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COVID-19 Australia: Epidemiology Report 49

Reporting period ending 29 August 2021

COVID-19 National Incident Room Surveillance Team

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Surveillance summary

COVID-19 Australia: Epidemiology Report 49

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Summary

Trends – There has been an ongoing increase in the weekly number of new cases of COVID-19 since mid-June 2021. The daily average of 947 cases for this reporting period was more than 2.5 times the previous fortnight's daily average of 348 cases. There were 13,252 cases of COVID-19 reported this fortnight, bringing the 2021 cumulative case count to 23,935.

Local cases – There were 13,066 locally-acquired cases reported in Australia this fortnight, representing 99% (13,066/13,252) of cases overall. The majority of locally-acquired cases this fortnight were reported in New South Wales (92%; 12,032/13,066), followed by Victoria (6%; 793/13,066).

Clusters and high-risk settings – The size of the Sydney Metropolitan Outbreak in New South Wales continued to increase during the reporting period. As at 29 August 2021, there had been 20,096 locally-acquired cases in New South Wales, including 91 deaths, reported following notification of the first case on 16 June 2021. Genomic testing results showed that this case was infected with the 'Delta' SARS-CoV-2 variant of concern (B.1.617.2). Several cases in other states were also linked to this cluster. Whilst the outbreak started in south-east Sydney, the largest proportion of recently-reported cases continued to be among residents of south-western and western Sydney, with cases also reported in residents of regional and remote areas in New South Wales, particularly in western New South Wales. Locally-acquired cases reported in Victoria were linked to cases first reported on 5 August 2021. As at 29 August 2021, there were 1,037 cases associated with the Victorian outbreaks, which involved the Delta variant and were closely associated with the current New South Wales and recent July 2021 Victoria outbreaks. The exact source of infection for these outbreaks remained under investigation at the end of this reporting period. Most cases in the Victorian outbreaks were in Greater Melbourne. However, cases had also been reported in Shepparton in regional Victoria. The size of the outbreak in the Australian Capital Territory continued to increase during this reporting period. The first case in this outbreak was reported on 12 August 2021 and was confirmed to have the Delta variant. The source of infection remained under investigation at the end of this reporting period, though it was genomically linked to the Sydney Metropolitan Outbreak. As at 29 August 2021, a total of 261 cases had been reported as part of this outbreak. In Queensland, all three locally acquired cases notified during the reporting period were part of an outbreak that was genomically linked to returned travellers with the Delta variant, with the first case reported on 30 July 2021. As at 29 August 2021, a total of 148 cases were linked to this outbreak.

Aboriginal and Torres Strait Islander persons – During the reporting period, 577 new Aboriginal and Torres Strait Islander cases were notified, of which 575 were locally acquired from New South Wales and two were locally acquired from the Australian Capital Territory. The first COVID-19-associated death in an Aboriginal and Torres Strait Islander person was also reported during the reporting period and was associated with the western New South Wales regional outbreak. In 2021 to date, there were 743 cases and one death reported among Aboriginal and Torres Strait Islander people.

Overseas cases – There were 85 overseas-acquired cases this reporting period, with the largest number of cases reported in New South Wales (41%; 35/85), followed by Western Australia (29%; 25/85) and Queensland (19%; 16/85).

Severity – In 2021, based on data from selected jurisdictions with reliable and complete hospitalisation data, 11% (1,386/12,269) of cases with an illness onset up to 16 August 2021 were hospitalised, 3% (309/12,269) required intensive care and 1% (87/12,269) died. Given the delay between illness onset and severe illness, cases with an onset in the last two weeks were excluded from the analysis on severity. In 2021, the case fatality rate for the year to date was less than 1% (97/23,935) with 37 new COVID-19-associated deaths notified during this reporting period.

Vaccinations – As at 29 August 2021, there had been 19,085,741 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 two-week period 16–29 August 2021, with data for this period compared to that from the previous two-week reporting period (2–15 August 2021).¹ The focus of this report is on the epidemiological situation in Australia since the beginning of 2021. Readers are encouraged to consult prior reports in this series for information on the epidemiology of cases in Australia in 2020.

