

IN FOCUS

LOCALLY-ACQUIRED COVID-19 CASES: A REVIEW OF THE LAST SIX WEEKS

Summary of locally-acquired cases reported in the six weeks ending 8 August:

- public health investigations were able to link 286 people diagnosed with COVID-19 (92% of all locally-acquired cases) to known cases or clusters
- 20 known transmission events (26 cases) remain unlinked, of which 12 (60%) occurred in South Western Sydney LHD and five (25%) in Western Sydney LHD residents
- the high testing rates throughout NSW and the low number of cases not linked to known cases indicates that, currently, community transmission is limited
- while the greatest number of cases were aged 30 to 49 years (86 cases), highest population rates of diagnosed infection were seen in those aged 12 to 17 years (31 cases) followed by 50 to 59 years (43 cases) and 60 to 69 years (40 cases)
- highest testing rates were observed in younger adults (18 to 49 years), while among those aged over 50 years, testing rates decreased with age
- almost 40% of cases linked to known clusters were acquired at home (111 cases)
- in the community, infections were most commonly acquired in restaurants and clubs (27%, 66 patrons and 10 staff), industrial workplaces (10%, 30 cases) and religious gatherings (8%, 24 cases).

This data shows:

- young adults (18 to 29 years) and those aged 30 to 49 years have followed recent public health advice and presented for COVID-19 testing
- testing in teenagers and older adults (aged 60 to 69 years) is important to detect infections which may be acquired in the community or at home
- a high proportion of cases linked to clusters were likely acquired in the home
- community settings at higher risk of COVID-19 transmission include restaurants and clubs, industrial workplaces and places of worship.

This highlights the importance of:

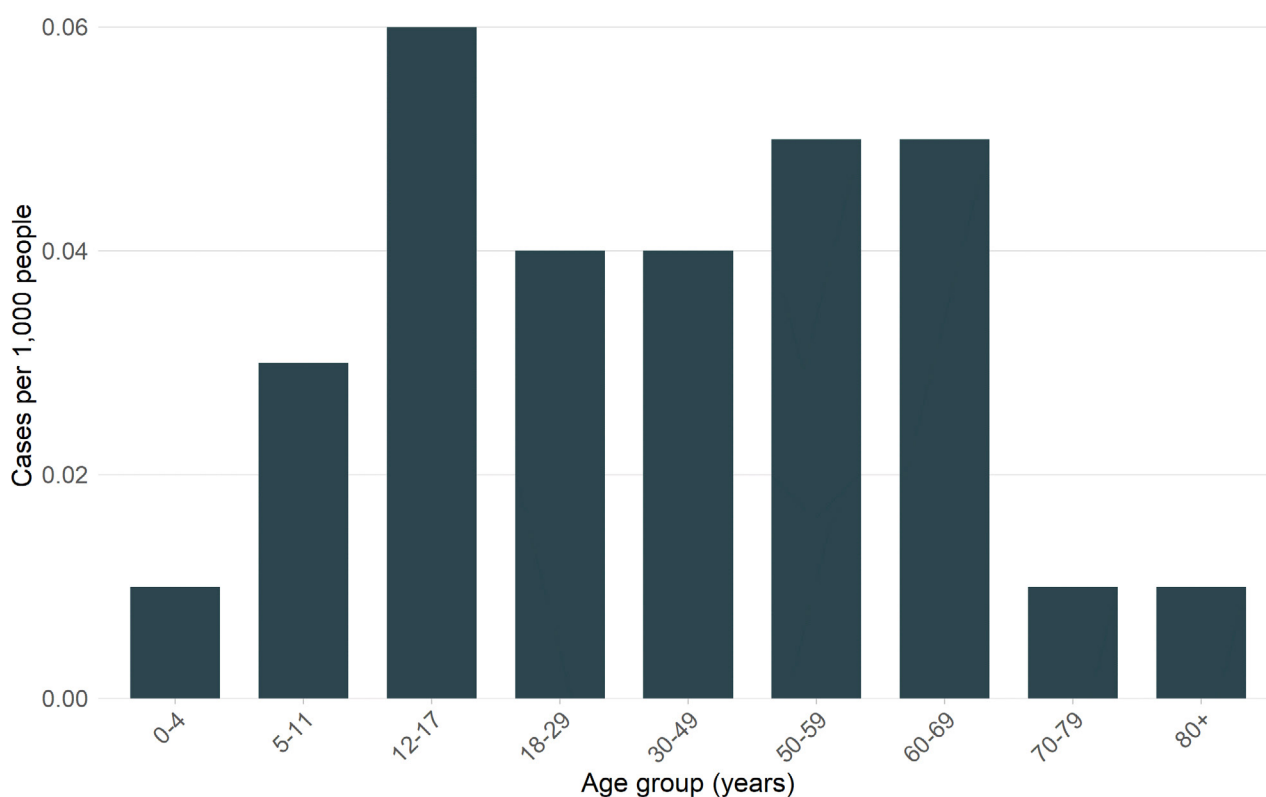
- testing among all age groups including teenagers and those in their 60s to prevent the spread of infection
- testing throughout NSW and in particular in residents and visitors to South Western Sydney and Western Sydney where the majority of recently reported unlinked cases reside
- development and strict implementation of COVID-19 Safety Plans in restaurants, clubs, workplaces and places of worship
- regular handwashing and maintaining physical distancing when out in the community, and mask wearing in situations where physical distancing is not possible, to prevent bringing home infection to household members.

