



COVID-19 Weekly Surveillance Report

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Summary for the week 21 November to 27 November 2022 (inclusive)

In the week of 21 November to 27 November 2022 there were:

- 11,081 COVID-19 cases reported
 - 2,013 with positive polymerase chain reaction (PCR) tests
 - 9,068 with positive rapid antigen tests (RAT)
 - 2,023 were reinfections (see definition in Table 2)
- 69 new hospital admissions and 5 new admission directly into an intensive care unit
- 17 deaths reported, aged between 70 and 100 years old
- 9,517 COVID-19 PCR tests conducted

Surveillance summary

This week, **case numbers** increased by 17% compared to the previous week. Cases diagnosed by PCR increased by 18% and by RAT increased by 17%. **Reinfections** comprised 18% of total cases this week, compared with 16% last week.

There was a 4% decrease in **PCR tests** conducted compared to the previous week, with a 7-day average proportion of positive PCR tests of 21.9%.

The moving seven-day average **case rates** per 100,000 population increased in the Metropolitan, Wheatbelt, Pilbara and Kimberley regions. The seven-day average case rate for the Perth metropolitan area (65 cases/100,000 population) was approximately 78% higher than the Western Australia Country Health Service (WACHS) regions combined (36 cases/100,000 population).

The highest seven-day average **age-specific rates** were in the 50 - 69 years age group (73 cases/100,000 population), with the lowest rates in the 0 – 9 years age group (26 cases/100,000 population).

Nationally, the moving seven-day average case rates increased across all jurisdictions except Queensland, with South Australia having the highest rate (70 cases/100,000 population) and Northern Territory the lowest rate (19 cases/100,000 population).

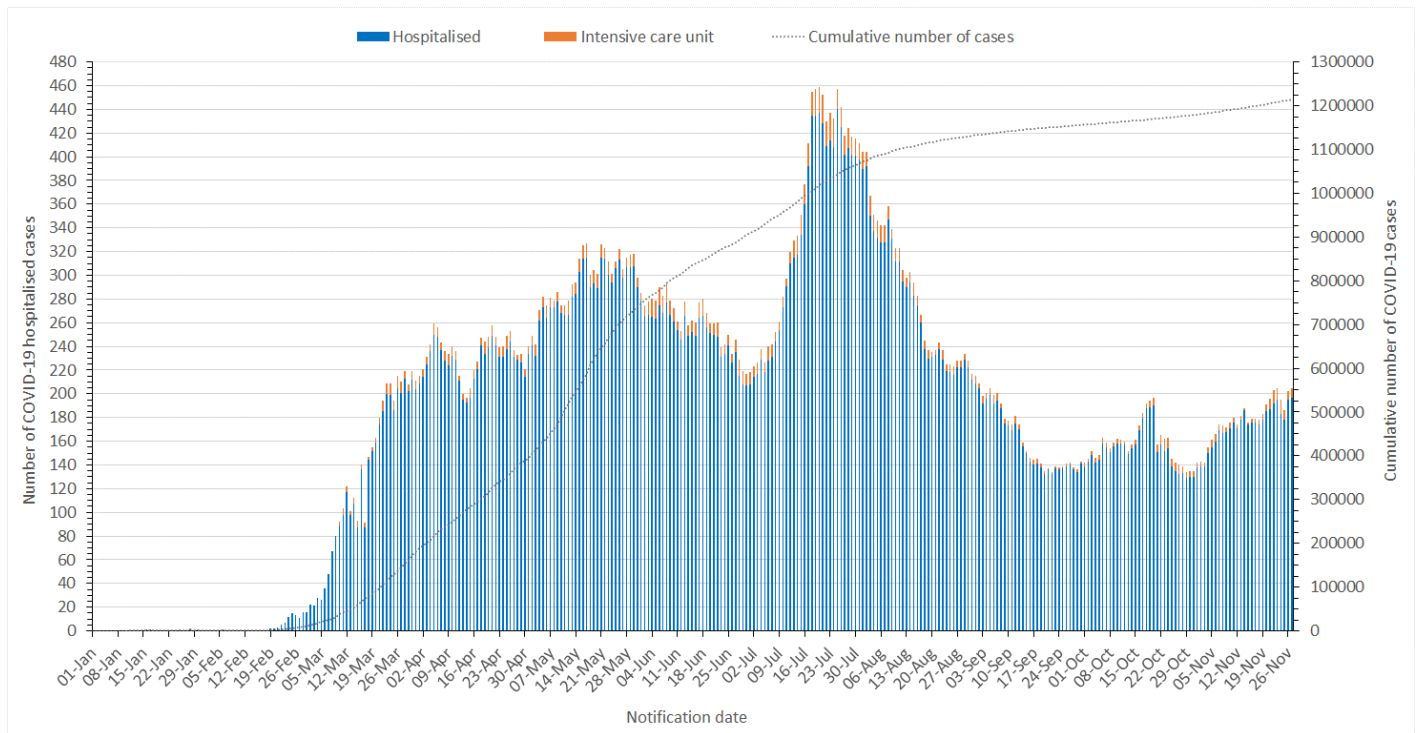
The 7-day average of **hospitalised cases** increased by 7% from 178 last week to 190 this week. **Intensive care unit cases** increased from 3 in the last reporting week to 9 this week. New hospital admissions related to COVID-19 decreased by 8% from 75 last week to 69 this week, and direct intensive care unit admissions increased from 1 last week to 5 this week.