Acute respiratory illness, 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 48,¹ state and territory health websites,ⁱ the World Health Organization's weekly situation reports,ⁱⁱ and the Department of Health's current situation and case numbers webpage.ⁱⁱⁱ

From report 46 onward, and unless otherwise specified, tabulated data and data within the text are extracted from the National Interoperable Notifiable Diseases Surveillance System (NINDSS)^{iv} based on 'notification received date' rather than 'diagnosis date' (see the Technical Supplement for definitions).² As a case's diagnosis date can be several days prior to the date of its notification, there is potential for newly-notified cases to be excluded from the case count in the current reporting period when reporting by 'diagnosis date'. Using 'notification received date' ensures that the case count for the

i https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert#local-outbreak-information.

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-currentsituation-and-case-numbers.

iv Previously known as the National Notifiable DiseasesSurveillance System (NNDSS).

reporting period better reflects the number of newly-notified cases. As the graphs presented in this report, based on NINDSS data, reflect a larger time period (i.e. year to date and entire pandemic), these will continue to be based on diagnosis date to enable a more accurate understanding of infection risk and local transmission.

Background and data sources

See the Technical Supplement for general information on COVID-19 including modes of transmission, common symptoms and severity.²

Activity

COVID-19 trends (NINDSS and jurisdictional reporting to NIR)

This fortnight, there were more than double the number of cases reported in the previous fortnight. A total of 13,252 cases had a notification received date within this two-week reporting period (an average of 947 cases per day), compared to 4,877 cases (an average of 348 cases per day) in the previous reporting period. The majority of cases reported in the last 14 days occurred in New South Wales (91%; 12,103/13,252), followed by Victoria (7%; 862/13,252). Tasmania was the only jurisdiction to not report any cases during the reporting period (Table 1).

In the year to date, from 1 January 2021 to 29 August 2021, there have been 23,935 COVID-19 cases reported nationally. Until the week ending 20 June 2021, the number of weekly cases diagnosed this year had been below 180 cases per week. Since then, there has been a continuing increase in new cases (Figure 1), with each week in the latest fortnight exceeding 5,000 cases per week. The number of cases in each week of the current reporting period exceeded the two distinct peaks experienced in March and July of 2020, when the number of weekly cases diagnosed reached approximately 2,700 and 3,000 respectively (Figure 2). Cumulatively, since the beginning of the epidemic in Australia, there have been 52,345 COVID-19 cases reported in Australia.

Source of acquisition (NINDSS)

In this reporting period, 99% of cases notified (13,066/13,252) were locally acquired and 1% (85/13,252) were overseas acquired. At the end of the reporting period, there were 100 cases under initial investigation, 63 from Victoria, 35 from New South Wales and two from Queensland (Table 1).

New South Wales reported the majority of locally-acquired cases (92%; 12,032/13,066) in this fortnight, followed by Victoria (6%; 793/13,066). In the reporting period, 38% (4,971/13,066) of locally-acquired cases had a known contact or link to a cluster, and 125 cases (64 in New South Wales, 42 in Victoria and 19 in the Australian Capital Territory) had an unknown source. At the end of the reporting period, the source of infection was under ongoing investigation for 7,970 cases from New South Wales.

For 2021 to date, New South Wales had the highest infection rate for locally-acquired cases with 246.9 infections per 100,000 population, followed by the Australian Capital Territory with a rate of 60.5 infections per 100,000 population (Table 2). Based on cases notified up to 29 August 2021, Tasmania reported that it had been more than a year since the last locallyacquired case (Table 3).

