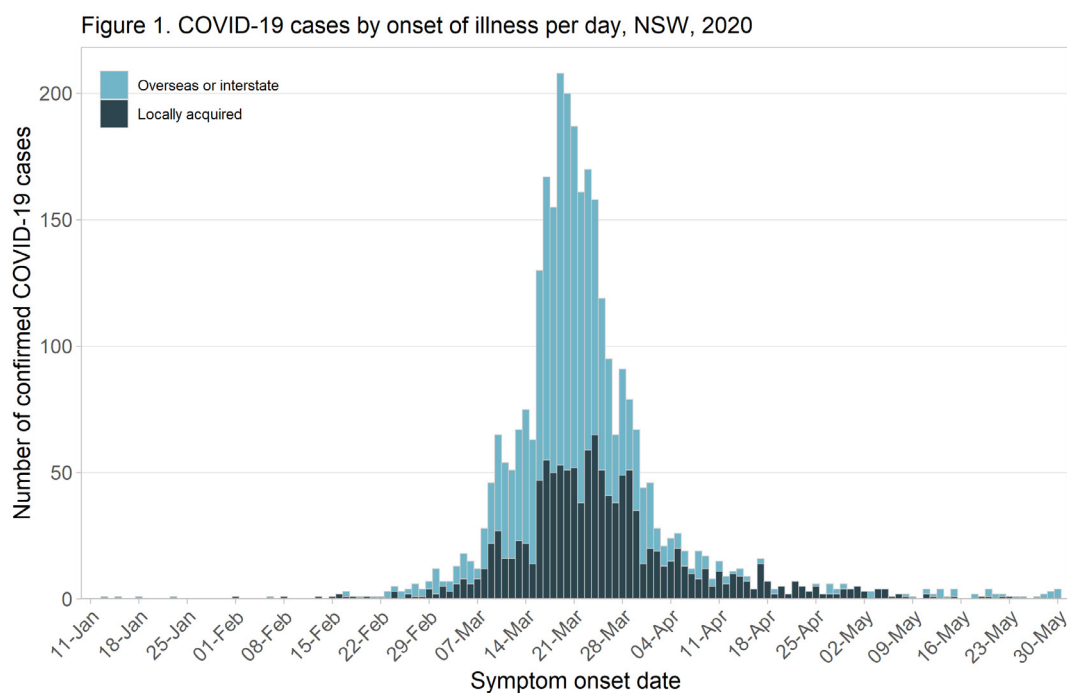
Table 1. COVID-19 cases and tests reported in NSW, up to 30 May 2020

	Week ending 30 May	Week ending 23 May	% change	Total to 30 May
Number of cases	13	12	+8%	3,095
<i>Overseas acquired</i>	9	11	-18%	1,790
<i>Interstate acquired</i>	0	0	-	72
<i>Locally acquired</i>	4	1	+300%	1,233
Number of deaths	0	3	-100%	50
Number of tests	57,221	54,758	+5%	512,189

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

The number of cases with an overseas source in the past week is in part due to a program of screening all overseas travellers 10 days after arrival in NSW. Of the nine cases reported with an overseas source in the past week, five were identified through this program.

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 the case started to feel unwell (known as the date of symptom onset). This information is collected by public health staff on interview with the case at the time of diagnosis.



Note: For asymptomatic cases or where symptom onset date is not available, the onset date is calculated from the earliest specimen collection date.

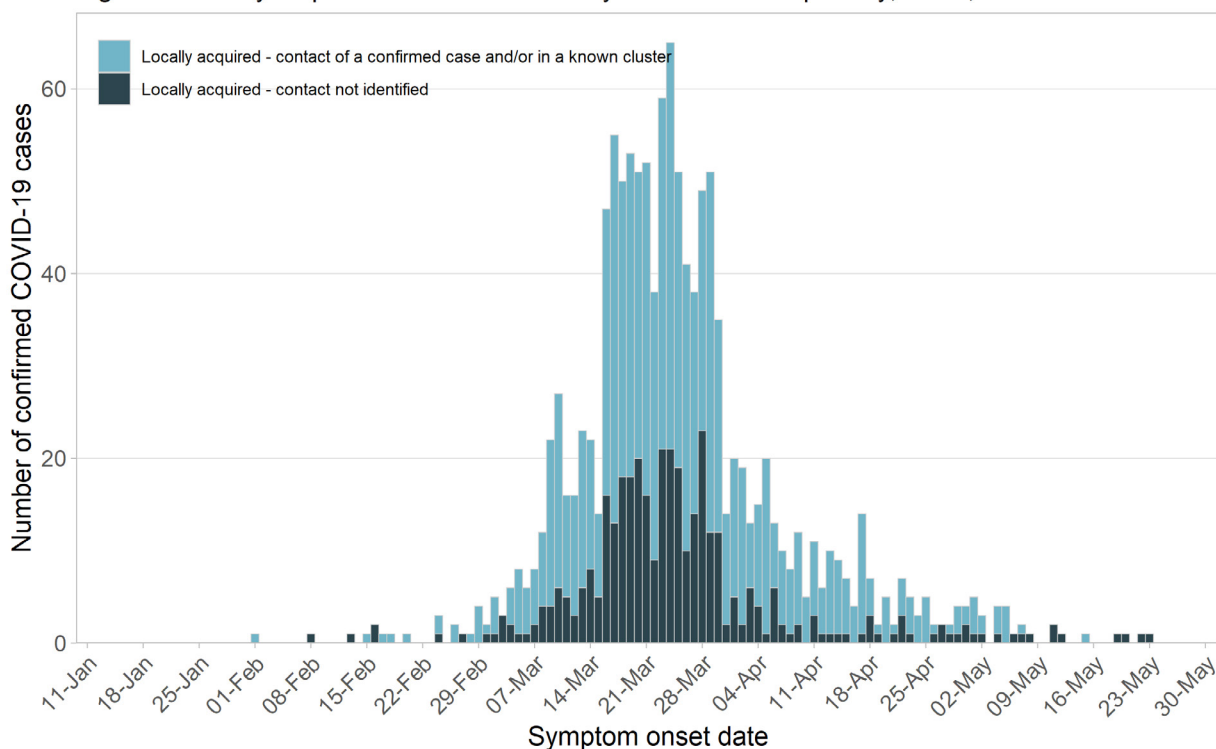
**Interpretation:** Approximately 60% of COVID-19 infections diagnosed in NSW to 30 May were acquired outside of NSW (almost all overseas) and the remaining 40% have been acquired locally (in NSW). The number of new cases reported in NSW has decreased significantly since the peak in mid-March.

## 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 (group of cases sharing a common source or links). To understand the extent of community transmission, locally acquired cases who have had contact with a confirmed 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.

In March, when the number of new cases diagnosed each day was high, public health efforts were focussed on contact tracing to limit further spread in the community. With a decline in cases, increased 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. Careful attention is given to understanding where transmission is occurring as social distancing measures are relaxed.

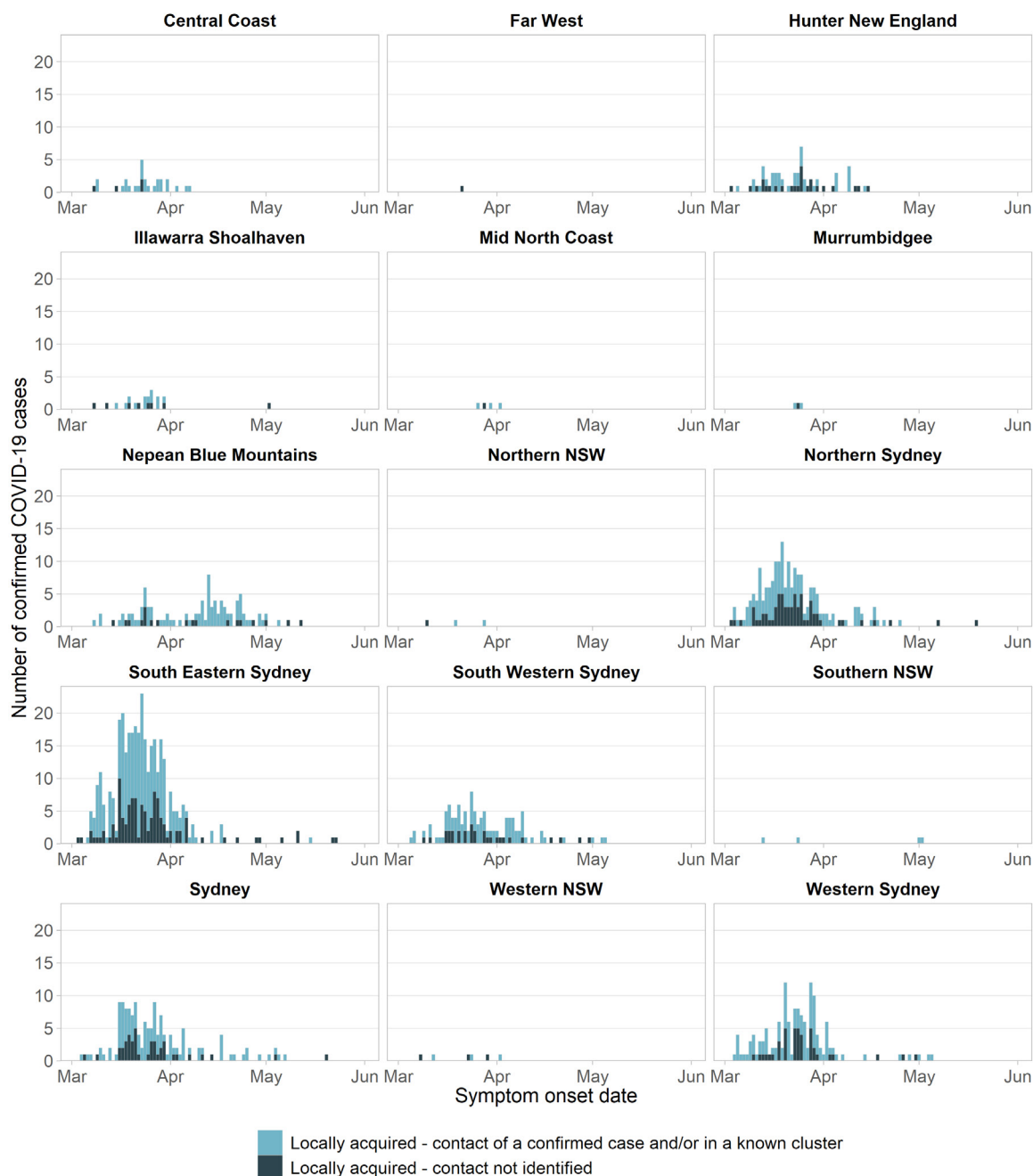
Figure 2. Locally acquired COVID-19 cases by onset of illness per day, NSW, 2020



Note: For asymptomatic cases or where symptom onset date is not available, the onset date is calculated from the earliest specimen collection date.

