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.

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

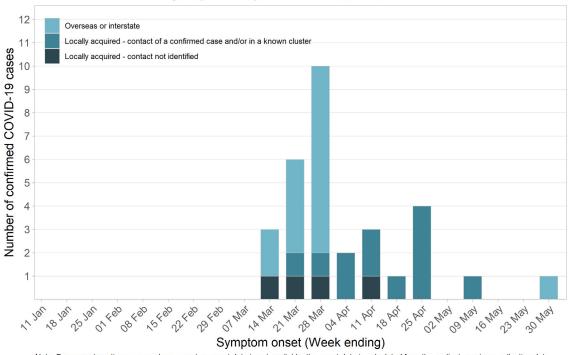
In NSW, Aboriginal status is collected during the initial interview once a person is confirmed as a COVID-19 case. In total, 31 Aboriginal people were diagnosed with COVID-19, representing 1% of the total number of COVID-19 cases diagnosed in NSW. The population rate of COVID-19 is lower for Aboriginal 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).¹

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%).

¹ NSW Government, HealthStats NSW. Population by Aboriginality (2020). Available from: 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

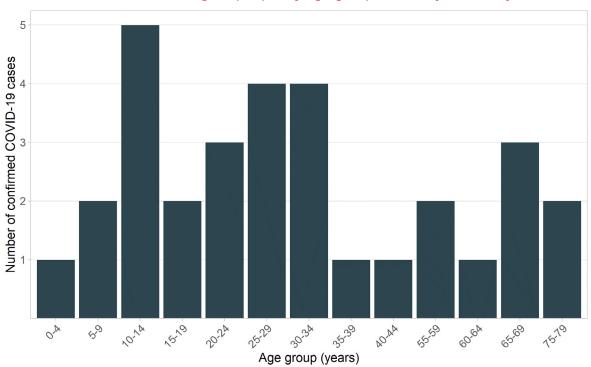
Source of infection	Number of cases
Overseas or on a cruise ship	15
Locally (in NSW)	16
 Household member/s 	9
 Confirmed case/s outside the home 	3
Source not identified	4

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.

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.

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.

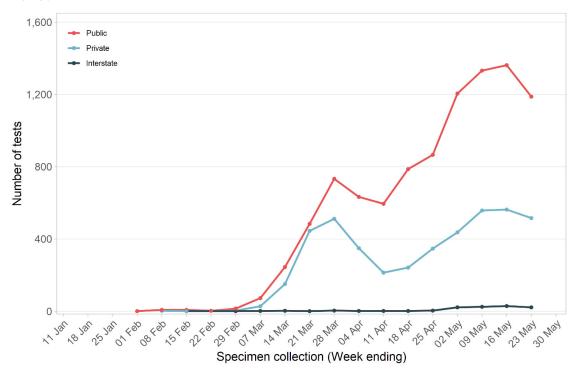
Testing for Aboriginal people

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. Date 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

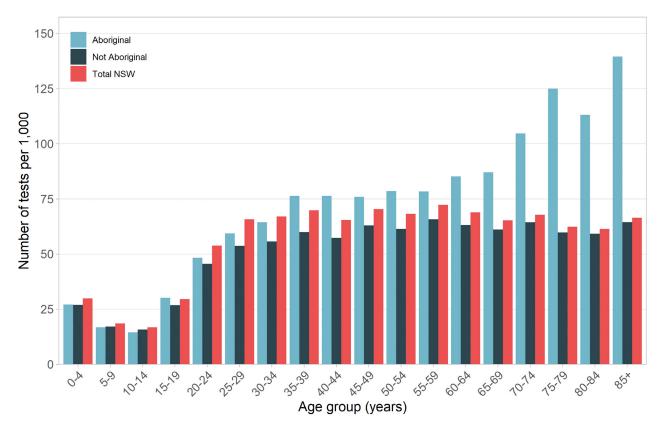


Interpretation: Testing numbers have generally been increasing for Aboriginal people in a similar fashion to the rest of the NSW population. Up to 23 May, there were 13,976 COVID-19 tests conducted for Aboriginal people in NSW. Most tests were done by public laboratories.

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



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

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Age group	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
NSW Total	13,976	0.2	50	0.7	55

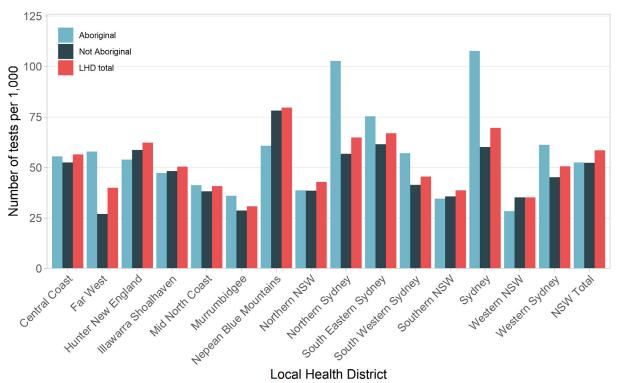
Interpretation: Testing rates were similar for Aboriginal and non-Aboriginal people aged under 60 years. In older individuals, testing rates were higher in Aboriginal people than in non-Aboriginal people. The 'percent positive' show there were very few confirmed COVID-19 cases for all Aboriginal people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

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.