In the reporting period, New South Wales reported the largest number of cases (41%; 35/85) that were overseas acquired, followed by Western Australia (29%; 25/85) and Queensland (19%; 16/85). In the past 28 days (2 to 29 August 2021), 49% (65/134) of overseas-acquired cases reported an unknown country of acquisition. Cases acquired at sea (58%; 40/69) were the most frequent of those with an identified country of acquisition in the past 28 days, followed by cases from the Philippines (9%; 6/69)

Source ^b	АСТ	NSW	NT	Qld	SA	Tas.	Vic.	WA	Australia
Overseas	0	35	2	16	1	0	6	25	85
Local	238	12,032	0	3	0	0	793	0	13,066
source known	219	3,994	0	3	0	0	751	0	4,967
source unknown	18	64	0	0	0	0	42	0	124
interstate, source known	0	4	0	0	0	0	0	0	4
interstate, source unknown	1	0	0	0	0	0	0	0	1
investigation ongoing	0	7,970	0	0	0	0	0	0	7,970
Under initial investigation	0	35	0	2	0	0	63	0	100
Missing source of acquisition	0	1	0	0	0	0	0	0	1
Total	238	12,103	2	21	1	0	862	25	13,252

Table 1: COVID-19 notifications by jurisdiction and source of acquisition, with a notification received date of 16–29 August 2021^a

a Source: NINDSS extract from 31 August 2021 for notifications to 29 August 2021.

b ACT: Australian Capital Territory; NSW: New South Wales; NT: Northern Territory; Qld: Queensland; SA: South Australia; Tas.: Tasmania; Vic.: Victoria; WA: Western Australia.

and Sri Lanka (6%; 4/69). The number of cases acquired in different countries is influenced by travel patterns of returning Australians, travel restrictions, and the prevalence of COVID-19 in the country of travel.

Demographic features (NINDSS)

In this reporting period, the largest proportion of cases occurred in those aged 20 to 29 years (24%; 3,124/13,252). For this year, the highest rate of infection was in those aged 20 to 29 years with a rate of 148.9 infections per 100,000 population (Figure 3; Appendix A, Table A.1). Adults aged 70 to 79 years had the lowest rate of infection this year.

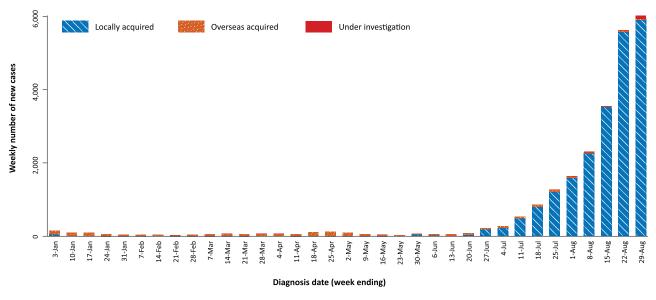
In 2021, notification rates were higher in males than in females for all age groups except those aged 0 to 19. Rates were similar among males and females aged 0 to 9 and higher in females than males for cases aged 10 to 19 (Figure 3). The largest proportional difference by sex, in rates this year, was in the 70 to 79 years age group, where the cumulative rate among males was 31.0 cases per 100,000 population and among females was 21.8 cases per 100,000 population (Appendix A, Table A.1). The median age of cases in this reporting period was 27 years (range: 0 to 103 years; interquartile range, IQR: 17 to 42 years).

Aboriginal and Torres Strait Islander persons (NINDSS)

Since the beginning of 2021, there have been 743 confirmed cases of COVID-19 notified in Aboriginal and Torres Strait Islander people, representing 3.1% of all confirmed cases (743/23,935) this year. During the reporting period, 577 new Aboriginal and Torres Strait Islander cases were notified, of which 575 were locally acquired from New South Wales and 2 were locally acquired from the Australian Capital Territory. The first COVID-19associated death in an Aboriginal and Torres Strait Islander person was notified during the reporting period and was associated with the western New South Wales regional outbreak.