**Interpretation:** Larger clusters occurred in NSW before many of the strict social distancing rules were introduced. Since this time, there has been a decline in both the COVID-19 cases known to have had contact with a confirmed case or who are part of a cluster and those with an unknown source. The number and size of clusters will be closely monitored as changes to social distancing rules are implemented.

Figure 3. Locally acquired COVID-19 cases by onset of illness per day, NSW, 2020

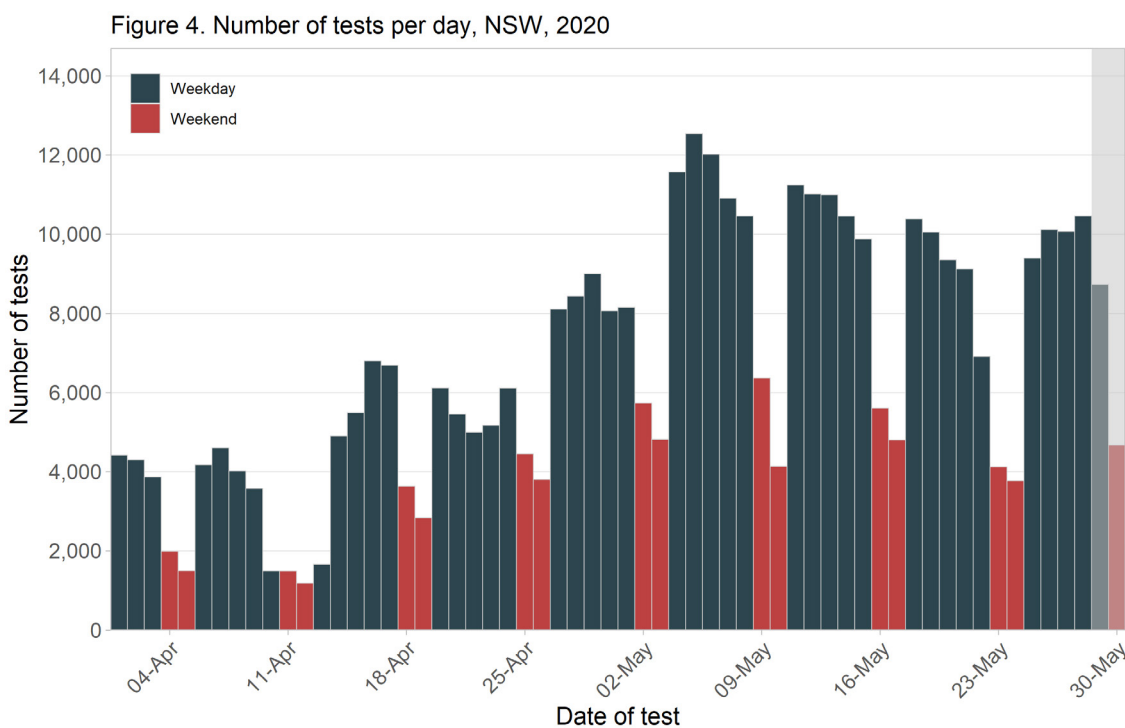


Note: For asymptomatic cases or where symptom onset date is not available, the onset date is calculated from the earliest specimen collection date.

**Interpretation:** Early in the outbreak cases more commonly occurred in people living in metropolitan Sydney (particularly in South Eastern Sydney and Northern Sydney LHDs) and this likely reflected the residence of travellers who returned from high-risk countries. During March there was an increase in cases in Nepean Blue Mountains LHD, largely due to an outbreak in the Anglicare Newmarch House aged care facility. The last case associated with this outbreak had an onset on 4 May. There has been very limited transmission detected in regional and rural areas and limited transmission identified throughout all of NSW in recent weeks.

### 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. In previous reports, the number of people tested was used to understand the impact of testing in NSW. As it is expected that people will be tested more than once throughout the pandemic, we now report the number of diagnostic tests in NSW. This means that people who get tested multiple times are counted as separate tests. This number is different to the number of tests reported to NSW Health each day as the laboratory needs time to conduct the test. To enable prompt public health action, laboratories prioritise notification of all positive results to Public Health over negative test results. The shaded area in the graph below indicates dates where counts may be incomplete due to a delay in the reporting of negative tests. 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.

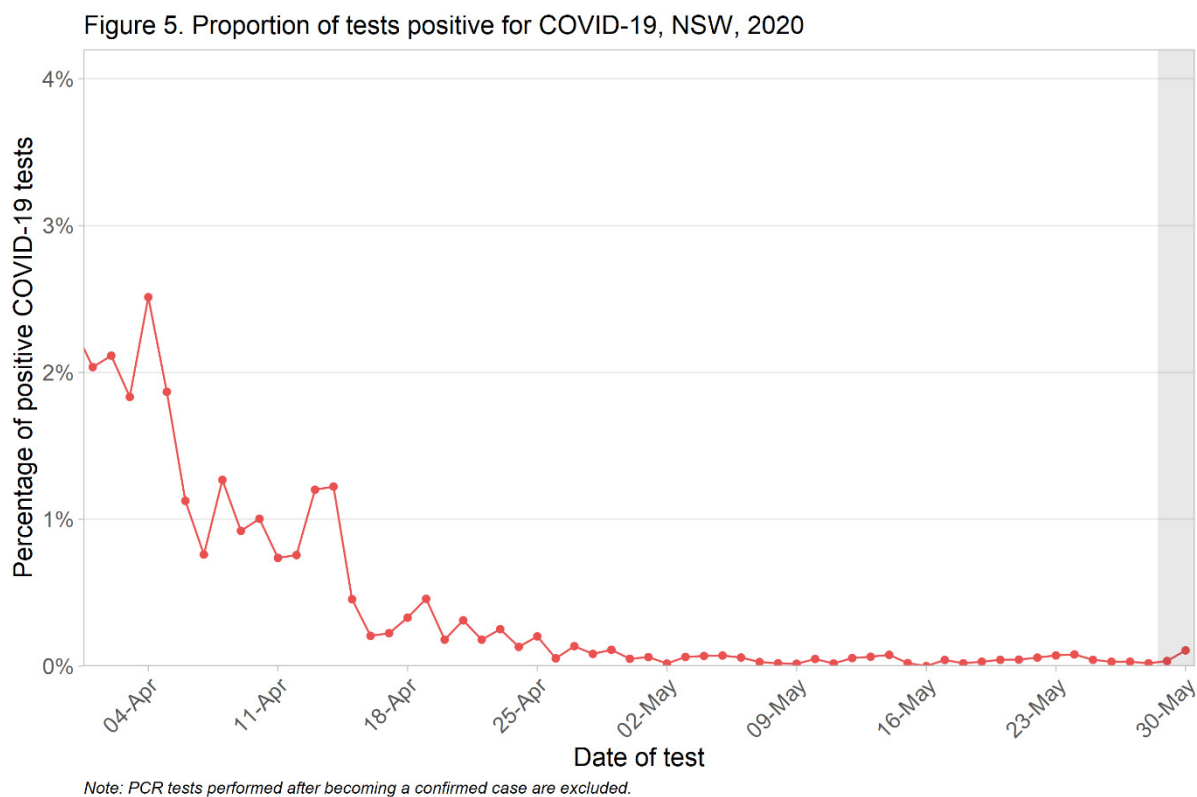


*Note: PCR tests performed after becoming a confirmed case are excluded.*

**Interpretation:** COVID-19 testing increased significantly in April and early May in line with the changes in the criteria for testing and increased availability of testing. Early in the outbreak the focus was on returning travellers whereas now testing is now recommended for anyone with even mild respiratory symptoms or unexplained fever.

The cumulative testing rate in NSW continues to remain high at 63 tests per 1,000 population (NSW cases = 3,095). While there is variation with countries reporting significantly more cases over longer periods of time, the rates of testing in NSW are similar to rates reported in New Zealand (56 per 1,000; 1,154 cases), the United Kingdom (63 per 1,000; 277,766 cases) and Singapore (57 per 1,000; 34,884 cases).

Some of the highest testing rates in the world are currently being reported in countries such as the United Arab Emirates (213 per 1,000; 34,557 cases), Iceland (179 per 1,000; 1,806 cases), Lithuania (111 per 1,000; 1,675 cases), and Denmark (108 per 1,000; 11,669 cases). There is continued investment both at the state and federal level to ensure all symptomatic people in NSW have access to timely testing.

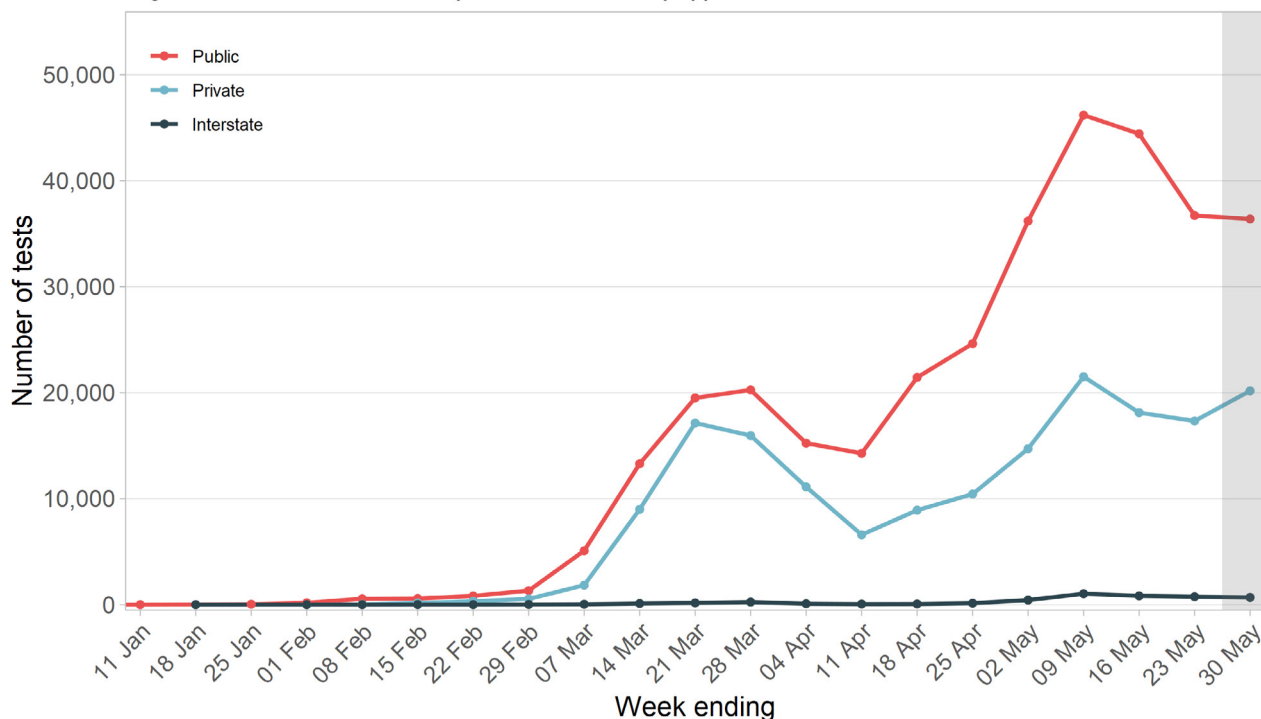


**Interpretation:** The number of people diagnosed and proportion of tests positive for COVID-19 in NSW declined since mid-March to early May, and has stabilised at very low levels since, despite the high rates of testing. This suggests there is currently limited transmission in the community.

