

IN FOCUS

COVID-19 IN YOUNG ADULTS (18 TO 29 YEARS)

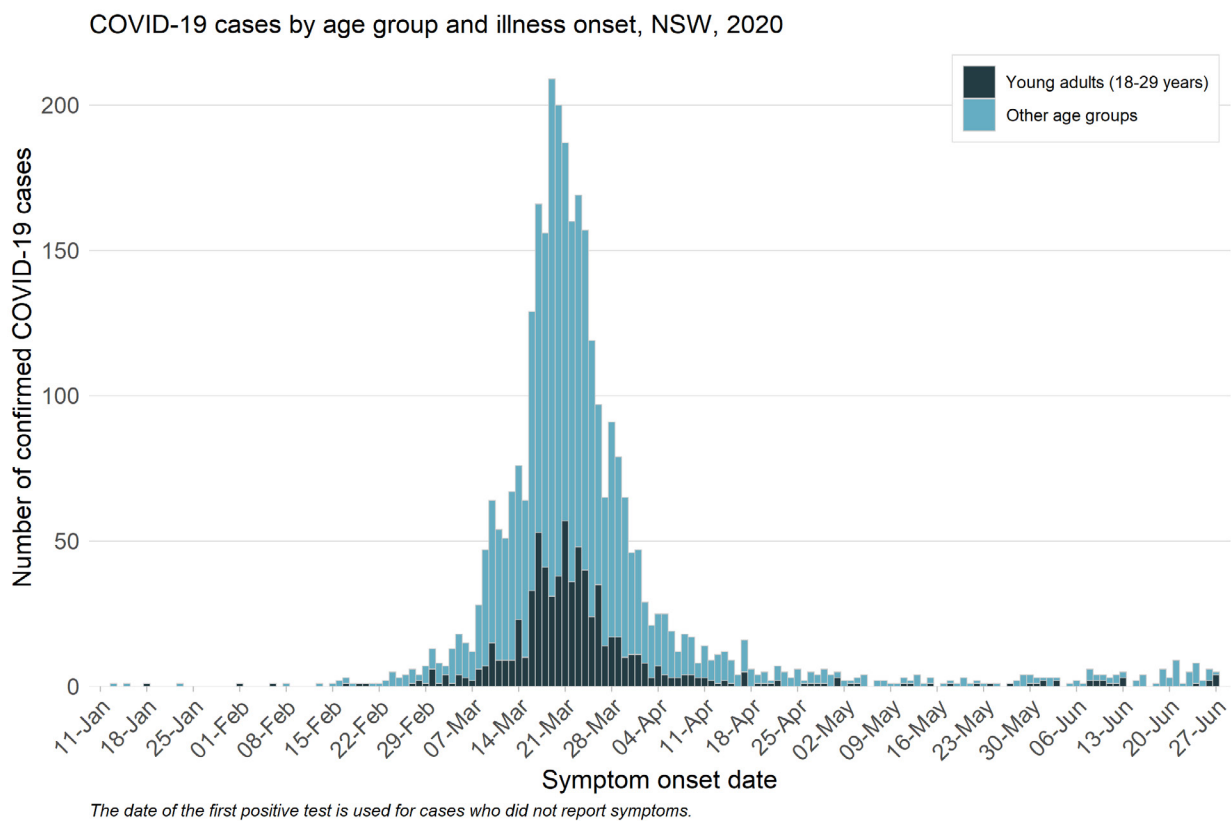
Reporting period: 1 January to 27 June 2020

This is a summary of all COVID-19 infections in young adults in NSW (including those who were infected overseas and those infected in NSW) in the period 1 January to 27 June 2020.

How many young adults have been diagnosed with COVID-19 in NSW?

In total, 728 young adults (aged 18 to 29 years) have been diagnosed with COVID-19 in NSW.

Each bar in the below figure shows the number of new cases in young adults compared with other age groups, based on the date of symptom onset.



Interpretation: Approximately a quarter of cases to 27 June have been in young adults with the majority developing symptoms from early March through to mid-April. Since this time the number of cases has decreased significantly in young adults as well as all other age groups.