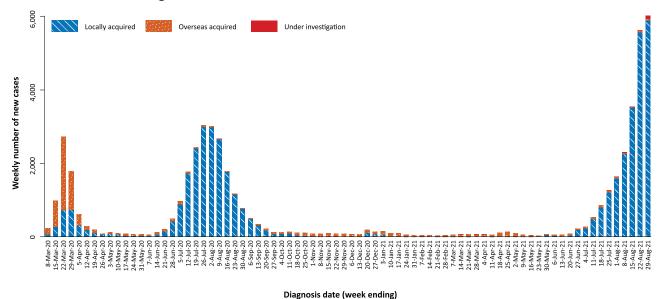
As at 29 August 2021, it had been 0 days since the last locally-acquired Aboriginal and Torres Strait Islander case was diagnosed and 43 days since the last overseas-acquired Aboriginal and Torres Strait Islander case was diagnosed.

Figure 1: COVID-19 notified cases by source of acquisition and diagnosis date, 28 December 2020 – 29 August 2021^a



a Source: NINDSS, extract from 31 August 2021 for notifications to 29 August 2021.

Figure 2: COVID-19 notified cases by source of acquisition and diagnosis date, 2 March 2020 – 29 August 2021^a



a Source: NINDSS, extract from 31 August 2021 for notifications to 29 August 2021.

Table 2: Locally-acquired COVID-19 case numbers and rates per 100,000 population by jurisdiction and reporting period, Australia, with a notification received date from 1 January to 29 August 2021^a

Jurisdiction	Reporting period 16–29 August 2021	Reporting period 2–15 August 2021	Cases thi 1 January – 29 <i>I</i>	
Junsaiction	Number of cases ^ь	Number of cases ^₅	Number of cases ^b	Rate per 100,000 population ^c
ACT	238	23	261	60.5
NSW	12,032	4,453	20,163	246.9
NT	0	1	11	4.5
Qld	3	102	213	4.1
SA	0	1	28	1.6
Tas.	0	1	1	0.2
Vic.	793	215	1,378	20.6
WA	0	1	16	0.6
Australia	13,066	4,797	22,071	85.9

a Source: NINDSS, data extract from 31 August 2021 for notifications to 29 August 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.

Table 3: Days since last locally-acquired COVID-19 case (source unknown and source known), by jurisdiction and diagnosis date, 29 August 2021^a

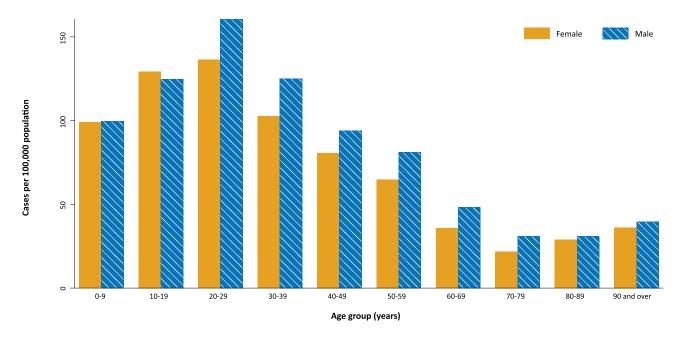
Jurisdiction	Locally acquired —	- source unknown ^b	Locally acquired	— source known ^ь
Jurisalction	Date of last case	Days since last case	Date of last case	Days since last case
ACT	27 August 2021	2	28 August 2021	1
NSW	29 August 2021	0	29 August 2021	0
NT	NAc	NAc	6 July 2021	54
Qld	6 August 2021	23	27 August 2021	2
SA	24 March 2020	523	3 August 2021	26
Tas.	9 August 2020	385	24 April 2020	492
Vic.	26 August 2021	3	29 August 2021	0
WA	3 April 2020	513	2 August 2021	27

a Source: NINDSS, extract from 31 August 2021 for notifications to 29 August 2021.

b This does not include locally-acquired cases that were interstate acquired.

c 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, with a diagnosis date of 1 January 2021 – 29 August 2021^a



a Source: NINDSS, extract from 31 August 2021 for notifications to 29 August 2021.

The majority of Aboriginal and Torres Strait Islander cases in 2021 have been reported as locally acquired (99%; 737/743), with five cases overseas acquired. The median age of all Aboriginal and Torres Strait Islander cases this year was 22 years old (range: 0 to 79 years; IQR: 12 to 37 years) with a higher proportion of cases among females (53%; 393/743) than among males (47%; 349/743).