High rates of testing are critically important to identify and isolate people who are infectious and to allow contact tracing (quarantining of all people potentially infected by a case) to limit the spread of infection. Testing is not recommended for those without symptoms except in special settings when cases have been identified such as aged care, health care, disability homes and schools.

**Which laboratories are doing the testing?**

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



*Note: This includes retests and is not person unique.  
 Once confirmed as a case, a person's further tests are not counted  
 Shading indicates current week, which underestimates testing due to a delay in importation or receipt of negative results  
 Weeks with less than three cases by facility type have been excluded*

**Interpretation:** About twice as many tests are done in public laboratories compared with private laboratories. Recent declines in test numbers have been reported across both public and private laboratories. The number of tests performed in private laboratories increased this week and tests performed in public laboratories stayed stable.



## SECTION 2: 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 analysis of locally acquired cases is for people with symptoms by the date of their onset of illness. Note: This analysis is different from Table 1 which is presented by date of report.

COVID-19 has an incubation period of up to 14 days which means that cases were exposed to COVID-19 in the 14 days prior to the day their symptoms started. Information from cases who became unwell in the last month is used to understand where COVID-19 is spreading in the community. This takes into account the time it takes for people to be tested and the laboratory to perform the test. Some people who have tested 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. Symptomatic locally acquired COVID-19 cases in NSW, by week of onset and source of infection, 3 May to 30 May 2020**

Locally acquired cases*	Week of onset			
	30 May	23 May	16 May	9 May
Contact of a confirmed case and/or part of a known cluster	0	0	1	5
Source not identified	0	4	2	2
<b>Total</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>7</b>

\*Excludes six asymptomatic cases reported in the period 3 May to 30 May.

**Interpretation:** The number of locally acquired cases remain low. There were no symptomatic cases with onset in the week ending 30 May. No known outbreaks were reported in the week ending 30 May. Three cases reported in recent weeks were students who attended school during their infectious period. The cases were promptly isolated and all close contacts at the three schools were quarantined.

While it is encouraging that the number of people without a known source of infection remain low, high rates of testing are required to rapidly identify cases to prevent the spread of infection. This is especially important as social distancing rules relax. Maintaining 1.5 m distance between others limits the opportunity for transmission between people.

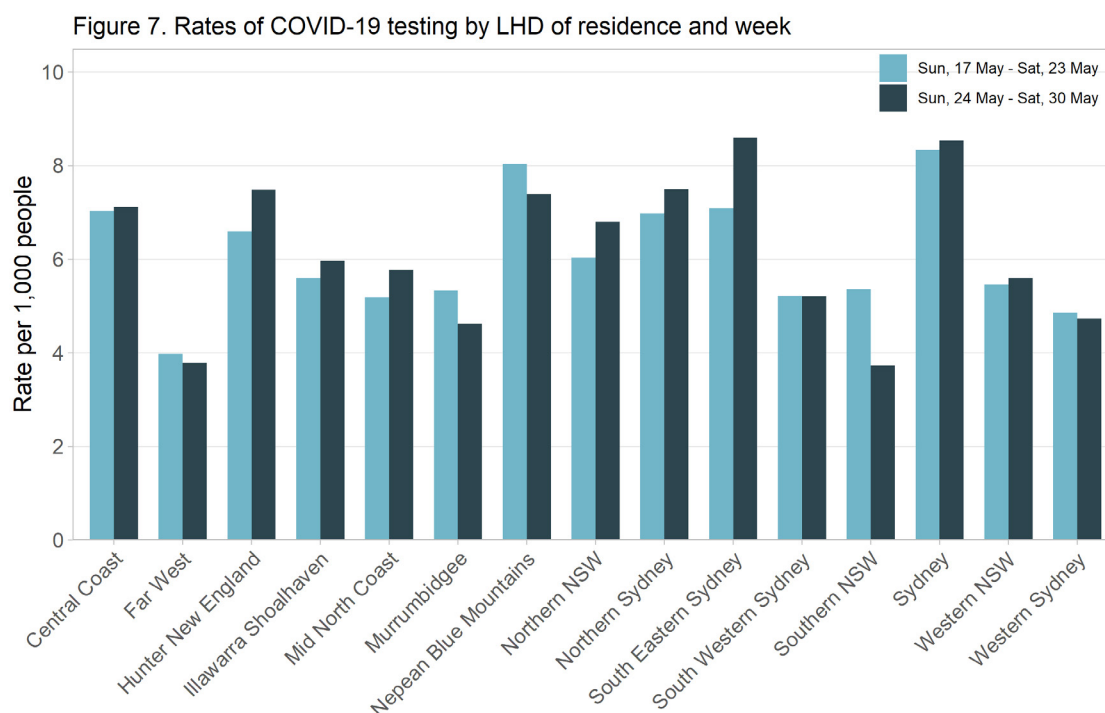


## Cases and testing by Local Health District of residence

Table 3. Symptomatic locally acquired COVID-19 cases by Local Health District of residence and week of onset, 3 May to 30 May 2020

Local Health District	Week of onset			
	30 May	23 May	16 May	9 May
Central Coast	0	0	0	0
Far West	0	0	0	0
Hunter New England	0	0	0	0
Illawarra Shoalhaven	0	0	0	0
Mid North Coast	0	0	0	0
Murrumbidgee	0	0	0	0
Nepean Blue Mountains	0	0	0	2
Northern NSW	0	0	0	0
Northern Sydney	0	1	0	0
South Eastern Sydney	0	2	3	1
South Western Sydney	0	0	0	1
Southern NSW	0	0	0	0
Sydney	0	1	0	3
Western NSW	0	0	0	0
Western Sydney	0	0	0	0
<b>Grand Total</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>7</b>

**Interpretation:** There were no cases with symptom onset in the week ending 30 May. Most locally acquired cases with onset in recent weeks have been reported from metropolitan Sydney. This does not mean that the infection was acquired in that area, as many people travel outside their place of residence for work or other reasons. Of the cases with an onset of illness in the last four weeks, eight locally acquired cases were from an unknown source and six were a contact of a known case. No links were identified between the cases with an unknown source notified in the four-week period.



**Interpretation:** South Eastern Sydney and Sydney LHDs reported the highest rates of testing in the week ending 30 May. Testing rates were higher or similar this week in most LHDs when compared with the previous week.

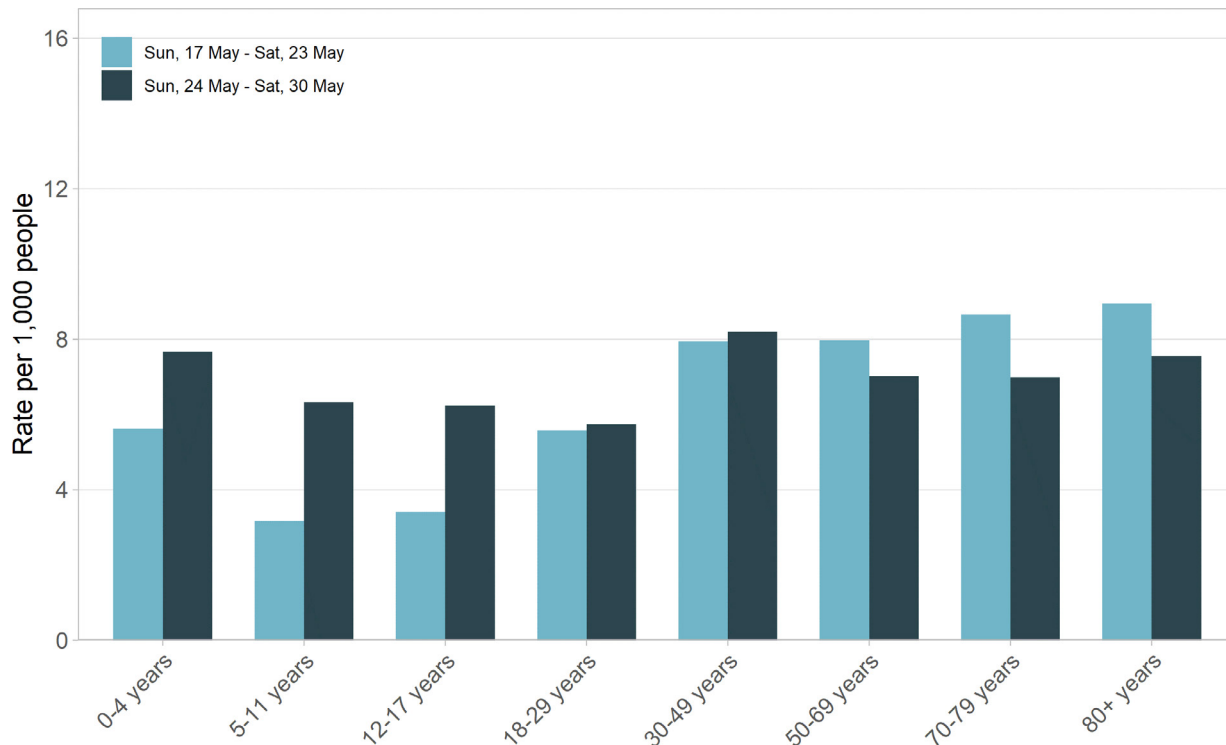
### Cases and testing by age group

Table 4. Symptomatic locally acquired COVID-19 cases by age group and week of onset, 3 May to 30 May 2020

Age group	Week ending			
	30 May	23 May	16 May	9 May
0-4 years	0	0	0	0
5-11 years	0	1	0	1
12-17 years	0	2	0	0
18-29 years	0	0	0	0
30-49 years	0	0	3	5
50-69 years	0	0	0	0
70-79 years	0	0	0	0
80+ years	0	1	0	1
<b>All ages</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>7</b>

**Interpretation:** There were no symptomatic cases with onset in the week ending 30 May. The most common age group for cases with symptom onset in the last month was 30-49 years.

