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## **COVID-19 Australia: Epidemiology Report 43**

Reporting period ending 6 June 2021

COVID-19 National Incident Room Surveillance Team

# Communicable Diseases Intelligence

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# COVID-19 Australia: Epidemiology Report 43

Reporting period ending 6 June 2021

COVID-19 National Incident Room Surveillance Team

## Summary

**Trends** – While Australia continues to report low numbers of COVID-19 cases overall, there has been an increasing trend in locally-acquired cases this fortnight. The daily average number of cases for this reporting period was nine compared to an average of five cases per day in the previous fortnight. There were 126 cases of COVID-19 this fortnight, bringing the cumulative case count since the start of the epidemic to 29,892.

**Local cases** – There were 78 locally-acquired cases reported in Australia this fortnight, representing 62% (78/126) of cases overall. Nearly all of these cases were from Victoria (77), with one case reported in Western Australia. All cases, except two from Victoria, had a known contact or cluster source at the end of this reporting period.

**Clusters and high risk settings** – All locally-acquired cases reported this fortnight in Victoria are due to a number of ongoing outbreaks in several settings. These outbreaks have been genomically linked to two overseas-acquired sources and two SARS-CoV-2 variants, the ‘Kappa’ and ‘Delta’ variants. The Kappa SARS-CoV-2 outbreaks are genomically linked to a case reported on 11 May 2021 in a person who acquired their infection in quarantine in South Australia and was detected in Victoria. Subsequent cases were reported in genomically-linked outbreaks from 24 May 2021. The Delta variant outbreak is genomically linked to an overseas-acquired case who tested positive in hotel quarantine in early May 2021. The locally-acquired case reported in Western Australia this fortnight was associated with a transmission event whilst in hotel quarantine.

**Overseas-acquired cases** – There were 46 overseas-acquired cases this reporting period, with the largest number of cases reported in New South Wales (43%; 20/46), followed by Victoria (30%; 14/46).

**Demographics** – Among cases notified in this calendar year, the notification rate has been higher among males than females in all age groups, except those aged 20–29 years and over 90 years.

**Vaccinations** – As at 6 June 2021, there have been 5,076,413 doses of COVID-19 vaccine administered in Australia.

Keywords: SARS-CoV-2; novel coronavirus; 2019-nCoV; coronavirus disease 2019; COVID-19; acute respiratory disease; epidemiology; Australia



This reporting period covers the last two weeks (24 May – 6 June 2021). The previous reporting period is the preceding two weeks (10–23 May 2021).<sup>1</sup> As Australia continues to experience low numbers of COVID-19 cases, this report has transitioned to a brief update on case numbers each fortnight and a more detailed analysis every four weeks. Acute respiratory illness, severity, testing, public health response measures, virology and the international situation are reported in detail on a four-weekly basis and are not included in this report. The latest information on these topics can be found in Epidemiology Report 42,<sup>1</sup> state and territory health websites,<sup>i</sup> the World Health Organization’s weekly situation reports<sup>ii</sup>, and the Department of Health’s current situation and case numbers webpage.<sup>iii</sup>

- i <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert#local-outbreak-information>.
- ii <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>.
- iii <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers>.

These reports focus on the epidemiological situation in Australia since the beginning of this year, 2021. Readers are encouraged to consult prior reports for information on the epidemiology of cases in Australia in 2020.

## Background and data sources

See the Technical Supplement for information on coronavirus disease 19 (COVID-19) including modes of transmission, common symptoms and severity.<sup>2</sup>