Deaths increased by 21% this reporting week with 17 deaths compared to 14 last week.

This week, 256 cases were reported in the **Aboriginal population**, a 24% increase compared to last week. Case rates in the Aboriginal population are lower compared to the non-Aboriginal population, with the 7-day average rate ratio sitting at 0.57 this reporting week. No deaths were reported in the Aboriginal population this week.

Hospitalisations, intensive care unit (ICU) inpatients and deaths

Figure 1. Number of active and cleared COVID-19 cases currently in hospital or in ICU, and cumulative number of COVID-19 notifications by notification date, 01 January to 27 November 2022.



Notes

Data sourced from Western Australia Department of Health dataset

Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022

'Hospitalised' relates to active and cleared COVID-19 cases that are current hospital inpatients. The reason for admission may be unrelated to COVID-19 for some people

'Intensive care unit' (ICU) is a subset of hospitalised and relates to active/cleared COVID-19 cases that are currently in an ICU

The definition of COVID-19 related hospitalisation was updated on 21 October 2022 to exclude cases where more than 60 days have passed since their positive COVID-19 test. This new definition more accurately captures cases in whom COVID-19 may have contributed to their reason for ongoing hospitalisation. Data reported after 21 October cannot be compared directly to data recorded prior to that date.

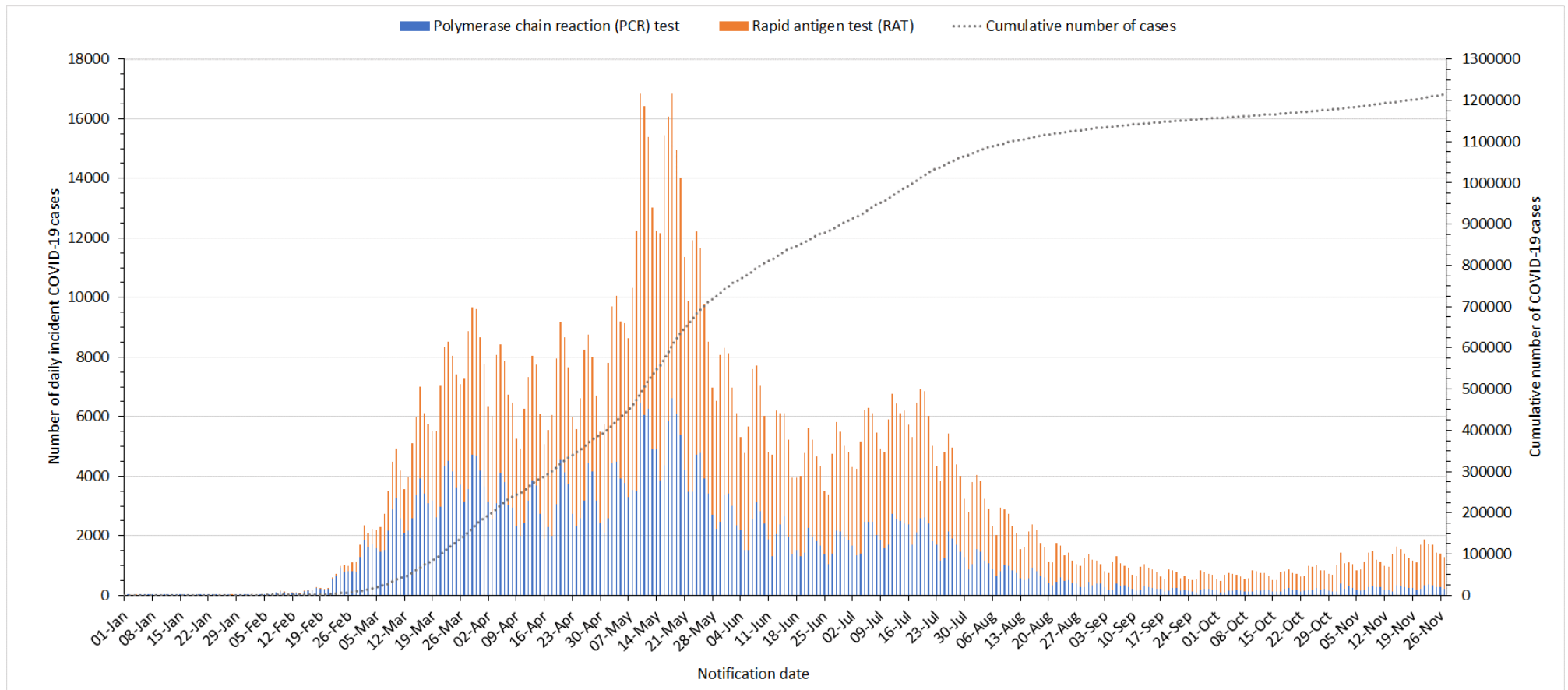