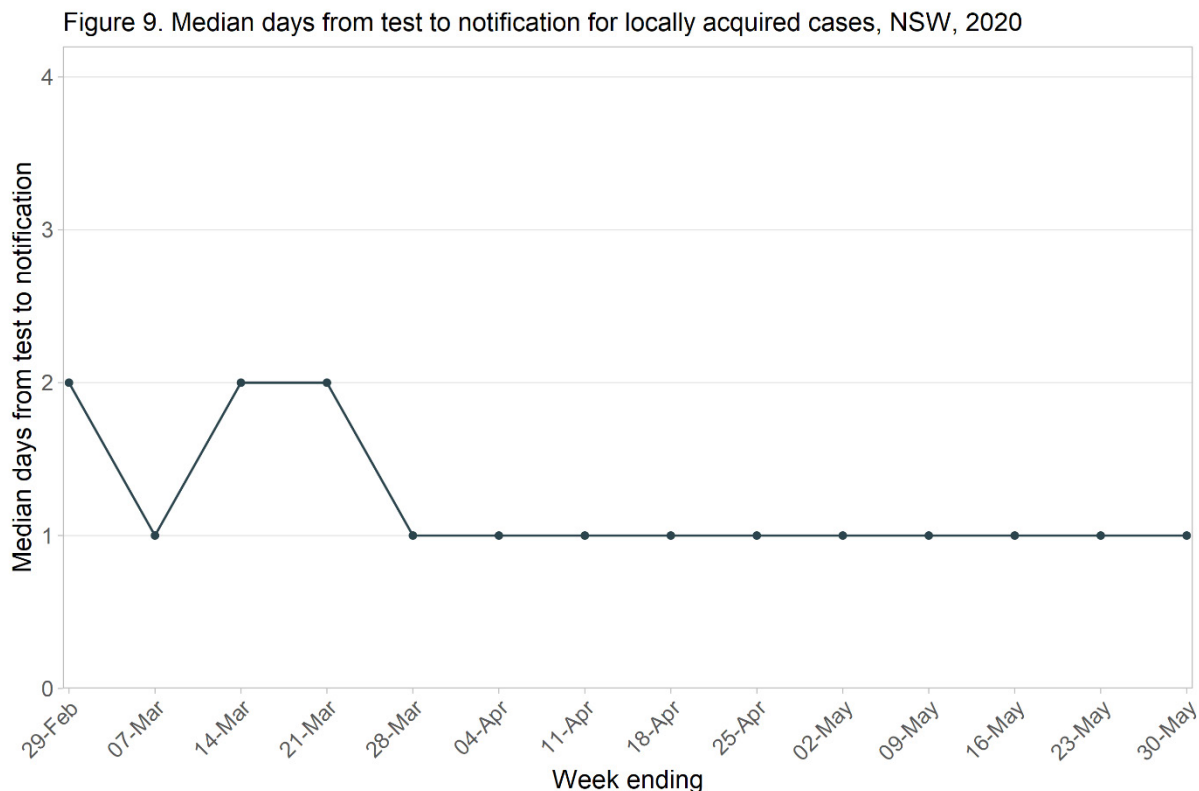
Figure 8. Rates of COVID-19 testing by age group and week



**Interpretation:** Testing rates increased significantly in the week ending 30 May in school aged children compared to the previous week. Rates of testing in older age groups decreased this week. Overall, testing rates were slightly higher in NSW in the week ending 30 May when compared to the previous week.

### How long does it take to get a positive COVID-19 test result?

To enable prompt public health action, laboratories prioritise the notification of positive COVID-19 test results to NSW Health. This graph shows median time (measured in whole days) from test date to COVID-19 diagnosis (test result) by week. The time taken to receive a negative result is typically longer.



**Interpretation:** Despite marked increases in testing overall, the median time to notification has remained at one day since the end of March.

### Areas with COVID-19 cases (by report date) where no source was identified

Cases with no source identified suggest that there may be people infected with COVID-19 in the community who have not been diagnosed. Where clusters are identified, public health staff actively look for cases for two incubation periods (four weeks for COVID-19) before the outbreak is considered closed. The following analysis is based on the date that the case was reported to NSW Health.

Having high rates of testing helps ensure that ongoing transmission within the community is promptly detected, allowing public health intervention to prevent further spread. In the week ending 30 May, the rate of tests in NSW was 7.1 per 1,000, similar to the rate of 6.8 per 1,000 tests in the previous week.

Table 5. Testing in areas for locally acquired cases where no source was identified, reported from 3 May to 30 May 2020

LGA	Cases				Tests				Tests per 1,000 population			
	30 May	23 May	9 May	2 May	30 May	23 May	9 May	2 May	30 May	23 May	9 May	2 May
Waverley	2	0	2	0	1115	756	819	890	15.0	10.2	11.0	12.0
Woollahra	1	0	0	0	775	661	687	766	13.1	11.1	11.6	12.9
Inner West	1	0	0	1	2155	1882	2159	2710	10.7	9.4	10.8	13.5

**Interpretation:** The rates of testing in these areas for the week ending 30 May was higher than the statewide rate for the week, and the rate for the previous week. The case reported from Woollahra this week had an onset of illness in late March. However, it is encouraging that only a small proportion of those tested were positive which indicates low rates of illness in the community.

### Cases in pregnant women

There have been no new cases in pregnant women in week ending 30 May.

### Cases and testing in Aboriginal people

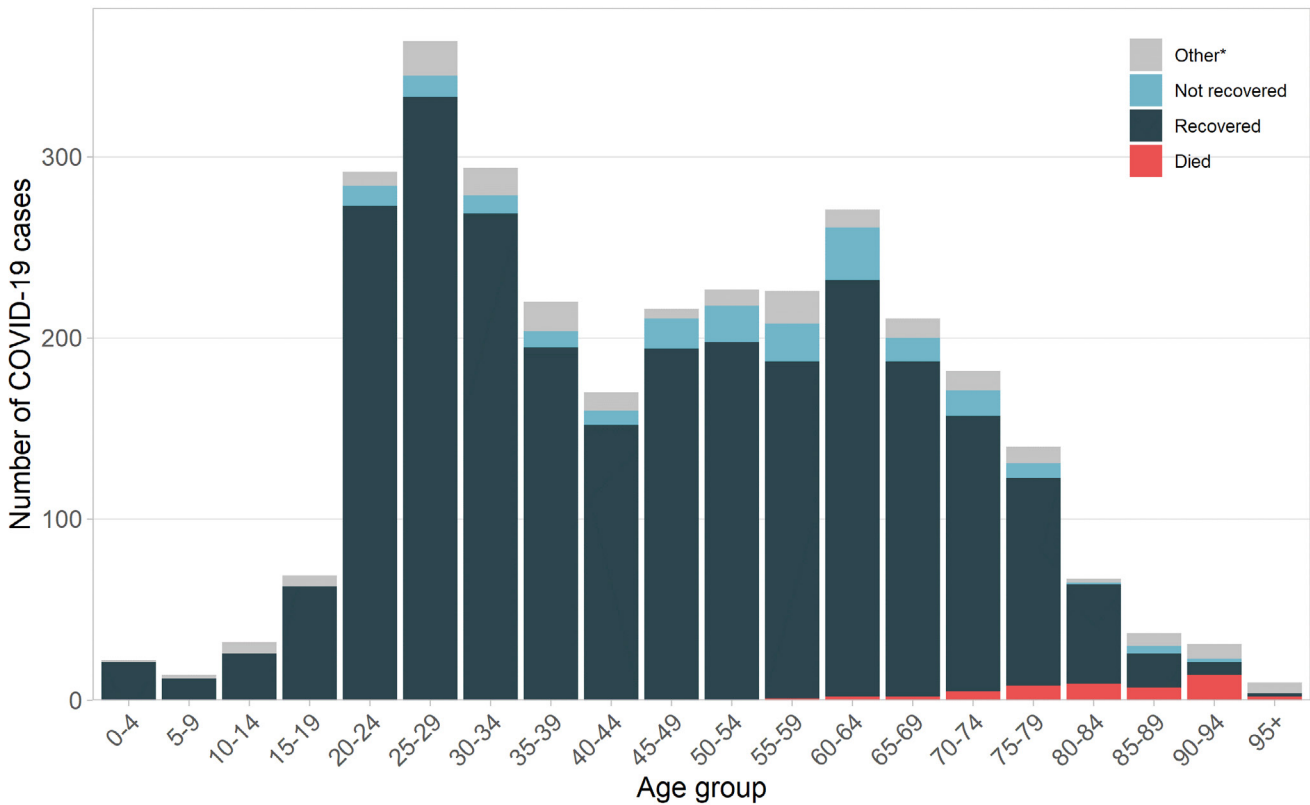
There was one new case in an Aboriginal person in the week ending 30 May who acquired their infection overseas. See this week’s In Focus report for an in-depth review of COVID-19 in Aboriginal people.

## SECTION 3: RECOVERY AND DEATHS

### How many cases have recovered?

In NSW, recovery status for COVID-19 is assessed three weeks after the onset of illness by interviewing the case. Cases reporting resolution of all COVID-19 symptoms are considered to have recovered. Cases who have not recovered at three weeks are called in the following weeks until recovery. At the time of interview, the date of recovery is collected to understand the duration of symptoms. The bars on the figure below show the total number of cases acquired by age group and health status up to 30 May. This includes all cases reported in NSW (acquired locally and overseas).

Figure 10. Total number of COVID-19 cases by age group and health status, NSW, 2020



\*Less than 3 weeks from symptom onset and/or recovery data not available

**Interpretation:** Overall, more than 85% of cases have recovered.

### How long does it take to recover from COVID-19?

An analysis of information collected from over 2,800 case interviews shows that 50% of cases recover after 16 days, 75% recover after 24 days and 95% recover after nine weeks. Time to recovery by age group is shown in the table below.

Table 6. Time to recovery by age group

Age group	Time taken for 50% of cases to recover	Time taken for 75% of cases to recover
	Days	Days
≤ 39 years	14	20
40–69 years	17	26
70+ years	19	32
<b>Total</b>	<b>16</b>	<b>24</b>

**Interpretation:** Older people take longer to recover than younger people.

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

In total, 1.6% of cases (50 people) have died as a result of COVID-19 infection, most of whom were 70 years of age or older. Of these 50, 27 were residents of aged care facilities with known COVID-19 outbreaks. Approximately one-quarter of the deaths were in people who acquired COVID-19 overseas.

Internationally it is estimated that 6.1% of COVID-19 cases are reported to have died as a result of their infection.<sup>1</sup> Countries such as Italy, the United Kingdom and Spain have reported higher mortality rates (14.3%, 14.0% and 12.1%), while NSW reports similar rates to South Korea (2.4%) and New Zealand (1.9%).