SECTION 1: OVERVIEW OF LOCALLY-ACQUIRED CASES

In the six weeks up to 8 August, 312 locally-acquired cases of COVID-19 were reported in NSW. Of these, 286 (92%) were found to be associated with known clusters or cases. Despite extensive public health investigations, it is unclear how 26 people (likely 20 transmission events) were infected.

What age groups are most affected?

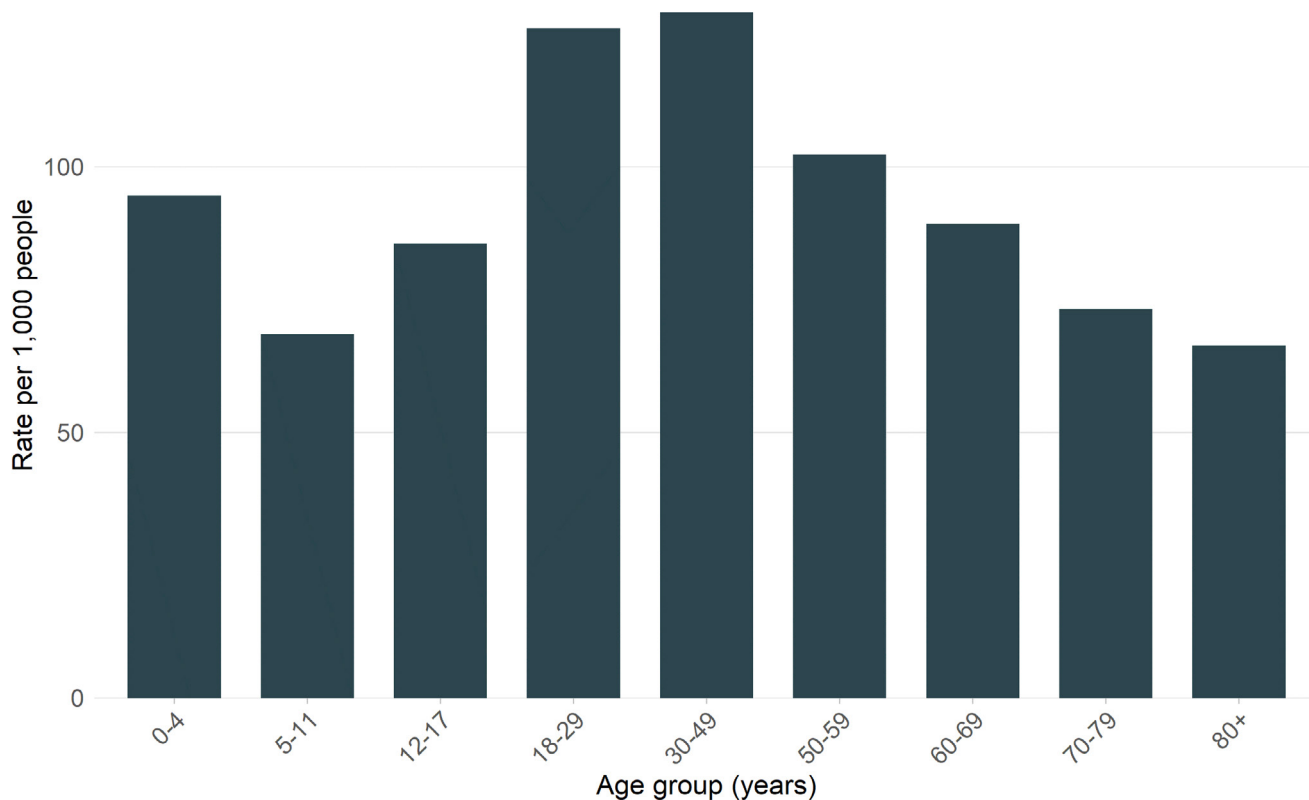
Rates of locally acquired COVID-19 cases by age group - 28 June 2020 to 08 August 2020, NSW