Table 1. Number of COVID-19 related deaths by vaccination status and age group, 21 November to 27 November 2022 and 01 January to 27 November 2022.

	Current report week	Year to date
	Week 21 Nov – 27 Nov 2022	01 Jan 2022 – 27 Nov 2022
Number of COVID-19 vaccine doses	Deaths (n= 17)	Deaths (n= 745)
0	1 (5.9%)	140 (18.8%)
1	0 (0%)	27 (3.6%)
2	2 (11.8%)	93 (12.5%)
3+	14 (82.3%)	485 (65.1%)
Age group (years)		
0-9	0 (0%)	0 (0%)
10-19	0 (0%)	2 (0.3%)
20-29	0 (0%)	1 (0.1%)
30-39	0 (0%)	4 (0.5%)
40-49	0 (0%)	9 (1.2%)
50-59	0 (0%)	27 (3.6%)
60-69	0 (0%)	54 (7.2%)
70-79	7 (41.2%)	137 (18.4%)
80-89	5 (29.4%)	282 (37.9%)
90+	5 (29.4%)	229 (30.8%)

Notes
 Data sourced from Western Australia Department of Health dataset
 Number of vaccination doses sourced from Australian Immunisation Register. Vaccination data are available for WA residents only, therefore, the number of unvaccinated individuals (0 doses) may be overestimated
 A high proportion of the WA population (16 years and above) is fully vaccinated against COVID-19 (as of 25th November 2022 – 84.0% for 3+ doses, >95% for 2 doses), therefore interpretation of people whom have died with both 3+ and 2 doses requires consideration within this context.
 Deaths are counted by notification date and may include historical deaths that occurred (i.e. date of death) prior to the current report week
 Deaths are not necessarily associated with hospital and/or ICU admissions.

Case data

Figure 2. COVID-19 cases by notification date and test type, Western Australia, 01 January to 27 November 2022.