## Activity

### COVID-19 trends (NNDSS)

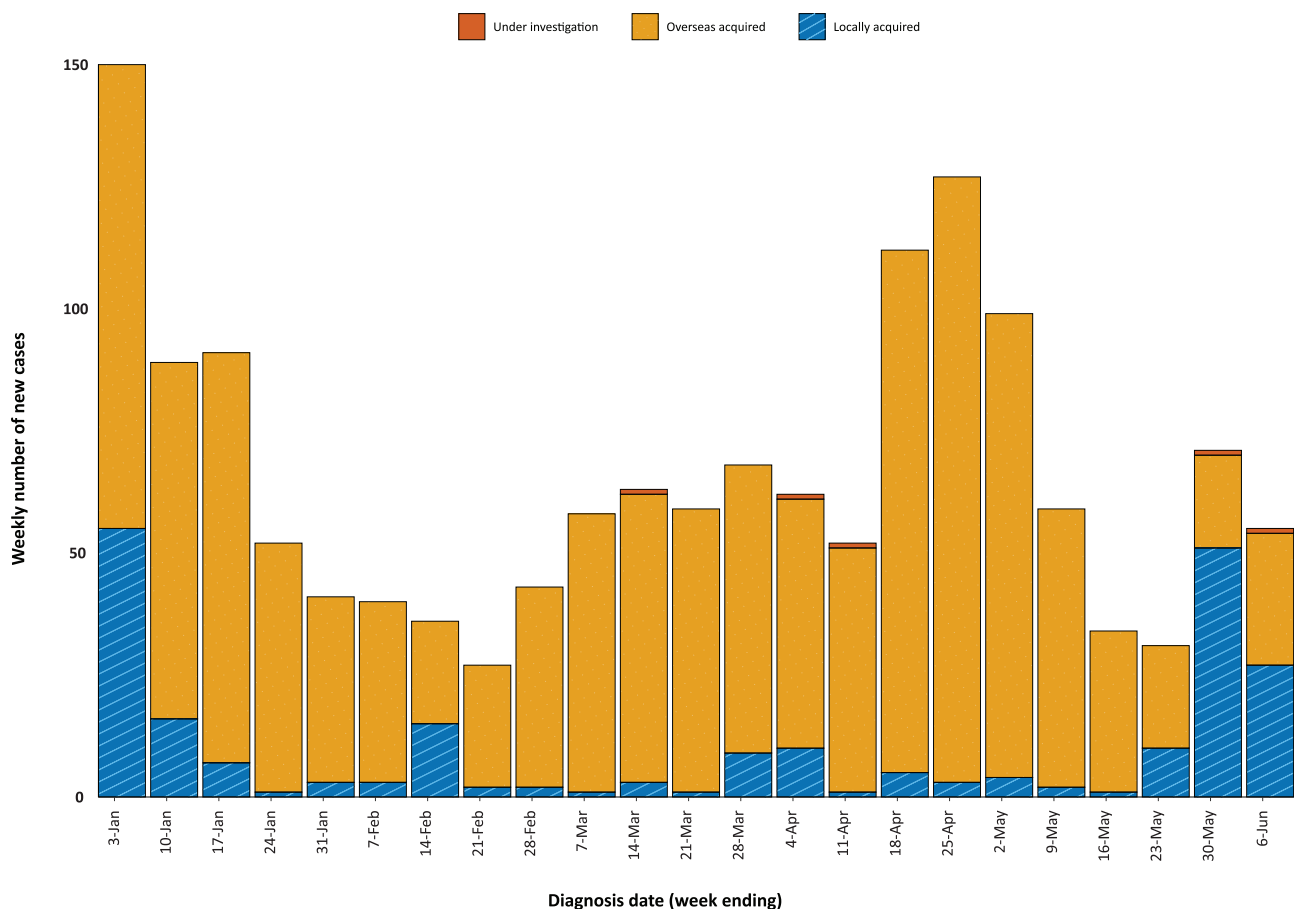
In this two-week reporting period, from 24 May to 6 June 2021, there were 126 cases reported. On average, nine cases were diagnosed each day over this reporting period, representing an increase compared to the previous reporting period when an average of five cases were diagnosed each day. The largest number of cases diagnosed this fortnight was from Victoria (73%; 92/126), followed by New South Wales (16%; 20/126) (Table 1).