Interpretation: In the six-week period ending 8 August, highest rates of infection were reported in those aged 12 to 17 years (31 cases) followed by people aged 50 to 59 years (43 cases) and 60 to 69 years (40 cases). Lowest rates were reported in young children (aged 0 to 4 years, six cases) and older adults (70 years and over, 11 cases).

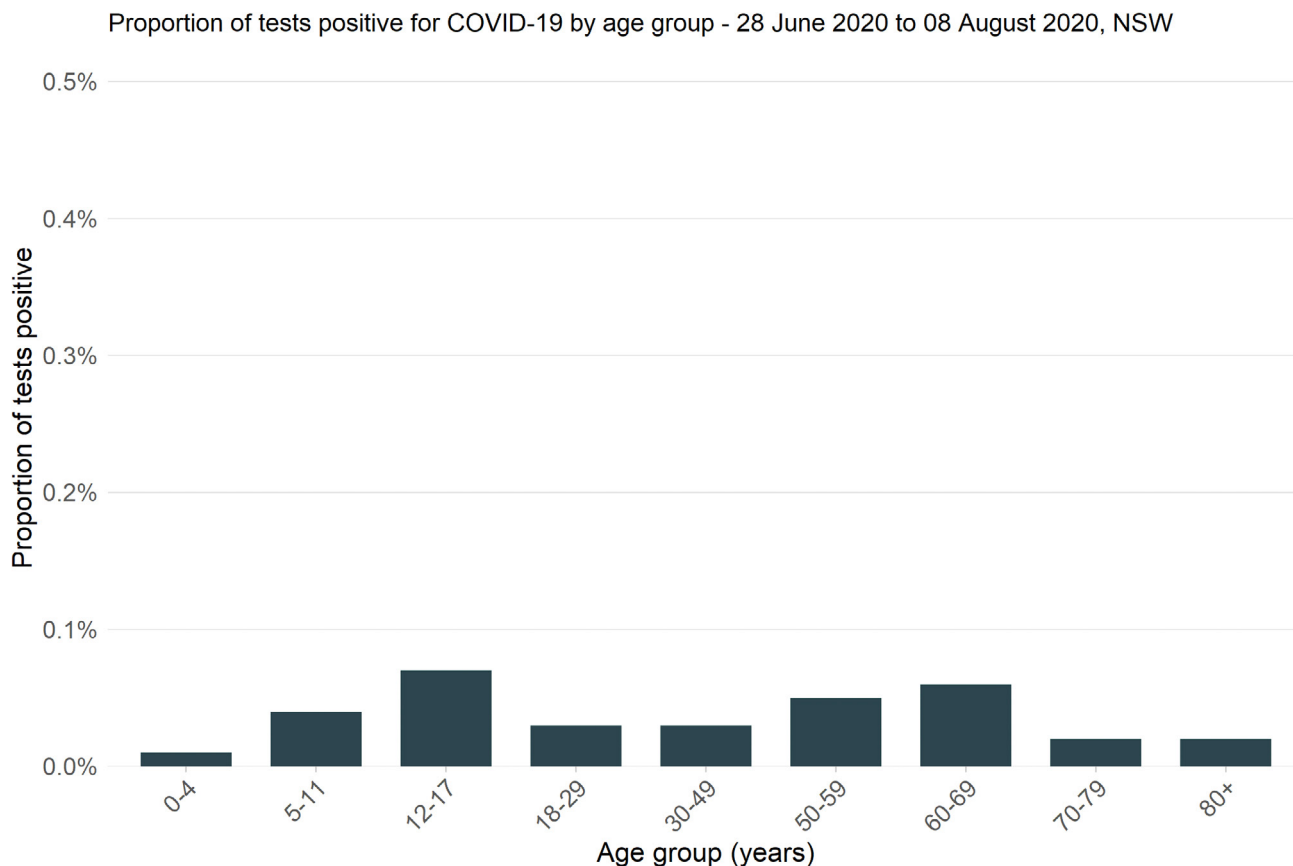
What age groups are getting tested?