Notes

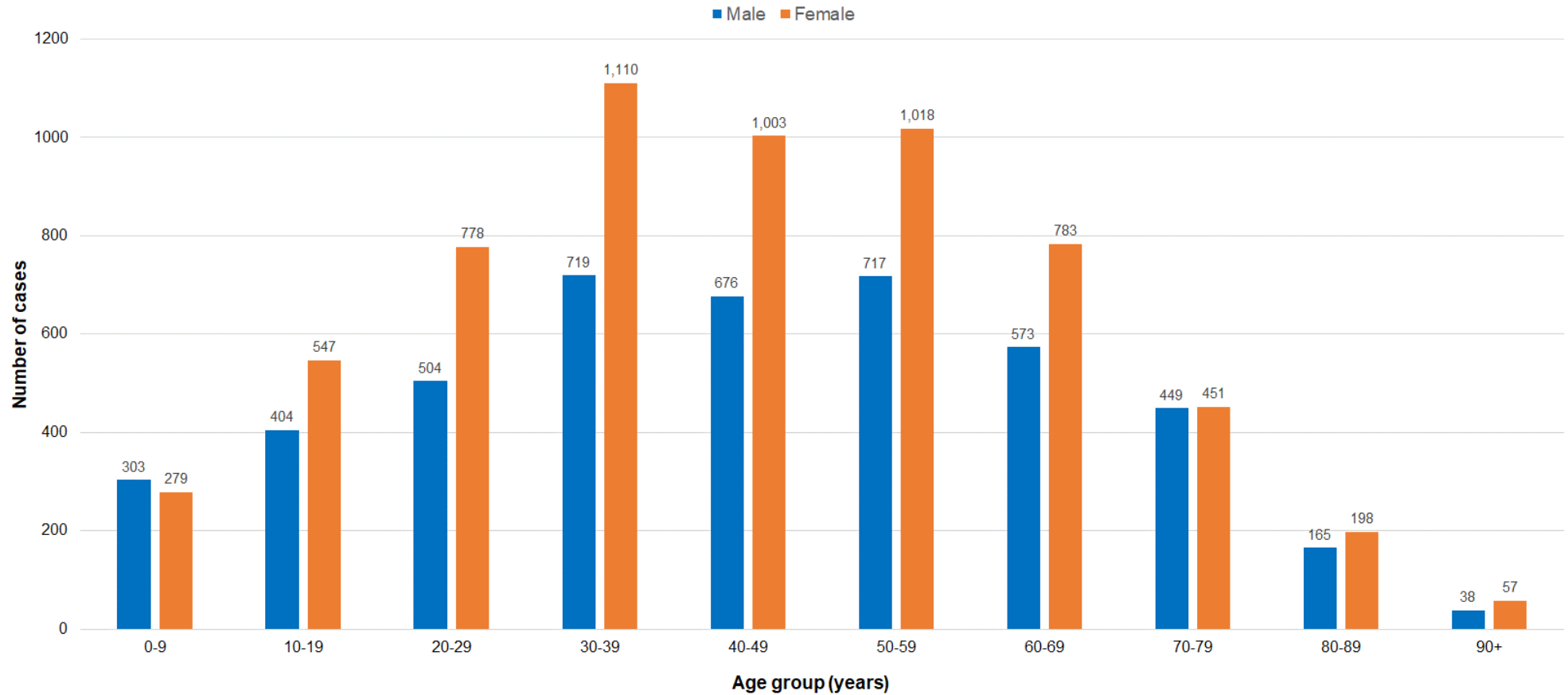
Data sourced from Western Australia Department of Health dataset

Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022

COVID-19 cases diagnosed on cruise vessels in WA are included in reporting week ending 06th November, resulting in a larger increase in cases than would be expected on current trends. These cases were identified through enhanced surveillance processes and there was no severe disease or deaths associated with these cases.

Figure 3. COVID-19 cases by age group and sex, Western Australia, 21 November to 27 November 2022.



Notes

Data sourced from Western Australia Department of Health dataset

Sex data is partially incomplete due to the unavailability of this variable during rapid antigen test registration, resulting in a discrepancy to total case numbers reported for the week.