**Table 1: COVID-19 notifications by jurisdiction and source of acquisition, with a diagnosis date from 24 May to 6 June 2021<sup>a</sup>**

Source	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Australia
Overseas	0	20	2	6	4	0	14	0	46
Local	0	0	0	0	0	0	77	1	78
<i>source known</i>	0	0	0	0	0	0	75	1	76
<i>source unknown</i>	0	0	0	0	0	0	2	0	2
<i>interstate, source known</i>	0	0	0	0	0	0	0	0	0
<i>interstate, source unknown</i>	0	0	0	0	0	0	0	0	0
<i>investigation ongoing</i>	0	0	0	0	0	0	0	0	0
Under initial investigation	0	0	0	1	0	0	1	0	2
Missing source of acquisition	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>20</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>92</b>	<b>1</b>	<b>126</b>

a Source: National Notifiable Diseases Surveillance System (NNDSS), extract from 8 June 2021 for notifications up to 6 June 2021.

**Figure 1: COVID-19 notified cases by source of acquisition and diagnosis date, 28 December 2020 – 6 June 2021<sup>a</sup>**



<sup>a</sup> Source: NNDSS, extract from 8 June 2021 for notifications up to 6 June 2021.

In the year to date, from 1 January 2021 to the end of this reporting period, 6 June 2021, there have been 1,426 COVID-19 cases reported nationally. Cases notified weekly have remained low this year, ranging from approximately 30 to 125 cases per week (Figure 1). This is in contrast to the two distinct peaks in March 2020 and July 2020, with weekly notifications reaching approximately 2,700 and 3,000, respectively (Figure 2).

Cumulatively since the beginning of the epidemic in Australia, there have been 29,892 COVID-19 cases reported nationally (Figure 2).

### Source of acquisition (NNDSS)

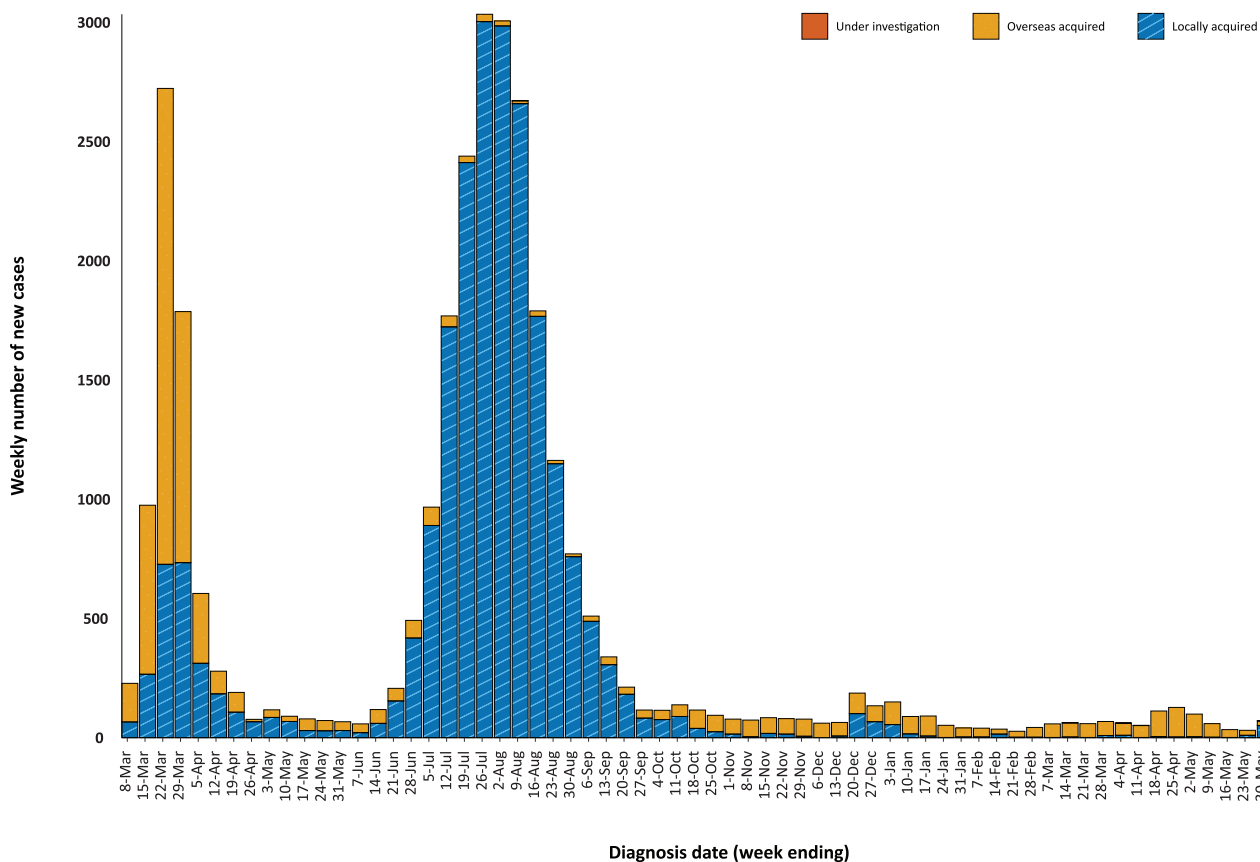
In this reporting period, the majority of cases were reported as locally acquired (62%; 78/126), with nearly all of these cases from Victoria (77),