Rates of COVID-19 testing by age group - 28 June 2020 to 08 August 2020, NSW



Interpretation: Highest testing rates were observed in young adults (18 to 49 years). Among those aged over 50 years, testing rates decreased with age. Among children, highest rates were reported among those aged 0 to 4 years.

What proportion of people tested are diagnosed with COVID-19?



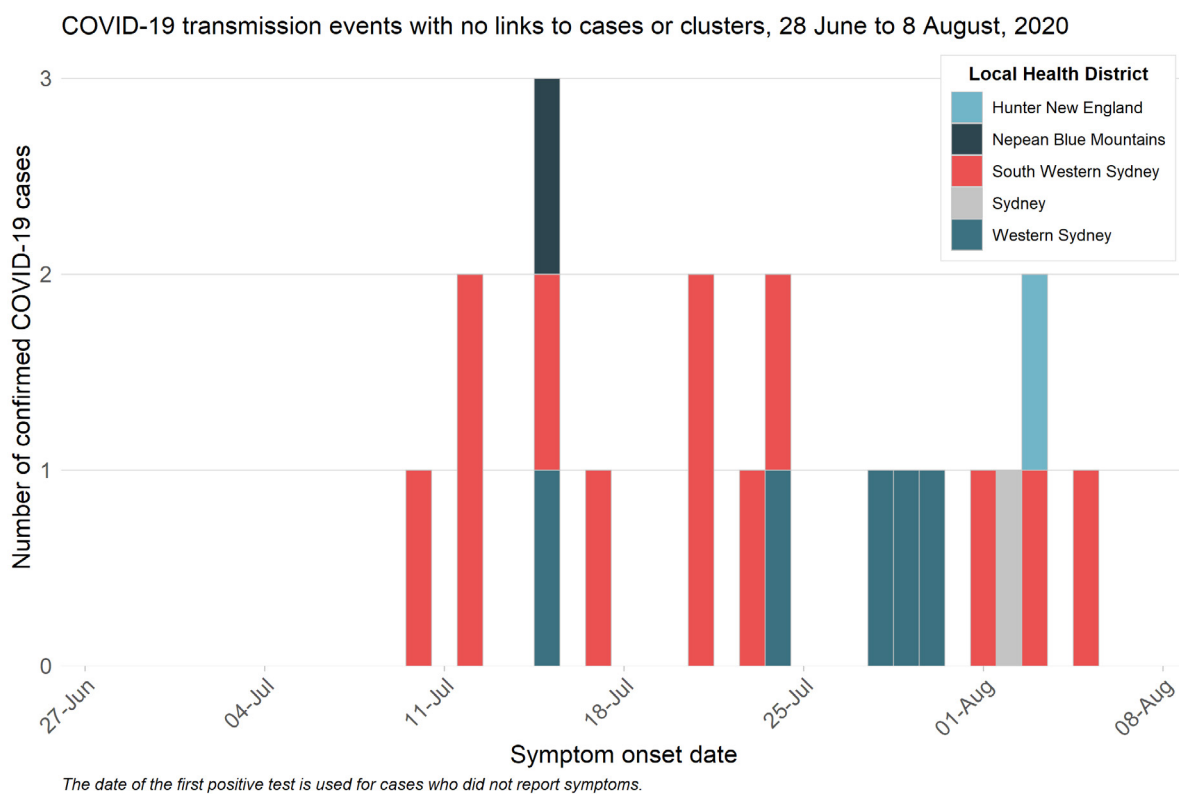
Interpretation: In each age group, the proportion of COVID-19 tests found to be positive was less than 0.1%, indicating that, currently, there is limited spread of COVID-19 in the community. The percent positivity was highest in teenagers (12 to 17 years) and older adults (60 to 69 years) due to the comparatively higher infection rates and lower testing rates.