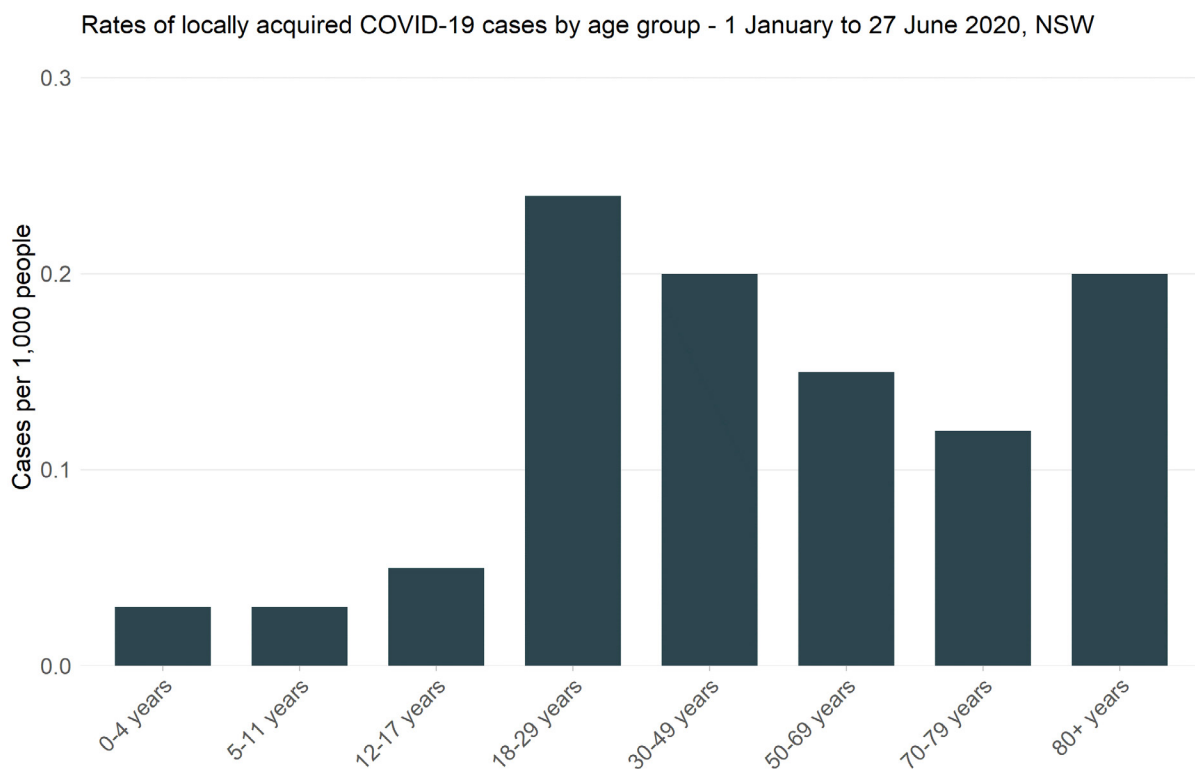
How do infection rates in young adults compare with other age groups?

The rate of COVID-19 diagnosed in each age group takes into account the different number of people in the population in each age group so is a better way to compare infections than the number of cases in each age group.

Overall, the rate of diagnosed infection was 0.5 per 1,000 young adults (or 5 per 10,000).

Among the overseas acquired cases diagnosed in NSW, young adults had the highest rates of infection among all age groups less than 50 years; likely influenced by the relatively higher proportion of overseas travellers. The highest infection rates in returned travellers were reported in people aged 50 to 79 years, which reflects the older age of travellers returning from cruise ships with known COVID-19 outbreaks.

The figure below compares the infection rates for locally acquired cases (excluding returning travellers).