<sup>1</sup> WHO Coronavirus disease (COVID-19) Situation Report – 126

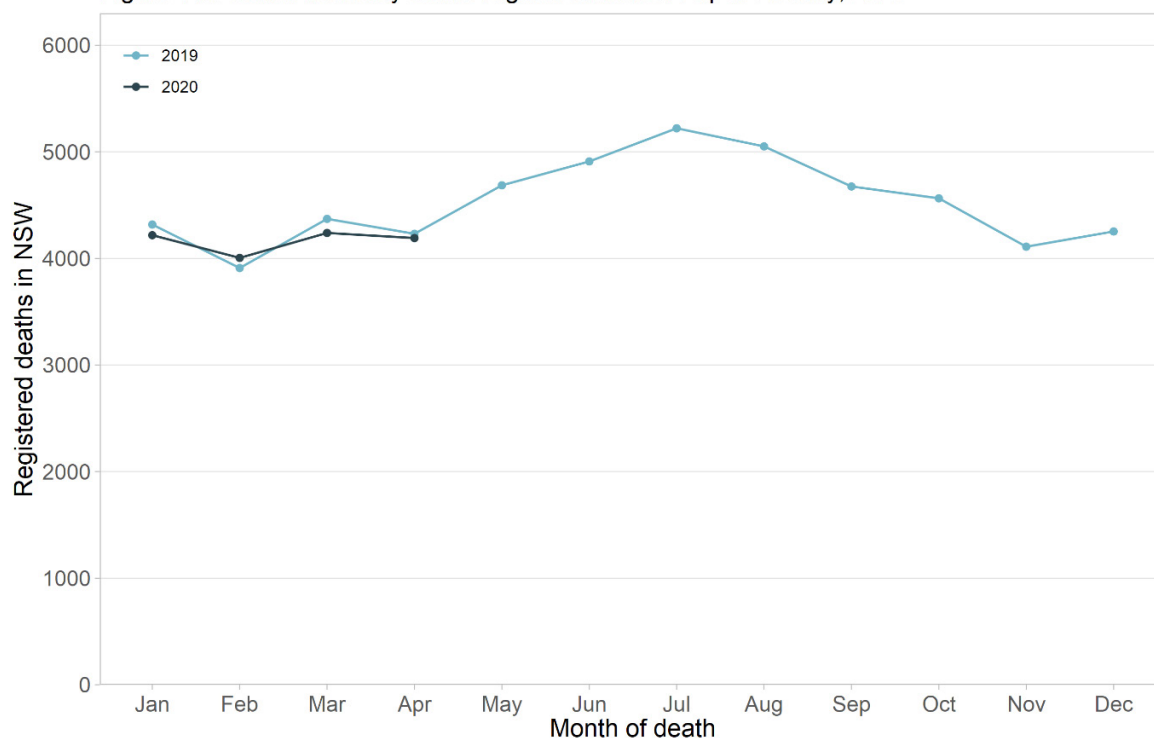
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### How many people have died in NSW from any cause of death?

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 11. Deaths from any cause registered in NSW up to 28 May, 2020

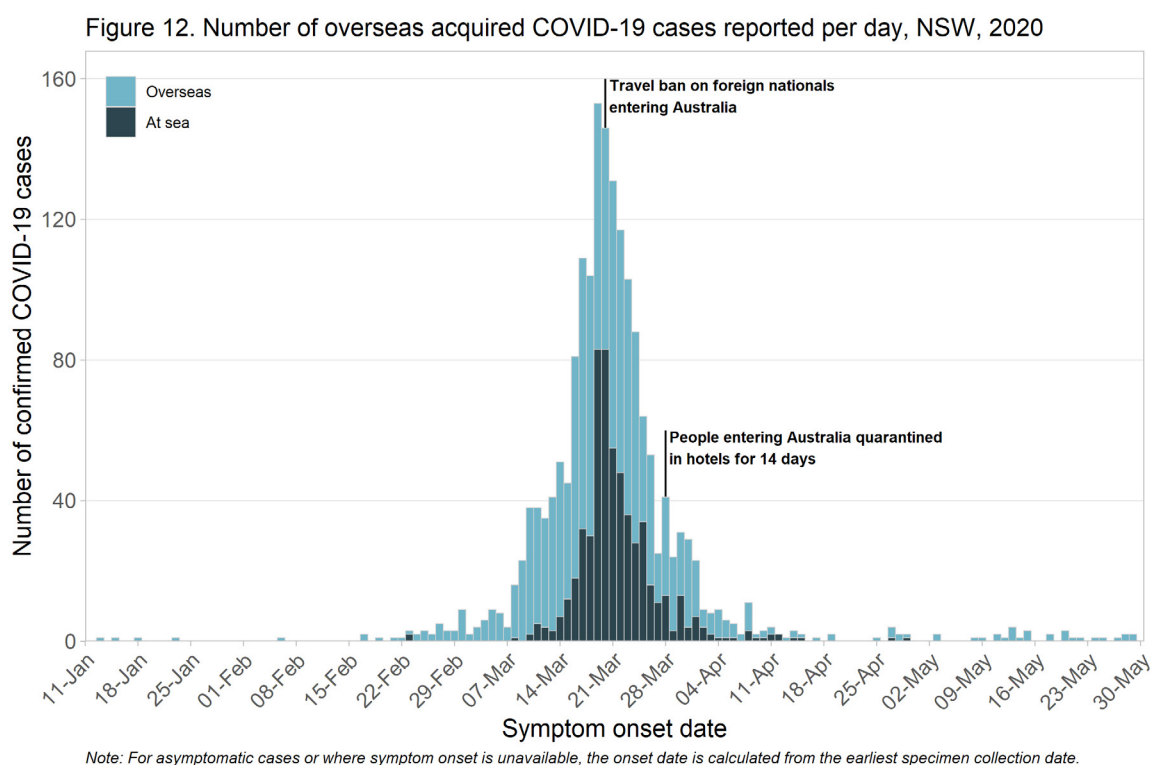


**Interpretation:** In March 2020, the numbers of deaths registered to date are lower compared to the same period in 2019, while it is almost the same for April. Similar to 2019, most deaths this year (83% in April 2020) are in people aged 65 years and over. While there is a lag in notification of deaths, there is no indication to date that the COVID-19 pandemic in NSW is causing an overall increase in mortality.

## SECTION 4: 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 on board prior to disembarking in NSW.



**Interpretation:** The number of new cases in returned travellers has decreased markedly in line with travel restrictions. Among cases notified since 1 April, returned travellers account for 40% (n=378) of cases reported in NSW. Cruise ship passengers (including cruises which disembarked outside Australia) accounted for the largest number of overseas acquired infections (96 cases) in this period. Following this, cases were most commonly returning from the United States (49 cases), United Kingdom (46 cases), and Chile (27 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.

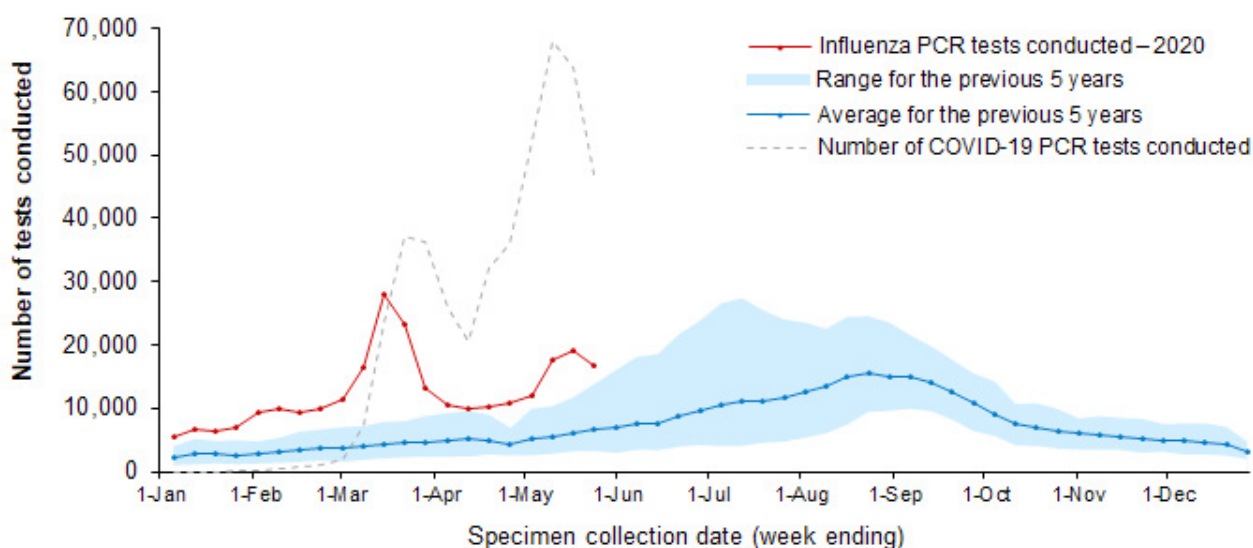
During the week of Sunday 24 May to Saturday 30 May, 3,278 people were screened at Sydney International Airport and 72 were referred for testing. Since screening began on 2 February, a total of 71,775 people have been screened and 819 were referred for onsite health assessment and testing.

## SECTION 5: OTHER RESPIRATORY INFECTIONS IN NSW

### Influenza cases and tests reported in NSW, up to 24 May 2020

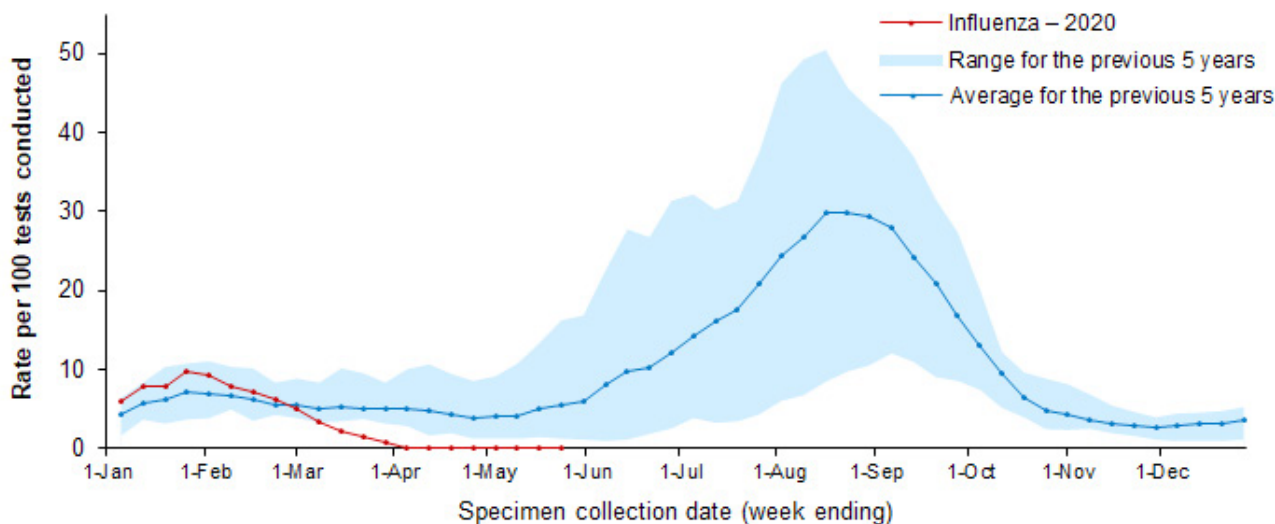
In NSW, sentinel laboratory surveillance for influenza and other respiratory viruses is conducted throughout the year. The number of PCR tests conducted and the results are provided by participating sentinel laboratories on a weekly basis. Information on influenza testing is available up to 24 May 2020. A total of 16,649 tests for influenza have been performed at sentinel NSW laboratories in 2020.