and one case reported in Western Australia. All locally-acquired cases reported this fortnight, except two from Victoria, had a known contact or cluster source at the end of this reporting period. At the end of this reporting period, two cases were classified as under initial investigation: one from Queensland and one from Victoria (Table 1).

There were 46 overseas-acquired cases reported in this reporting period, with the majority of cases reported in New South Wales (43%; 20/46), followed by Victoria (30%; 14/46).

Of overseas-acquired cases that reported a country of acquisition, the largest number in this reporting period were from India (24%; 9/37). The country of acquisition was reported as unknown for 20 percent of overseas-acquired cases (9/46). The number of cases by country is influenced by travel patterns of returning

**Figure 2: Cumulative COVID-19 notified cases by source of acquisition and diagnosis date, 2 March 2020 – 6 June 2021<sup>a</sup>**



a Source: NNDSS, extract from 8 June 2021 for notifications up to 6 June 2021.

Australians, by restrictions on travel enforced by the Australian government, and also by the prevalence of COVID-19 in the country the person arrived from.

For 2021 to date, Victoria has the highest infection rate for locally-acquired cases with 1.85 infections per 100,000 population (Table 2). At the end of this reporting period, there had been zero days since the last locally-acquired case of known source and eight days since the last locally-acquired case of unknown source (Table 3).

### Demographic features (NNDSS)

In this reporting period, the largest number of cases occurred in those aged 30 to 39 years (29%; 37/126 cases). For notifications this year, the highest rate of infection is in those aged 30

to 39 years, with a rate of 10.5 infections per 100,000 population (Figure 3; Appendix A, Table A.1). Adults over 80 years of age have the lowest rate of infection this year.

Focusing on cases in this year only, the notification rate is higher in males than females in all age groups except those 20 to 29 years old and 90 and over (Figure 3). The largest difference in rates this year is in the 40 to 49 years age group, where the cumulative rate among males is 10.5 cases per 100,000 population and among females is 4.1 cases per 100,000 population (Appendix A, Table A.1). The median age of cases in this reporting period is 33 years (range: 1 to 99).