Vaccinations (Department of Health)

As of 1 August 2021, a total of 19,085,741 doses of COVID-19 vaccine had been administered (Table 4), including 764,981 doses provided to aged care and disability residents.

Clusters and outbreaks

Sydney Metropolitan Outbreak

The size of the Sydney Metropolitan Outbreak in New South Wales continued to increase during the reporting period. Genomic testing results showed that the first case was infected with the Delta SARS-CoV-2 variant of concern (B.1.617.2); however, the sequence did not match cases from the Victorian Delta variant outbreak that occurred from May to June 2021. This sequence had not been seen in Australia previously, but matches one from the United States of America.

Whilst the outbreak started in south-east Sydney, the largest proportion of recently reported cases continued to be among residents of south-western and western Sydney, with cases also reported in residents of regional and remote areas in New South Wales, particularly in western New South Wales. The first cases in the Western NSW regional outbreak were reported in Dubbo on 11 August 2021. As at 29 August 2021, there had been 559 cases from the Western New South Wales Local Health District, including one death, and 76 in the Far West New South Wales Local Health District.

In total, as at 29 August 2021, there had been 20,096 locally-acquired cases in New South Wales, including 91 deaths, reported following notification of the first case on 16 June 2021.

Table 4: Total number of vaccinations administered, by jurisdiction, Australia, 29 August 2021^a

Jurisdiction	Total number of doses administered
ACT	446,067
NSW	6,721,343
NT	208,029
Qld	3,410,142
SA	1,236,435
Tas.	443,001
Vic.	4,892,786
WA	1,727,938
Aged care and disability facilities ^b	764,981
Primary care ^c	10,320,608
Total	19, 085,741

a Source: Australian Government Department of Health website.³

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

c Commonwealth vaccine doses administered in primary care settings.

Victoria

As at 29 August 2021, there had been 1,037 locally-acquired cases been reported in Victoria since two unlinked cases were reported on 5 August 2021. Genomic testing determined these outbreaks were due to the Delta variant and were genomically closely associated with recent clusters in NSW and the previous two seeding events in Victoria from July 2021.

Most cases in the outbreak were in Greater Melbourne. However, on 20 August 2021, cases were reported in Shepparton in regional Victoria. As at 29 August 2021, there had been 99 cases reported in Shepparton.

Australian Capital Territory

The first case in this outbreak, which was the first locally acquired case in the Australian Capital Territory in over a year, was reported on 12 August 2021 and was confirmed to have the Delta variant. The source of infection remained under investigation at the end of this reporting period, though it was genomically linked to the Sydney Metropolitan Outbreak. As at 29 August 2021, a total of 261 cases had been reported as part of this outbreak.

Queensland

All locally-acquired cases reported in Queensland during the reporting period were part of an outbreak linked to a Brisbane high school (Indooroopilly cluster). The first case in this outbreak was reported on 30 July 2021. The outbreak was genomically linked to returned overseas travellers with the Delta variant. The epidemiological link remained under investigation at the end of this reporting period. The last reported case infectious in the community was reported on 6 August 2021 and all cases reported since then had been in quarantine for their infectious period. As at 29 August 2021, a total of 148 cases were linked to this outbreak.

Severity (NINDSS, SPRINT-SARI)

Hospitalisation and intensive care unit admission

Given the delay between illness onset and severe illness, cases with an onset in the last two weeks were excluded from the analysis on severity based on NINDSS data. In 2021, based on data from selected jurisdictions with reliable and complete hospitalisation data, 11% of cases with an onset up to 16 August 2021 (1,386/12,269) were hospitalised, 3% (309/12,269) required intensive care and 1% (87/12,269) died (Table 5). This was based on data from six states/territories with reliable data across both hospitalisation and intensive care unit (ICU) data fields in the NINDSS, and which did not routinely hospitalise cases for isolation purposes (Australian Capital Territory, New South Wales, South Australia, Tasmania, Victoria and Western Australia).