Figure 13. Number of influenza tests conducted at sentinel NSW laboratories per week, 1 January to 24 May 2020 compared to the range and mean from the previous 5 years



**Interpretation:** There is an increase in influenza testing activity overall for this time of year. The peak in influenza testing during March corresponds to testing for COVID-19 virus. The subsequent decline of influenza testing, and sharp increase in COVID-19 testing from early 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. Influenza testing has substantially increased since then, and testing rates remain above previous years.

Figure 14. Weekly rate of influenza detected by PCR per 100 tests conducted at sentinel NSW laboratories, 1 January to 24 May 2020, compared to the range and mean from the previous 5 years



**Interpretation:** This graph shows the weekly number of positive PCR tests for influenza for every 100 tests conducted at sentinel NSW laboratories between 1 January and 24 May 2020. The number of people diagnosed with influenza has been declining since early February. This suggests there is currently limited transmission in the community. The influenza percent positive rate for the week ending 24 May was 0.06%, remaining at a very low rate since the beginning of April.

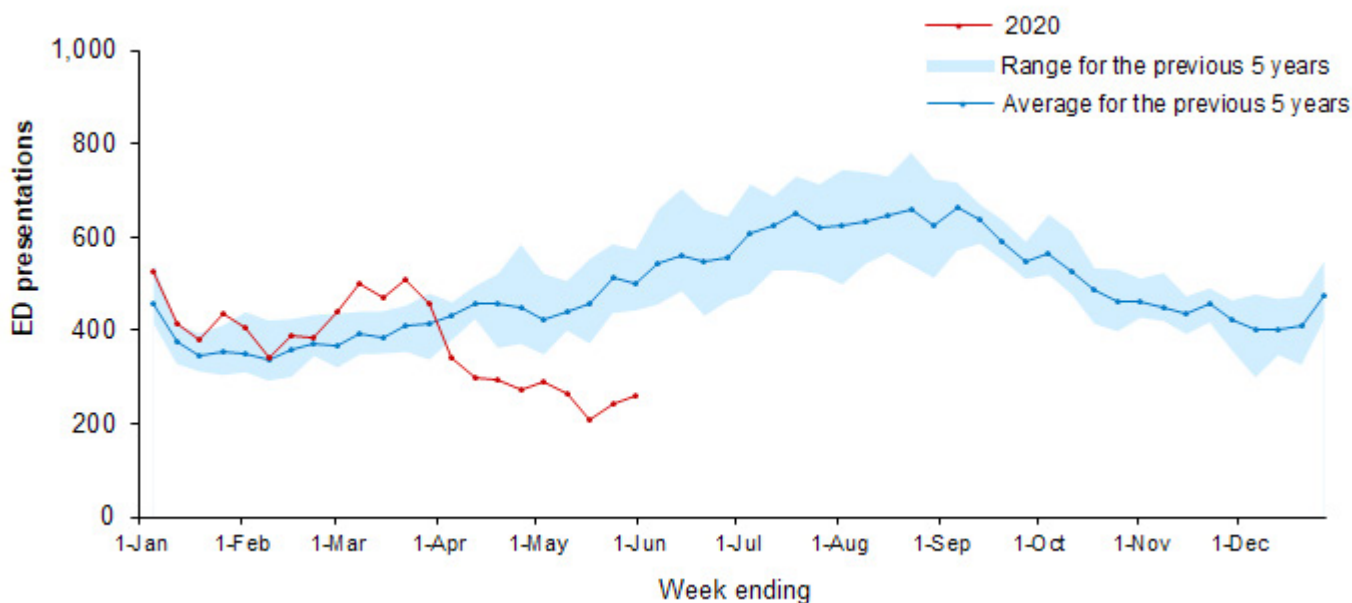
**How many people have died as a result of influenza?**

There have been 12 influenza deaths identified using Coroner’s reports and death registrations with laboratory-confirmed influenza reported for the year to date. Two-thirds of the deaths were in people aged 65 years and over. In 2019, for same period of time, there had been 43 laboratory-confirmed influenza deaths.

**How many emergency department presentations have there been for pneumonia?**

NSW emergency department (ED) surveillance for presentations of pneumonia includes ED 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.<sup>2</sup>

Figure 15. Total weekly counts of ED visits for pneumonia, all ages, 1 January to 31 May 2020, compared with the 5 previous years



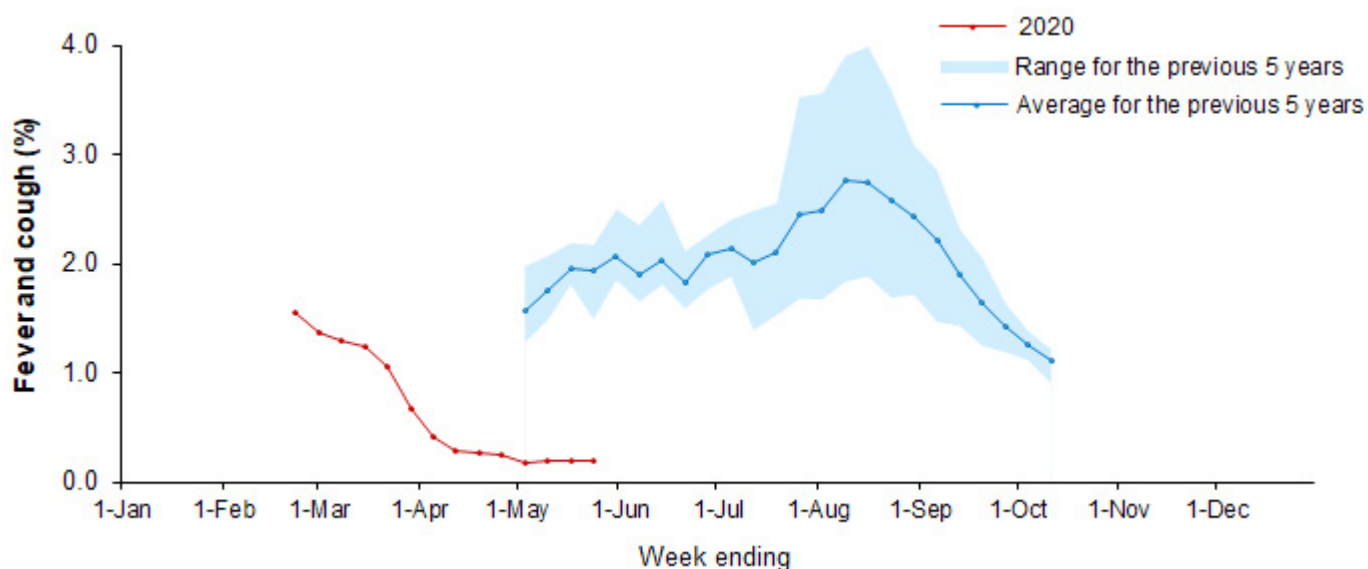
**Interpretation:** Pneumonia presentations decreased from the end of March and remains below the usual range for this time of year.

<sup>2</sup> NSW Health Public Health Rapid, Emergency Disease and Syndromic Surveillance (PHREDSS) system, CEE, NSW Ministry of Health. Comparisons are made with data for the preceding 5 years. Includes unplanned presentations to 67 NSW emergency departments (accounts for 87% of total public ED activity).

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

FluTracking is an online survey that asks if you have had typical flu-like symptoms, such as fever or cough, in the last week. Across NSW approximately 25,000-30,000 people participate each week. Due to the COVID-19 outbreak the FluTracking survey started at the end of February; in previous years the survey commenced at the beginning of the regular flu season in May.

Figure 16. Proportion of people reporting influenza-like illness, 1 January to 24 May 2020 (red line), compared with the 5 previous years' annual mean, NSW



**Interpretation:** In NSW in the week ending 24 May, of the people surveyed, there was a decrease in reported typical flu-like symptoms for this time of year, likely partly due to the response to the COVID-19 outbreak, in particular the decrease in overseas travel, community restrictions and social distancing.

# IN FOCUS

## COVID-19 IN ABORIGINAL PEOPLE

Reporting period: 1 January to 30 May 2020

A review of COVID-19 cases in Aboriginal people up to 30 May found:

- Thirty-one Aboriginal people have been diagnosed with COVID-19. This represents a small proportion of all COVID-19 cases (1%).
- The population rate of COVID-19 is lower for Aboriginal people (11 confirmed cases for every 100,000) in NSW than the rest of the NSW population (39 confirmed cases for every 100,000 population).
- Of the 31 cases, half most likely acquired their infection overseas and the remaining acquired their infection locally in NSW. Around 75% of all cases who acquired their infection locally are linked to another confirmed case.
- Most symptoms reported were mild, and at least 93% of cases have already recovered.
- Testing rates have generally been increasing for Aboriginal people. Up to 23 May, there were 13,976 COVID-19 tests conducted for Aboriginal people in NSW. Most tests were done by public laboratories.
- Testing rates were similar for Aboriginal and non-Aboriginal people under 60 years old. In older individuals, testing rates were higher in Aboriginal people than in non-Aboriginal people.
- Aboriginal people living in metropolitan local health districts (LHDs) tend to have higher testing rates than Aboriginal people in regional areas.



Reporting period: 1 January to 30 May 2020

## How many Aboriginal people have been diagnosed with COVID-19 in NSW?

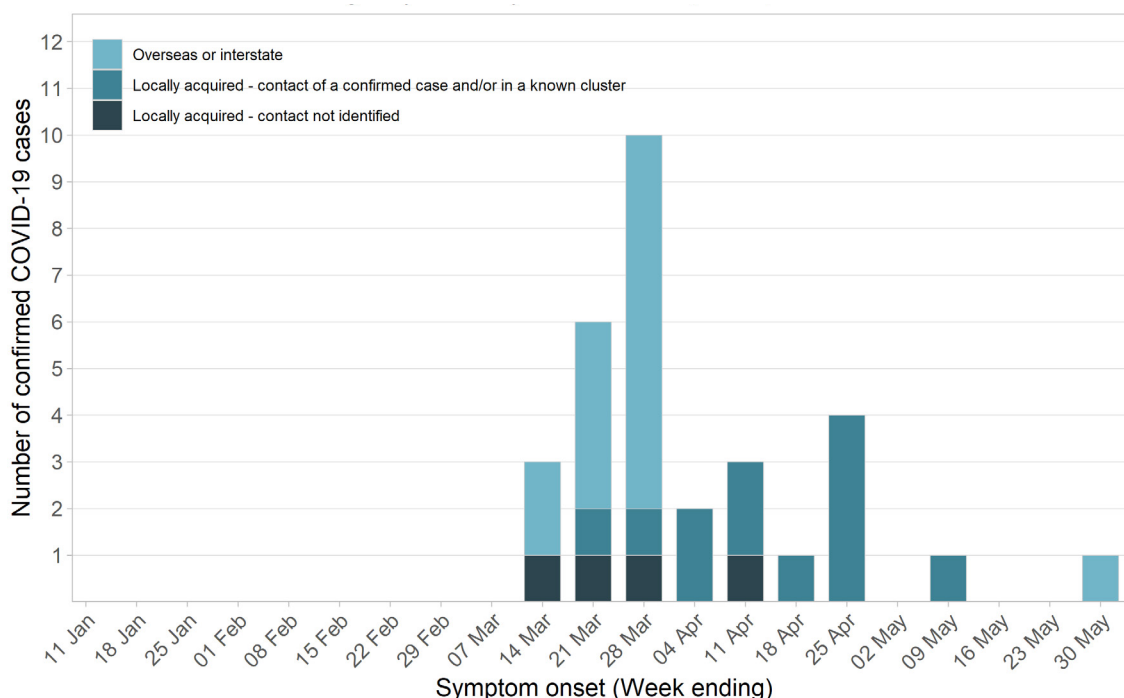
In NSW, Aboriginal status is collected during the initial interview once a person is confirmed as a COVID-19 case. In total, 31 Aboriginal people were diagnosed with COVID-19, representing 1% of the total number of COVID-19 cases diagnosed in NSW. The population rate of COVID-19 is lower for Aboriginal people (11 confirmed cases for every 100,000) in NSW than the rest of the NSW population (39 confirmed cases for every 100,000 population).<sup>1</sup>