**Table 2: Locally-acquired COVID-19 case numbers and rates per 100,000 population by jurisdiction and reporting period, Australia, with a diagnosis date from 1 January to 6 June 2021<sup>a</sup>**

Jurisdiction	Reporting period 24 May – 6 June 2021	Reporting period 10–23 May 2021	Cases this year 1 January 2021 – 6 June 2021	
	Number of cases <sup>b</sup>	Number of cases <sup>b</sup>	Number of cases <sup>b</sup>	Rate per 100,000 population <sup>c</sup>
ACT	0	0	0	—
NSW	0	0	36	0.44
NT	0	0	0	—
Qld	0	0	25	0.48
SA	0	0	0	—
Tas.	0	0	0	—
Vic.	77	11 <sup>d</sup>	124	1.85
WA	1	0	9	0.34
<b>Australia</b>	<b>78</b>	<b>11<sup>d</sup></b>	<b>194</b>	<b>0.76</b>

a Source: NNDSS, extract from 8 June 2021 for notifications up to 6 June 2021.

b This total does not include cases that are under initial investigation.

c Population data based on Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at June 2020.

d Eleven locally-acquired cases are now identified for the reporting period 10 – 23 May, despite no locally-acquired cases reported in Epidemiology Report 42 covering this period.<sup>1</sup> This is due to the fact that a case's diagnosis date, which is the most epidemiologically-relevant date in terms of describing infection risk, can be several days prior to the date of its notification.

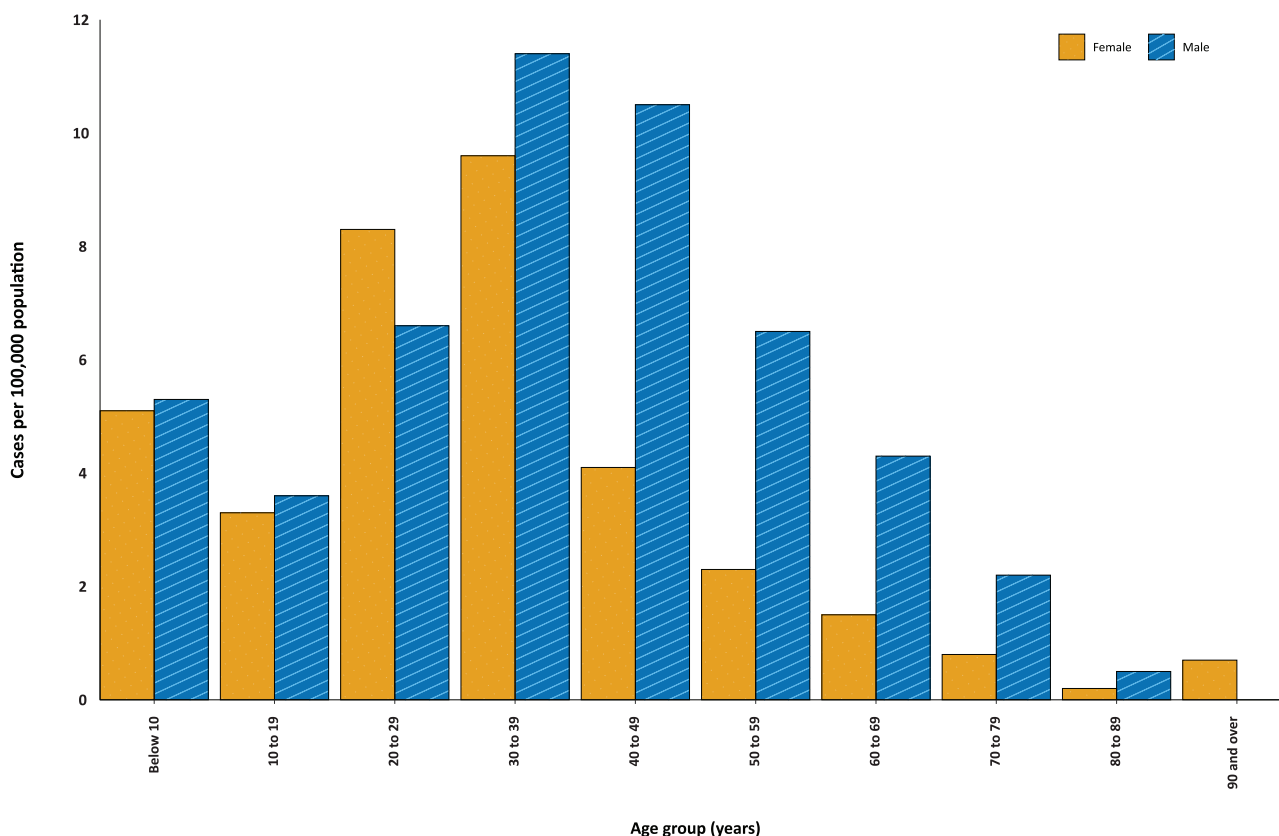
**Table 3: Days since last locally-acquired COVID-19 case (source unknown and source known), by jurisdiction and diagnosis date, 6 June 2021<sup>a</sup>**