SECTION 2: CASES WITH NO LINKS TO KNOWN CASES OR CLUSTERS

Extensive public health investigations were unable to identify a source of infection for 26 cases reported in the six weeks ending 8 August. This excludes a case who was likely infected earlier in the year. Among the 26 cases there were three family groups (total of nine cases) who had similar onsets, suggesting a common exposure. This indicates that there were at least 20 transmission events not linked to a known case or cluster. Of these, 12 (60%) occurred in South Western Sydney LHD, five (25%) in Western Sydney LHD residents and one resident each in Sydney, Hunter New England and Nepean Blue Mountains LHDs. The Hunter New England resident reported travelling to metropolitan Sydney during his incubation period and, while his source remains unclear, it is likely the infection was acquired in metropolitan Sydney.

With the exception of two children belonging to a family cluster of four people, all cases were adults with ages ranging from 19 to 75 years (average 42 years). Cases were evenly distributed among males and females.

The figure below shows the 20 transmission events with an unknown source by onset date and LHD of residence.

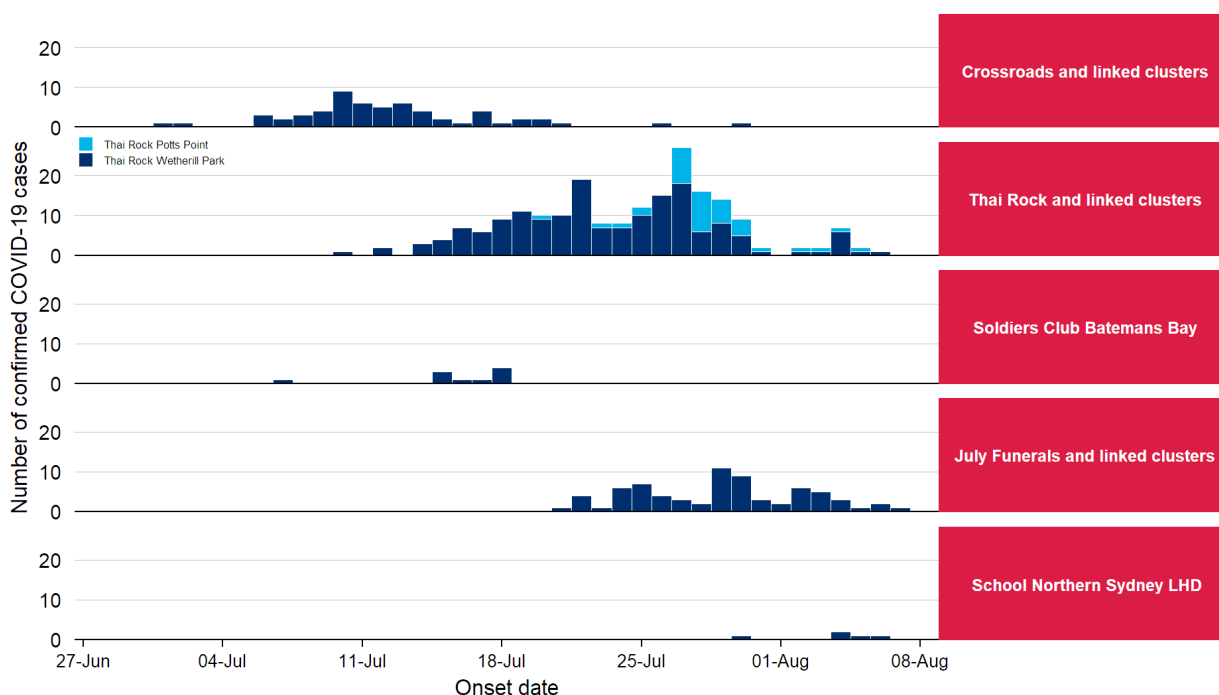


Interpretation: The date cases developed symptoms ranged from 10 July to 8 August 2020. Given the high testing rates throughout NSW, the low number of cases not linked to any known cases or clusters indicates that, currently, community transmission is limited. While counts are low, high rates of testing are important to prevent the spread of infection, especially in South Western Sydney and Western Sydney where unlinked cases have been reported.