- Males: n=4,548 (42.2%) Females: n=6,224 (57.8%)
- Median age = 44 years; range: 0 to 101 years

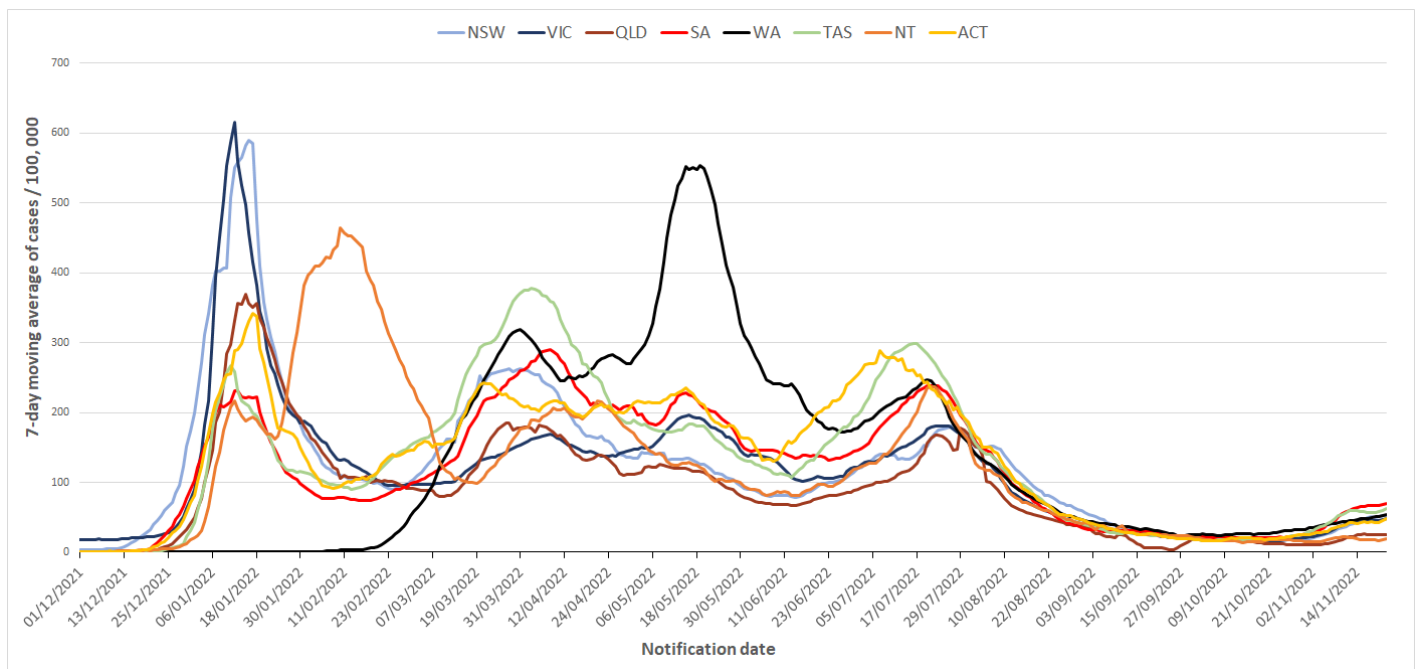
Table 2. COVID-19 reinfections in Western Australia, 02 March to 27 November 2022.

Month	Number of reinfections *
Mar-2022	14
Apr-2022	28
May-2022	105
Jun-2022	846
Jul-2022	5,040
Aug-2022	5,697
Sep-2022	4,024
Oct-2022	2,967
Nov-2022[^]	5,632
Total	24,353

* Reinfection definition as per Series of National Guidelines (SoNG) published by the Communicable Disease Network Australia (CDNA): between 2nd March 2022 and 8th July 2022, COVID-19 reinfections were defined as a positive COVID-19 test that occurred more than 12 weeks after an initial infection. From 9 July 2022 to date, COVID-19 reinfections are defined as a positive COVID-19 test occurring 28 days after previously recovering from the virus