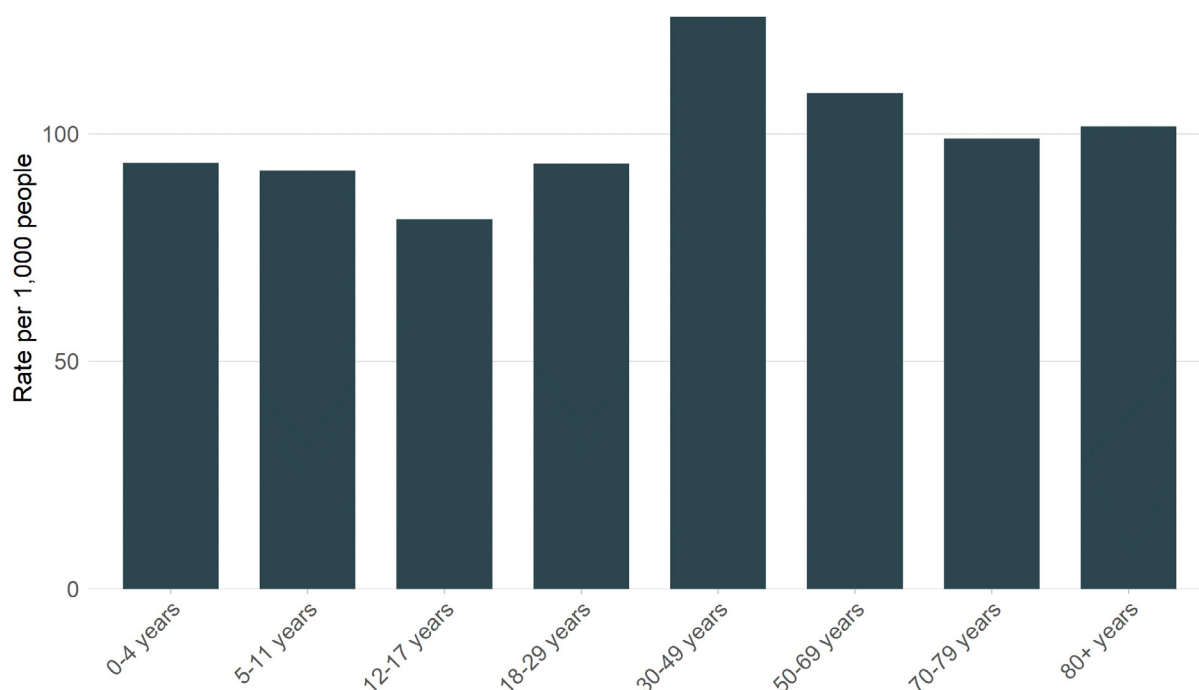


Interpretation: To 27 June, the rate of locally acquired infection was highest in young adults.

How much testing is happening in young adults?

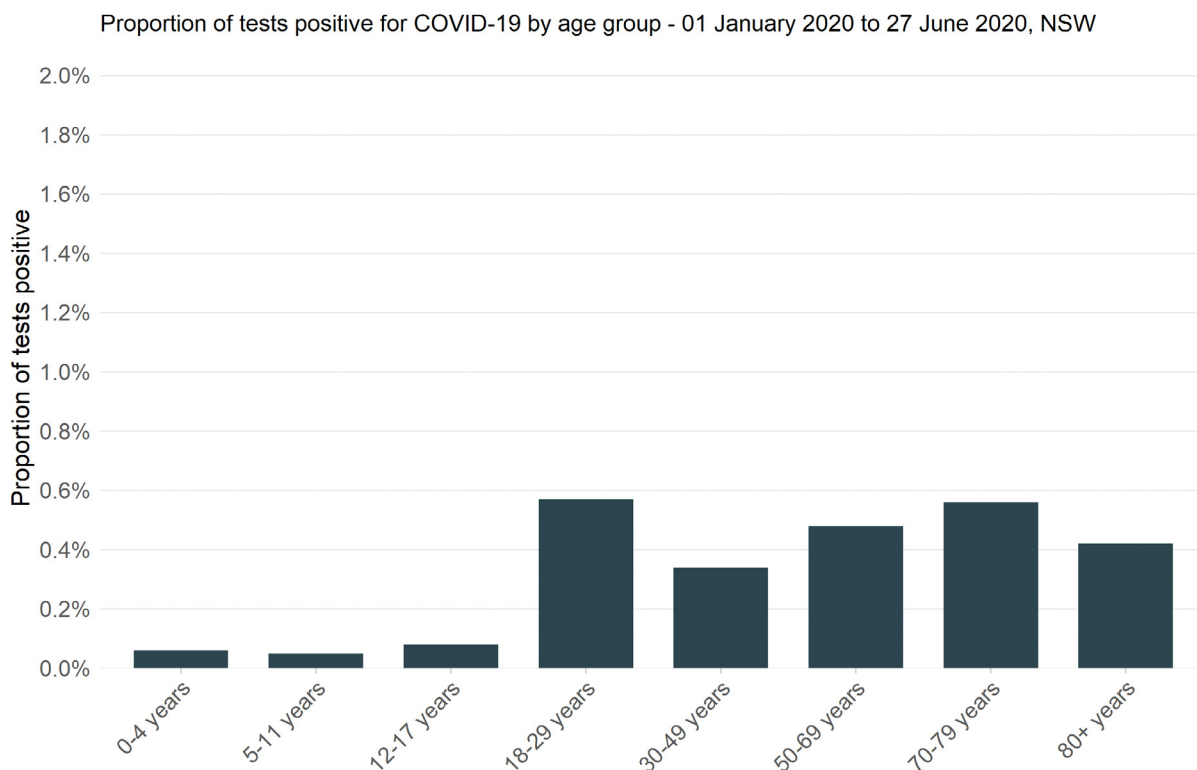
It is not possible to separate testing that was done to diagnose COVID-19 infections acquired overseas from testing done in people in the community who had not travelled. However, with the introduction of travel restrictions in March, the volume of returning travellers dropped markedly so that the majority of testing since this time reflects testing to detect community transmission.