SECTION 3: CASES LINKED TO KNOWN CASES OR CLUSTERS

Between 28 June and 8 August, 286 cases have been linked to known cases or clusters. The figure below shows the clusters by onset date with the first cluster detected at a hotel in Casula in July and the most recent cluster occurring at a school in Northern Sydney LHD. Rapid isolation of cases and prompt testing and quarantining of all close contacts limits the spread of infection into the community.

Locally-acquired COVID-19 cases by onset date and cluster, 27 June to 8 August 2020



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

Interpretation: Following the initial outbreak detected at the Crossroads Hotel Casula in early July, seven secondary clusters were detected in people who had close contact with cases prior to their diagnosis and isolation. In mid-July a seemingly unrelated cluster was detected in Thai Rock Restaurant Wetherill Park and subsequent testing of close contacts identified a further five community clusters that stemmed from the original infections acquired in the restaurant. These five clusters were in South Western and Western Sydney LHDs. This cluster was subsequently linked to clusters in two restaurants in Potts Point. In late July, a cluster was detected in those who attended funeral services held in Bankstown. Clusters were detected arising from close contacts of funeral service attendees with subsequent exposures occurring at a club in Mt Pritchard and in a van during transport to a farm on the Central Coast. An investigation is also underway into a recently identified cluster at a school in Northern Sydney LHD.

Where are people getting infected?

While a number of clusters detected occurred in community locations in the six-week period, infections associated with these clusters were most commonly acquired at home (39%, 111 cases). In the community, infections were most commonly acquired in restaurants and clubs (27%, 66 patrons and 10 staff), industrial workplaces (10%, 30 cases) and places of worship (8%, 24 cases).

Setting of infection by age group

Children

All six cases in children aged 0 to 4 years and the majority (80%, 15 cases) of children aged 5 to 11 years acquired their infection at home from an adult family member who was part of a known cluster.

In comparison with younger age groups, older children (aged 12 to 17 years) were more likely to acquire their infection outside the home with 45% (14 cases) part of community clusters in the six-week period. Cases likely acquired outside the home occurred at a range of locations including restaurants, schools, places of worship and at social gatherings in residential homes. Parents were typically the source of infection for cases acquired within the home.

Young adults aged 18 to 29 years

The majority of young adults acquired their infection outside the home with just over a third of cases likely infected in a restaurant or pub (19 patrons and two staff) and 10 cases in social contacts of outbreak cases. The remaining community-acquired infections occurred in a gym (three cases), industrial workplaces (three cases), childcare centre (one case whose source was an adult colleague), on route to work on a farm (one case) and at a cathedral (one case). Of the 11 infections acquired at home, most were spread from adults aged over 40 years who were part of community clusters.

Adults aged 30 to 49 years

Approximately a third of cases aged 30 to 49 years likely acquired their infection in a restaurant or club (21 patrons and five staff, 30%). A further 19 cases (22%) were acquired at work, typically in industrial workplaces, while eight cases (9%) were likely acquired at religious gatherings. Inside the home, cases typically resulted from close contact with an infected adult of a similar age.

Adults aged 50 to 69 years

The settings of exposure for adults aged 50 to 59 years was similar to those aged 60 to 69 years with approximately a third of the infections acquired in the home (30 cases, 36%) and the remainder acquired in the community, most commonly at restaurants and clubs (23 cases, 28%) and religious gatherings (10 cases, 12%). Within the home, approximately half of the infections were likely spread from household members of a similar age while the other half were from younger adults.

Adults aged 70 years and over

Of the 11 cases aged 70 years and over, seven resulted from household contact with infected adults while two cases were restaurant attendees and two acquired their infection while attending a place of worship.