[^] Data from 1st November to 27th November inclusive

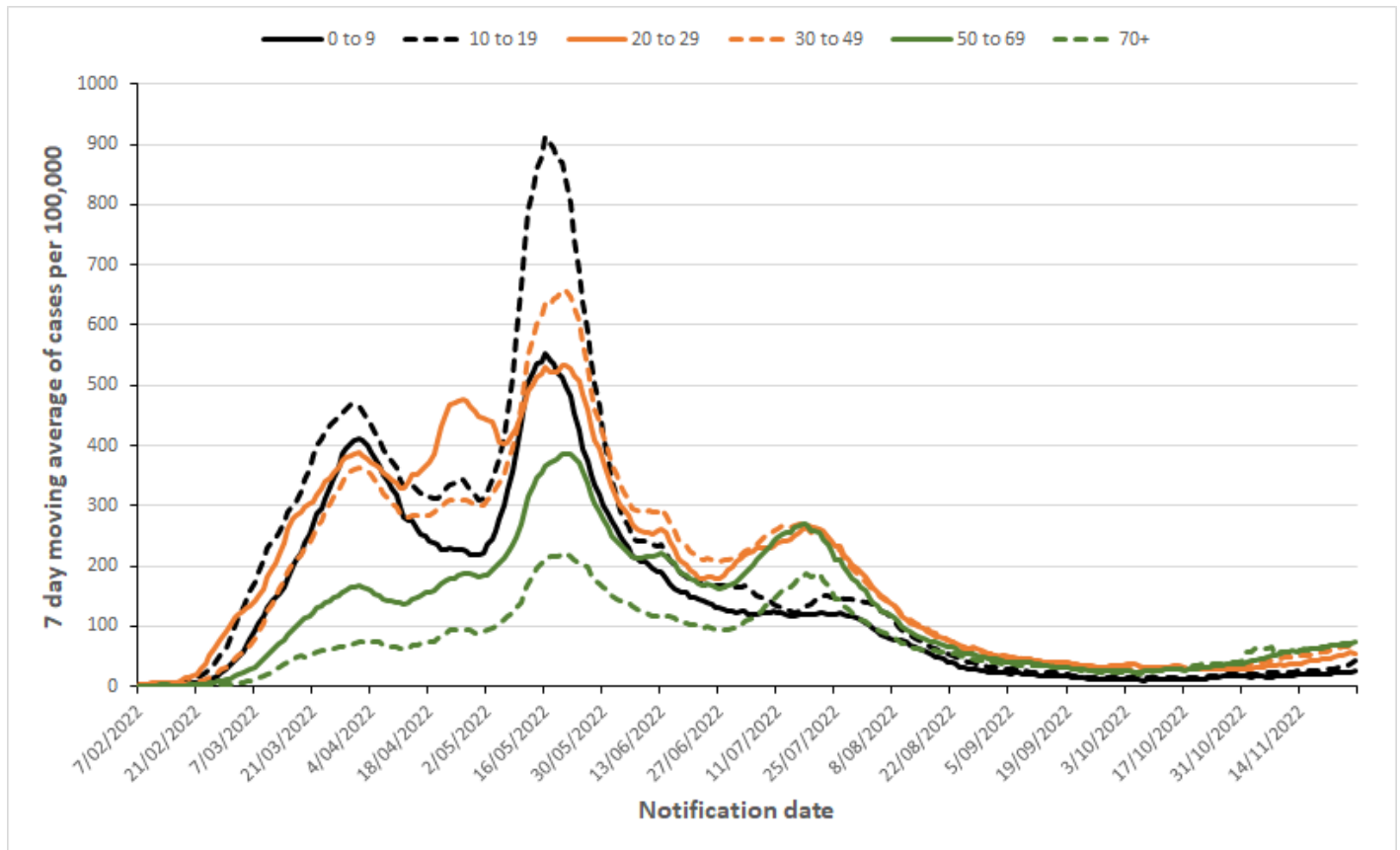
Figure 4. 7-day moving average of COVID-19 cases per 100,000 population by Australian jurisdiction, 01 December 2021 to 22 November 2022.



Notes

Data sourced from the respective jurisdictional health department datasets
 Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm
 The reporting period in WA transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022
 Population denominators are sourced from Australian Bureau of Statistics December 2021 estimates.

Figure 5. 7-day moving average of COVID-19 cases per 100,000 by age group, Western Australia, 08 February to 27 November 2022.