Rates of COVID-19 testing by age group - 01 January 2020 to 27 June 2020, NSW



Interpretation: Among adult age groups, testing rates were lowest in those aged 18 to 29 years. As seen in Section 2, while testing rates have increased in recent weeks, rates of testing in young adults continue to be lower when compared with other age groups.

What proportion of young adults are diagnosed with COVID-19?



Interpretation: The proportion of tests that were positive for COVID-19 was less than 1% across all age groups, indicating low rates of COVID-19 infection in NSW. Among young adults, the proportion of tests that were positive were similar to those aged 70 to 79 years and higher than all other age groups. The comparatively lower rates of testing and higher proportion positive indicates more infection among young adults when compared with those aged 30 to 69 years.

Is infection more common in males or females?

A slightly higher number of infections were diagnosed in young females compared with males (400 females, 55% vs 328 males, 45%).

The below table shows the number of tests per 1,000 people in NSW by age group and gender, between 1 January and 27 June 2020.

COVID-19 testing rates by age group and gender, to 27 June 2020

Age group	Males	Females
	Tests per 1,000 population	Tests per 1,000 population
0-4 years	99.2	87.0
5-11 years	94.5	89.0
12-17 years	82.3	79.9
18-29 years	73.4	113.4
30-49 years	102.8	148.4
50-69 years	90.0	126.5
70-79 years	100.1	97.5
80+ years	114.4	92.1

Interpretation: To 27 June, the testing rate in young adult females was nearly 40% higher than in males of the same age group. Young adult males had the lowest number of tests per 1,000 people across all age groups.

How are young adults getting infected?

All cases of COVID-19 are investigated by public health staff to understand the source of the infection. The table below shows the likely source of infection among young adults.

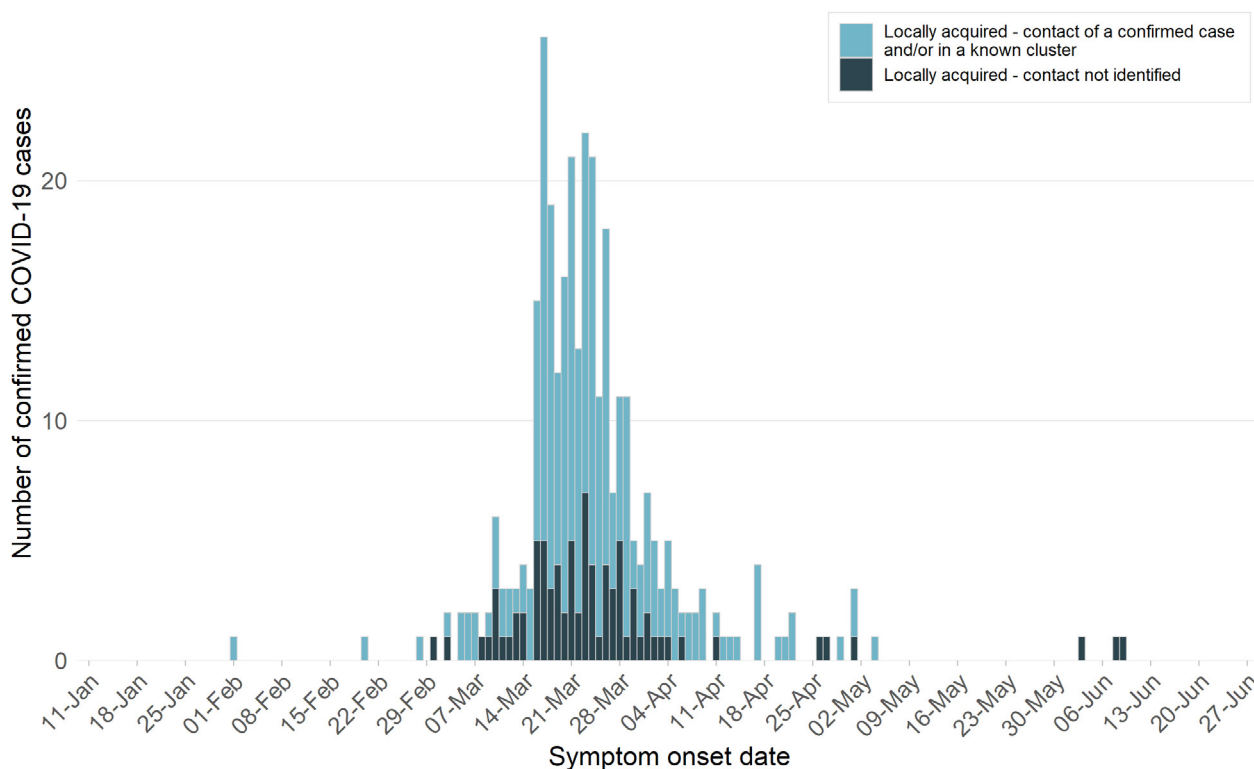
COVID-19 cases in young adults by likely source of infection, to 27 June 2020