Table 5: COVID-19 cases by age group and highest level of illness severity, selected jurisdictions, 1 January 2021 – 16 August 2021^{a,b}

			Count			%	of cases	
Age group	Not	Hospitalised only	Ιርሀ	Died	Total	Hospitalised only	Ιርሀ	Died
5 1	severe	(not ICU or died)	(not died)	Died	cases	(not ICU or died)	(not died)	Died
0-9	1,437	51	1	0	1,489	3%	< 1%	0%
10-19	1,973	70	8	1	2,052	3%	< 1%	< 1%
20-29	2,424	229	31	1	2,685	9%	1%	< 1%
30-39	1,880	252	37	4	2,173	12%	2%	< 1%
40-49	1,225	222	45	3	1,495	15%	3%	< 1%
50-59	942	225	78	2	1,247	18%	6%	< 1%
60-69	426	135	57	9	627	22%	9%	1%
70-79	129	99	39	19	286	35%	14%	7%
80-89	42	75	13	34	164	46%	8%	21%
90+	8	28	0	14	50	56%	0%	28%
Age unknown	1	0	0	0	1	0%	0%	0%
Total	10,487	1,386	309	87	12,269	11%	3%	1%

a Source: NINDSS, extract from 31 August 2021, based on notification received date.

Data included from six jurisdictions with the most reliable data across both hospital and ICU data fields: Australian Capital Territory,
New South Wales, South Australia, Tasmania, Victoria and Western Australia. This is based on an assessment of data from SPRINT-SARI and NINDSS.

In the year to date to 29 August 2021, there were 471 COVID-19 cases admitted to ICUs participating in the sentinel surveillance system, Short Period Incidence Study of Severe Acute Respiratory Infection (SPRINT-SARI),⁴ with 168 of these admitted during this reporting period (16 – 29 August 2021).

Risk factors for severe disease

The hospitalisation rate for COVID-19 cases in the year to date has increased with advancing 10-year age bracket (Table 5).

Comorbidity data extracted from SPRINT-SARI reflect the sickest patients with COVID-19 managed in ICU; data are therefore not generalisable to all cases (Table 6). In patients admitted to ICU with COVID-19 since 1 February 2021, the most prevalent comorbidity was diabetes, following by obesity (a body mass index of > 30 or weight over 120 kg). Of those adult patients admitted to ICU this year for whom comorbidity data was known, 58% (214/366) had at least one comorbidity; 42% (152/366) of patients had none of the listed comorbidities recorded.

COVID-19 deaths

In the reporting fortnight, there were 37 deaths associated with COVID-19, all from New South Wales. The overall crude case fatality rate (CFR) since the start of the epidemic was 2% (Table 7). The ratio of deaths to cases in the year to date has decreased in comparison to this time last year, noting the difference in age distributions of those infected in 2021 versus 2020.

Table 6: Comorbidities for adult COVID-19 cases (aged greater than or equal to 18 years) amongst those admitted to ICU, Australia, 1 February 2021 – 29 August 2021^a

Comorbidity	ICU casesª (n = 465) (%)
Cardiac disease (n = 360)	37 (10)
Chronic respiratory condition (n = 359) $^{\rm b}$	44 (12)
Diabetes (n = 359)	102 (28)
Obesity (n = 338)	96 (28)
Chronic renal disease (n = 357)	18 (5)
Chronic neurological condition ($n = 358$)	9 (3)
Malignancy (n = 344)	14 (4)
Chronic liver disease (n = 358)	14 (4)
Immunosuppression (n = 357)	15 (4)
Number of specified comorbidities (n = 366) ^{c,d}	
One or more	214 (58)
Two or more	87 (24)
Three or more	30 (8)
No comorbidities	152 (42)

a Source: SPRINT-SARI. Only includes adult cases (≥ 18 years old) and excludes those with missing data on comorbidities or where comorbidity is unknown.

b Includes asthma.

c Includes chronic respiratory conditions, cardiac disease (excluding hypertension), immunosuppressive condition/therapy, diabetes, obesity, liver disease, renal disease and neurological disorder.

d Excludes cases where comorbidity data is missing or unknown for all comorbidities.