### Overview of COVID-19 infections in Aboriginal people, NSW, 2020

Total number of COVID-19 cases	Number of cases	Rate of cases per 100,000
Aboriginal people (percentage of all NSW cases)	31 (1%)	10.8
Total NSW	3,095	39.2

The below figure shows the distribution of cases by the week in which individual cases began to feel unwell (known as date of symptom onset) categorised by the likely source of infection, from January to 30 May. During this period, the date of symptom onset in Aboriginal people ranged from 10 March to 24 May.

### COVID-19 cases in Aboriginal people by onset of illness, NSW, 2020



Note: For asymptomatic cases or where symptom onset date is not available, the onset date is calculated from the earliest specimen collection date.

**Interpretation:** Most Aboriginal people confirmed with COVID-19 became unwell in March and April, with two becoming unwell in May. Around 50% of Aboriginal cases acquired their infection overseas. This is slightly less than the percentage of all NSW cases who acquired their infection overseas (60%).

<sup>1</sup> NSW Government, HealthStats NSW. Population by Aboriginality (2020). Available from: [http://www.healthstats.nsw.gov.au/Indicator/dem\\_pop\\_Aboriginality/dem\\_pop\\_Aboriginality](http://www.healthstats.nsw.gov.au/Indicator/dem_pop_Aboriginality/dem_pop_Aboriginality)

## How are people who identify as Aboriginal getting their infection?

The below table shows that among Aboriginal people diagnosed with COVID-19, 15 acquired their infection overseas or on a cruise ship. Sixteen individuals acquired their infection in NSW. Of these 16 people, nine acquired their infection in a household setting and three were linked to a confirmed case or an event or situation where there was at least one confirmed case. For the remaining four cases acquired in NSW, no source of infection could be identified.

Seven of the nine individuals who acquired their infection in a household setting were aged less than 19 years, and from three separate families. These seven children acquired their infection from an adult family member. Most adults aged 19 years and over acquired their infection overseas or on a cruise ship.

### Source of infection for 31 cases in Aboriginal people up to 30 May 2020

Source of infection	Number of cases
Overseas or on a cruise ship	<b>15</b>
Locally (in NSW)	<b>16</b>
• Household member/s	9
• Confirmed case/s outside the home	3
• Source not identified	4

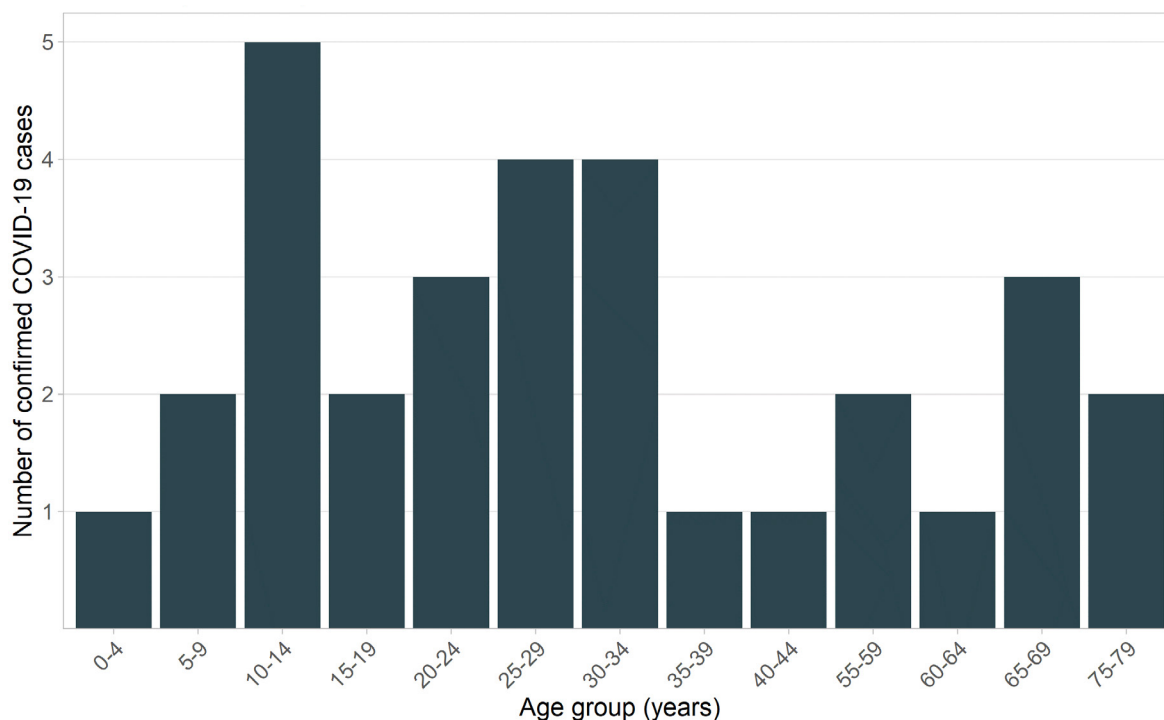
**Interpretation:** Of the cases in Aboriginal people who acquired their infection in NSW, most have been linked to a known confirmed case or an event where there were confirmed cases.

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### How old are Aboriginal people who have been diagnosed with COVID-19?

Each bar in the below figure shows the number of confirmed cases by five-year age group. Ten cases were among children and young people aged less than 19 years, 12 cases were reported in young adults aged 20-39 years, and nine were in adults aged 40 years and over. The age range of cases was 1-75 years and the median age was 26 years.

Number of COVID-19 cases in Aboriginal people by age group, 1 January to 30 May 2020, NSW



**Interpretation:** There have been slightly more cases in young adults (aged 20-39 years) than in children and older adults.

## What are the characteristics of Aboriginal people who have been diagnosed with COVID-19?

The below table shows that 58% of Aboriginal cases were female and 42% were male, noting that case numbers are small. Most of the cases live in major cities and one of the cases reported this week was a resident of QLD who acquired their infection overseas and was diagnosed in NSW. Most cases were managed by Hunter New England LHD and Sydney LHD and there have been no cases reported in remote and very remote areas.

### Characteristics of COVID-19 cases diagnosed in Aboriginal people in NSW, up to 30 May 2020

Sex	
Male	18 (58%)
Female	13 (42%)
Remoteness of usual residence	
Major cities	24* (77%)
Inner regional	6 (20%)
Outer regional	1 (3%)
Remote and very remote	0

\* Includes one case who is a resident of QLD but is in the care of NSW after returning from overseas.

**Interpretation:** The rate of infection among males and females is similar. Most cases have been reported in major cities.

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## How severe has COVID-19 infection been in Aboriginal people?

The below table provides a breakdown of the most common symptoms reported by Aboriginal people and all people in NSW – cough, fatigue, fever, headache, chills or rigors, runny/blocked nose and sore throat. In Aboriginal people, report of these symptoms was slightly higher in people aged 20 years and over than in people aged 0-19 years old. Overall, the frequencies of common symptoms reported both by Aboriginal and non-Aboriginal people were similar.

Of the 31 cases reported up to 30 May, one person was admitted to hospital. Recovery information was available for 27 Aboriginal people. Of these people, 25 (93%) cases are known to have recovered. This compares to 91% of all cases in NSW who are known to have recovered. No COVID-19 related deaths have been reported in Aboriginal people in NSW.

### Most common symptoms among Aboriginal people by age group, NSW, 2020

Symptom	0-19 years		20-39 years		40 years and over		Total	
	No.	%	No.	%	No.	%	No.	%
Cough	4	11%	11	20%	6	12%	21	15%
Fatigue	4	11%	7	13%	8	16%	19	14%
Fever	3	8%	6	11%	8	16%	17	12%
Headache	4	11%	8	15%	5	10%	17	12%
Chills or rigors	2	6%	7	13%	4	8%	13	9%
Runny/blocked nose	4	11%	4	7%	3	6%	11	8%
Sore throat	4	11%	3	6%	3	6%	10	7%
Malaise	3	8%	2	4%	4	8%	9	6%
Joint pain	4	11%	1	2%	3	6%	8	6%
Body pain	2	6%	3	6%	3	6%	8	6%
Shortness of breath	2	6%	2	4%	3	6%	7	5%

**Interpretation:** Of the 31 cases, 87% reported having symptoms. By comparison, 95% of all cases in NSW reported having symptoms. The percentage of Aboriginal people who reported symptoms is slightly lower than for non-Aboriginal people, which may be an effect of testing contacts in outbreak settings. The most common types of symptoms reported include cough, fatigue and fever. The symptom profile and the proportion reported are similar for total cases in NSW. Most Aboriginal cases are known to have recovered.