Jurisdiction	Locally acquired — source unknown		Locally acquired — source known	
	Date of last case	Days since last case	Date of last case	Days since last case
ACT	21 March 2020	442	7 July 2020	334
NSW	2 May 2021	35	5 May 2021	32
NT	NA <sup>b</sup>	NA <sup>b</sup>	3 April 2020	429
Qld	23 August 2020	287	3 April 2021	64
SA	24 March 2020	439	27 November 2020	191
Tas.	9 August 2020	301	24 April 2020	408
Vic.	29 May 2021	8	6 June 2021	0
WA	3 April 2020	429	29 May 2021	8

a Source: NNDSS, extract from 8 June 2021 for notifications up to 6 June 2021.

b NA: not applicable. The Northern Territory has not reported any locally-acquired cases with an unknown source of infection.

**Figure 3: Cumulative COVID-19 cases for the calendar year to date, by age group and sex, Australia, 1 January 2021 to 6 June 2021<sup>a</sup>**



<sup>a</sup> Source: NNDSS, extract from 8 June 2021 for notifications up to 6 June 2021.

### Aboriginal and Torres Strait Islander persons (NNDSS)

There have been five confirmed cases of COVID-19 notified in Aboriginal and Torres Strait Islander people since the beginning of 2021. No new Aboriginal and Torres Strait Islander cases were notified with a diagnosis date within this reporting period. Overall, Aboriginal and Torres Strait Islander people represent 0.4% (5/1,383) of all confirmed cases with Indigenous status known this year. The Indigenous status is unknown for 2.7% (38/1,426) of all cases reported this year. The majority of cases in Aboriginal and Torres Strait Islander people in 2021 have been overseas-acquired (80%; 4/5). The age range of COVID-19 cases in Aboriginal and Torres Strait Islander people in 2021 is 20 to 65 years.

### Clusters and high risk settings

There were 77 locally-acquired cases in Victoria with a diagnosis date in this reporting period, and 11 cases in the previous reporting period, from 10 to 23 May 2021 (Table 2). Of the locally-acquired cases in Victoria in this reporting period, 75 had a known contact or cluster (Table 1).

In Victoria, all locally-acquired cases diagnosed this fortnight are due to a number of ongoing outbreaks in several settings, including the Whittlesea community outbreak, Port Melbourne workplace outbreak, an aged care facility outbreak, and the West Melbourne outbreak.

The source of infection for cases in the Victorian outbreaks, except the West Melbourne outbreak, is the ‘Kappa’ variant (B.1.617.1).



Genomic evidence has linked these ‘Kappa’ cases to a returned traveller (the Wollert case) who was notified on 11 May 2021 and had acquired their infection in hotel quarantine in South Australia before returning to Victoria and developing symptoms. The first cases in the current genomically-linked outbreaks were reported on 24 May 2021, with the onset of illness and diagnosis date for several cases prior to this. Investigations into the epidemiological link between the Wollert case and these current outbreaks are ongoing.

The West Melbourne outbreak, which is linked to the ‘Delta’ variant (B.1.617.2), has been genomically matched to a returned traveller who tested positive in hotel quarantine in Victoria in early May 2021. The first cases in this outbreak were reported on 2 June 2021. The epidemiological links between the traveller and cases in the current outbreak are under investigation.