Table 7: Deaths associated with COVID-19 by reporting period, Australia, 1 January 2020 – 29 August 2021^a

Reporting period	Number of deaths ^b	CFR ^c
16 – 29 August 2021	37/13,252	< 1%
Year to date (2021) 1 January – 29 August 2021	97/23,935	< 1%
Year to date (2020) 1 January – 29 August 2020	854/22,925	4%
Epidemic to date 1 January 2020 – 29 August 2021	1,006/52,345	2%

a Source: NINDSS, extract from 31 August 2021, based on notification received date.

b Expressed as deaths/case numbers.

c CFR: Crude case fatality rate.

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References

- COVID-19 National Incident Room Surveillance Team. COVID-19 Australia: Epidemiology Report 48: Reporting period ending 15 August 2021. *Commun Dis Intell (2018)*. 2021;45. doi: https://doi.org/10.33321/ cdi.2021.45.48.
- 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 2 August 2021.] Available from: https://www.health.gov.au/ initiatives-and-programs/covid-19-vaccines/ getting-vaccinated-for-covid-19#australiasvaccine-rollout.
- 4. Australian and New Zealand Intensive Care Research Centre (ANZIC-RC). SPRINT-SARI: Short period incidence study of severe acute respiratory infection. [Internet.] Melbourne: Monash University; 2020. Available from: https://www.anzics.com.au/currentactive-endorsed-research/sprint-sari/.

Appendix A: Supplementary figures and tables

Table A.1: COVID-19 cases and rates per 100,000 population, by age group, sex and diagnosis date Australia, 29 August 2021^{a,b}

			This reporting period	ing period					This year ^c	rear ^c		
			16–29 August 2021	gust 2021				1 1	1 January 2021 – 29 August 2021	29 August 20	21	
Age group		Cases		Rate pe	r 100,000 population	ulation		Cases		Rate pe	Rate per 100,000 population	ulation
	Male	Female	People	Male	Female	People	Male	Female	People	Male	Female	People
0 to 9	0/6	897	1884	59.3	57.9	59.2	1628	1534	3191	99.5	99.1	100.2
10 to 19	1125	1107	2240	70.9	73.8	72.6	1979	1940	3930	124.8	129.3	127.3
20 to 29	1737	1381	3124	94.4	7.77	86.3	2954	2426	5389	160.5	136.4	148.9
30 to 39	1276	1060	2348	68.7	55.8	62.5	2323	1952	4292	125.1	102.7	114.2
40 to 49	827	723	1554	50.7	43.4	47.1	1533	1344	2884	94.0	80.7	87.5
50 to 59	615	541	1160	40.4	33.9	37.2	1237	1036	2281	81.2	64.8	73.1
60 to 69	297	257	557	22.7	18.5	20.7	633	496	1133	48.4	35.7	42.0
70 to 79	146	93	241	16.0	9.6	12.8	283	211	497	31.0	21.8	26.4
80 to 89	52	60	112	14.0	12.7	13.3	115	137	252	31.0	28.9	29.8
90 and over	11	20	31	15.0	14.5	14.7	29	50	79	39.6	36.2	37.4
a Source: NIN b Population c Note the ch	IDSS, extract froi data based on A ange to focus oi	m 31 August 202 ustralian Bureau n rates in this yea	Source: NINDSS, extract from 31 August 2021 for notifications up to 29 August 2021. Excludes cases where age or sex data is missing. Population data based on Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) as at June 2020. 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.	ns up to 29 Augu S) Estimated Res Ilative rates sinco	ıst 2021. Exclud∈ sident Population e the beginning	is cases where ac 1 (ERP) as at June of the epidemic	ge or sex data is 2 2020. in Australia, rea	missing. ders are encoura	ged to consult p	revious reports.		