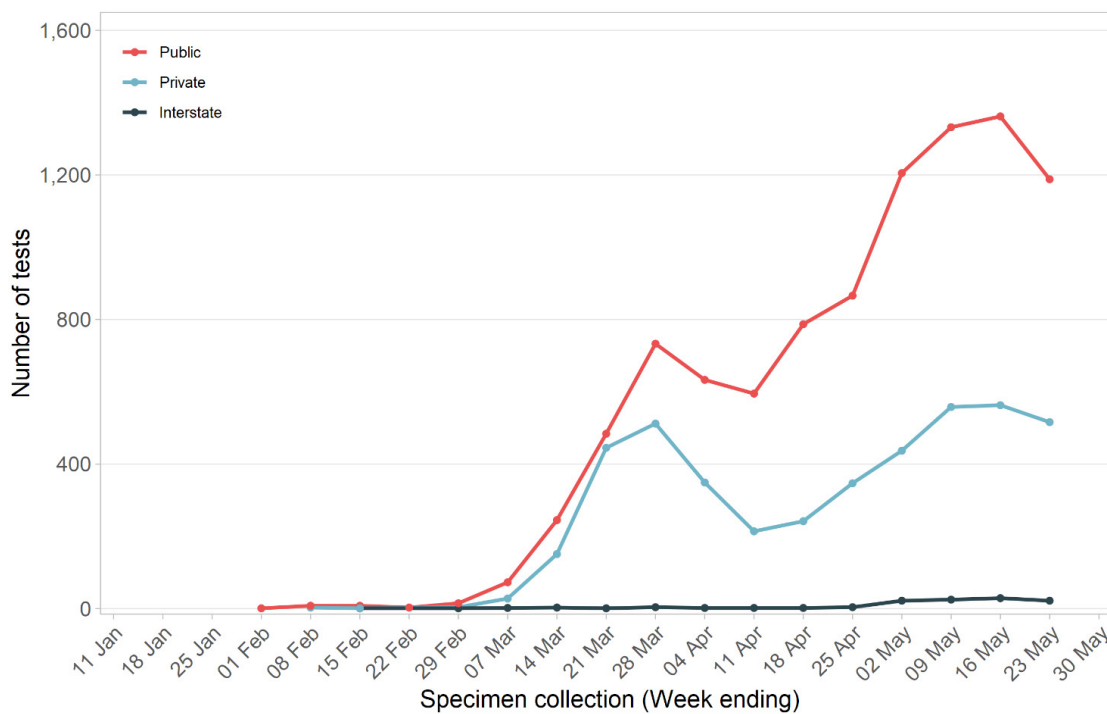
## Testing for Aboriginal people

In NSW, there is currently no standard approach to documenting Aboriginal status on pathology forms. Therefore, this is not routinely collected in the testing data received by NSW Health. Case interviews are only conducted with people who have tested positive. For negative tests, Aboriginal status is derived through data linkage with other health information systems. Data linkage inferred the Aboriginal status for approximately 90% of all COVID-19 records. As the process of data linkage requires several steps, testing data are reported up to midnight of 23 May, which carries a lag of 1-week compared to data on confirmed cases.

### How many people who identify as Aboriginal have been tested for COVID-19?

The below figure shows the number of tests in Aboriginal people over time by laboratory type, including for individuals who are NSW residents but were tested by interstate laboratories.

Number of Polymerase Chain Reaction (PCR) diagnostic tests in Aboriginal people by week and laboratory type, NSW, 2020

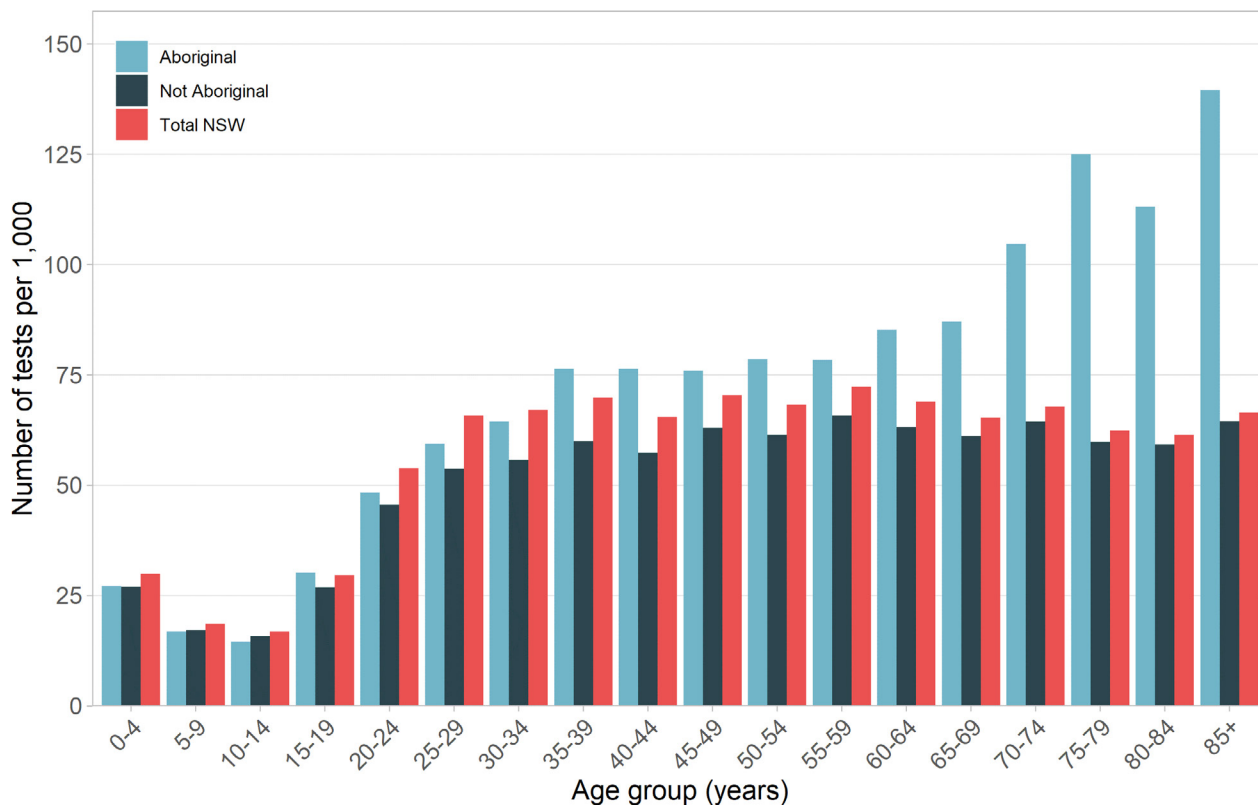


**Interpretation:** Testing numbers have generally been increasing for Aboriginal people in a similar fashion to the rest of the NSW population. Up to 23 May, there were 13,976 COVID-19 tests conducted for Aboriginal people in NSW. Most tests were done by public laboratories.

**What do the COVID-19 testing rates look like for Aboriginal people by age group?**

Each bar of the below figure gives the number of people tested by five-year age groups for Aboriginal people (light blue), non-Aboriginal people (dark blue) and all people in NSW (red).

Testing rate by Aboriginality and age group, 1 January to 23 May 2020, NSW





Reporting period: 1 January to 30 May 2020

Number, percent positive, and rate of COVID-19 tests for Aboriginal people by 10-year age groups, NSW, reported up to midnight 23 May 2020

Age group	Aboriginal people			All NSW	
	Number of tests	Percent positive (%)	Tests per 1,000 population	Percent positive (%)	Tests per 1,000 population
0-9 years	1,424	0.2	22	0.1	24
10-19 years	1,304	0.5	22	0.5	23
20-29 years	2,602	0.3	53	1.0	60
30-39 years	2,247	0.2	70	0.6	69
40-49 years	2,129	0.1	76	0.5	68
50-59 years	1,942	0.1	78	0.6	70
60-69 years	1,333	0.3	86	0.8	67
70-79 years	758	0.3	112	0.8	66
80+ years	237	-	122	0.6	64
<b>NSW Total</b>	<b>13,976</b>	<b>0.2</b>	<b>50</b>	<b>0.7</b>	<b>55</b>

**Interpretation:** Testing rates were similar for Aboriginal and non-Aboriginal people aged under 60 years. In older individuals, testing rates were higher in Aboriginal people than in non-Aboriginal people. The 'percent positive' show there were very few confirmed COVID-19 cases for all Aboriginal people tested across all age groups, and this rate was lower for Aboriginal people than non-Aboriginal people.

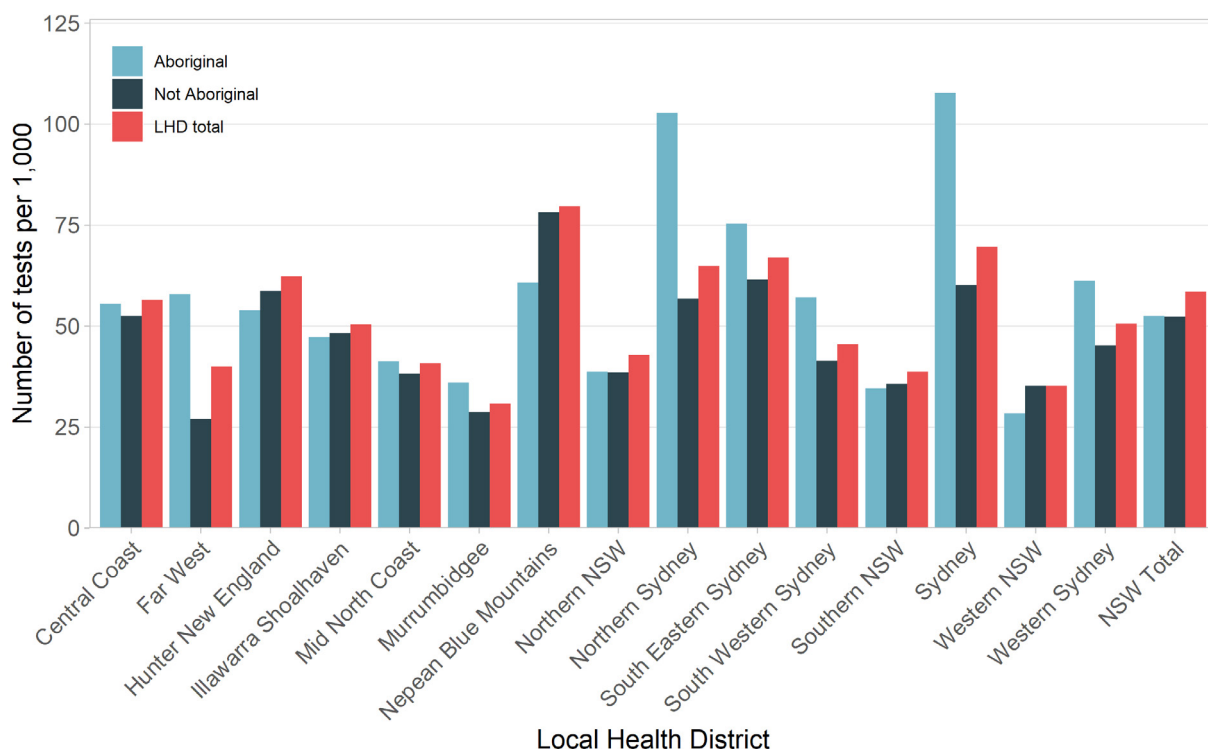
Reporting period: 1 January to 30 May 2020

**Is there a difference in testing rates in metropolitan vs regional areas?**

Each bar in the below figure shows the number of people tested by local health district (LHD) for Aboriginal people (light blue), non-Aboriginal people (dark blue) and all people (red).

Note: The bars related to ‘NSW Total’ include records where Local Health District is not allocated, or where the person resides outside of NSW.

**Testing rate by Aboriginality and LHD, 1 January to 23 May 2020, NSW**



Note: NSW Total includes personstested in NSW without a NSW residential address.

**Interpretation:** Aboriginal people living in metropolitan LHDs tend to have higher testing rates. Testing rates by LHD were similar for Aboriginal and non Aboriginal people in most areas apart from Sydney, Northern Sydney and Far West LHDs where Aboriginal testing rates were higher.