Source of infection	Number of cases	Percentage
Acquired locally	324	45%
- Household member/s	75	
- Confirmed case/s outside the home	168	
- Source not identified	81	
Acquired interstate	11	2%
Acquired overseas	393	54%
Total	728	100%

Interpretation: Approximately half of the cases diagnosed in young adults to 27 June were in travellers returning from overseas while the other half were locally acquired. Among the locally acquired cases with a known source of infection, approximately 70% were infected outside the home. Prior to the introduction of social distancing measures, a number of outbreaks occurred among young adults at social events in metropolitan Sydney.

Each bar in the below figure shows the number of locally acquired cases in young adults by the source of likely infection and the date of symptom onset.

Locally acquired COVID-19 cases in young adults by illness onset, NSW, 2020



The date of the first positive test is used for cases who did not report symptoms and cases who have not had an initial interview by public health staff.

Interpretation: Locally acquired cases in young adults peaked in mid-March prior to the introduction of strict social distancing measures including restrictions on gatherings of large groups. The decrease since this time suggests young adults were compliant with social distancing measures.

Where do young adults with COVID-19 live in NSW?

Over 80% of the locally acquired cases in young adults were metropolitan Sydney residents with nearly 40% of cases reported residing in either inner Sydney or the eastern suburbs.

Have young Aboriginal adults been infected?

Nine young Aboriginal adults were diagnosed to 27 June which represented 1% of COVID-19 infections diagnosed in young adults and 30% of infections diagnosed in Aboriginal people. Three cases were acquired overseas and six were locally acquired, including three cases who reported contact with people known to have COVID-19 and three whose source remains unknown. The three cases with an unknown source each resided in different LHDs and had no known links.

What are the symptoms in young adults?

The majority (95%) of young adults experienced respiratory symptoms prior to diagnosis.¹ The table below shows the most commonly reported symptoms.

Frequency of symptoms reported in young adults at the time of diagnosis with COVID-19, to 27 June 2020

Symptom	Symptomatic cases (n = 692)	
	Number	Percentage
Cough	425	72%
Headache	385	69%
Fatigue	386	69%
Sore throat	325	58%
Fever	292	53%
Runny nose	278	52%
Malaise	222	45%
Body pain	191	38%
Chills or rigors	170	34%
Joint pain	140	29%
Shortness of breath	137	27%
Diarrhoea	106	22%

Interpretation: Cough, headache and fatigue were the most common symptoms reported by young adults at the time of diagnosis.

How quickly are young adults getting tested?

The median duration of symptoms prior to testing was three days both for all cases in young adults and those acquired locally. This was similar to other adult age groups.

How many cases have recovered?

Recovery information was available for 673 young adults, all of whom had recovered. No deaths have been reported among young adults diagnosed with COVID-19 in NSW.

¹ Information collected by public health staff on interview at the time of diagnosis.