In the reporting period, one locally-acquired case who acquired their infection whilst in hotel

quarantine was reported in Western Australia. This case was confirmed through genomic sequencing and linked to a guest/case who was quarantining in an adjacent room.

## Vaccinations

(Department of Health)

As of 6 June 2021, a total of 5,076,413 doses of COVID-19 vaccine have been administered (Table 4), including 375,533 doses provided to aged care and disability residents.

## Acknowledgements

We thank public health staff from incident emergency operations centres and public health units in state and territory health departments, and the Australian Government Department of Health, along with state and territory public health laboratories.

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**Table 4: Total number of vaccinations administered, by jurisdiction, Australia, 6 June 2021<sup>a</sup>**

Jurisdiction	Total number of doses administered
ACT	55,787
NSW	499,725
NT	38,768
Qld	283,768
SA	126,358
Tas.	76,363
Vic.	650,878
WA	191,384
Aged care and disability facilities <sup>b</sup>	375,533
Primary care <sup>c</sup>	2,777,849
<b>Total</b>	<b>5,076,413</b>

a Source: Australian Government Department of Health website.<sup>3</sup>

b Commonwealth vaccine doses administered in aged care and disability facilities.

c Commonwealth vaccine doses administered in primary care settings.

## References

1. COVID-19 National Incident Room Surveillance Team. COVID-19 Australia: Epidemiology Report 42: Fortnightly reporting period ending 23 May 2021. *Commun Dis Intell (2018)*. 2021;45. doi: <https://doi.org/10.33321/cdi.2021.45.30>.
2. COVID-19 National Incident Room Surveillance Team. Technical supplement: COVID-19 Australia: epidemiology reporting. *Commun Dis Intell (2018)*. 2021;45. doi: <https://doi.org/10.33321/cdi.2021.45.2>.
3. Australian Government Department of Health. Getting vaccinated for COVID-19: Australia's vaccine rollout. [Internet.] Canberra: Australian Government Department of Health; 2021. [Accessed on 13 April 2021.] Available from: <https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/getting-vaccinated-for-covid-19#austalias-vaccine-rollout>.

## Appendix A: Supplementary figures and tables

**Table A.1: COVID-19 case notifications and rates per 100,000 population, by age group and sex, Australia, 6 June 2021<sup>a,b</sup>**

Age group	This reporting period 24 May – 6 June 2021						This year only <sup>c</sup> 1 January 2021 – 6 June 2021					
	Cases			Rate per 100,000 population			Cases			Rate per 100,000 population		
	Male	Female	People	Male	Female	People	Male	Female	People	Male	Female	People
0 to 9	12	3	15	0.7	0.2	0.5	87	79	166	5.3	5.1	5.2
10 to 19	4	8	12	0.3	0.5	0.4	57	50	107	3.6	3.3	3.5
20 to 29	13	11	24	0.7	0.6	0.7	122	148	270	6.6	8.3	7.5
30 to 39	16	21	37	0.9	1.1	1.0	212	182	394	11.4	9.6	10.5
40 to 49	12	7	19	0.7	0.4	0.6	171	69	240	10.5	4.1	7.3
50 to 59	7	1	8	0.5	0.1	0.3	99	37	136	6.5	2.3	4.4
60 to 69	3	3	6	0.2	0.2	0.2	56	21	77	4.3	1.5	2.9
70 to 79	2	1	3	0.2	0.1	0.2	20	8	28	2.2	0.8	1.5
80 to 89	1	0	1	0.3	0.0	0.1	2	1	3	0.5	0.2	0.4
90 and over	0	1	1	0.0	0.7	0.5	0	1	1	0.0	0.7	0.5

<sup>a</sup> Source: NNDS, extract from 8 June 2021 for notifications up to 6 June 2021.

<sup>b</sup> Population data based on Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at June 2020.

<sup>c</sup> Note the change to focus on rates in this year only. For cumulative rates since the beginning of the epidemic in Australia, readers are encouraged to consult previous reports.