Notes

Data sourced from Western Australia Department of Health dataset

Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022

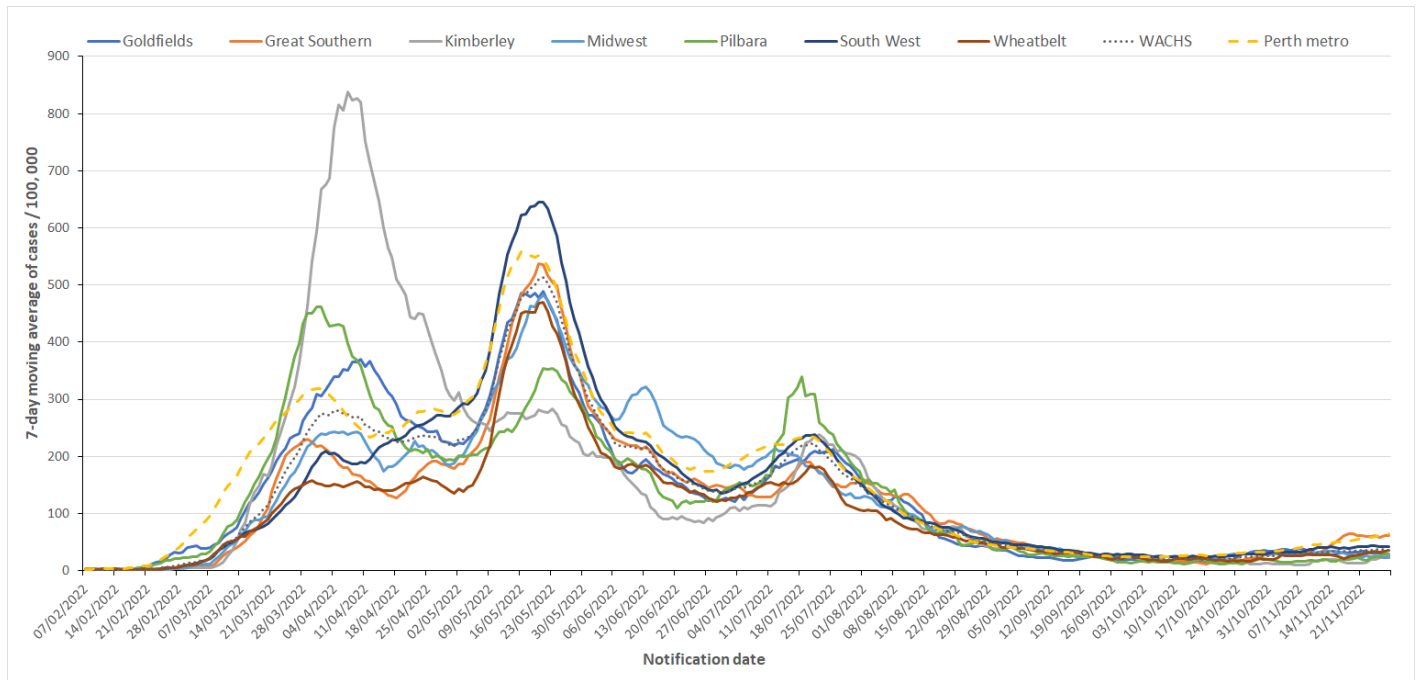
Cases include cases whose source of infection is classified as 'locally-acquired', 'interstate-acquired', 'overseas-acquired' and 'source under investigation'

Case data includes those determined by both polymerase chain reaction (PCR) tests and rapid antigen tests (RAT)

COVID-19 cases diagnosed onboard cruise vessels in WA are included in reporting week ending 06th November, resulting in a larger increase in cases than would be expected on current trends. These cases were identified through enhanced surveillance processes and there was no severe disease or deaths associated with these cases.

Population denominator sourced from Australian Bureau of Statistics June 2021 estimates.

Figure 6. 7-day moving average of COVID-19 cases per 100,000 population by health region, Western Australia, 08 February 2022 to 27 November 2022.



Notes

Data sourced from Western Australia Department of Health dataset
 Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm
 The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022
 Cases include cases whose source of infection is classified as 'locally-acquired', 'interstate-acquired', 'overseas-acquired' and 'source under investigation'
 Case data is by place of usual residence for positive case (due to unavailability of data for specific location of acquisition)
 Case data includes those determined by both polymerase chain reaction (PCR) tests and rapid antigen tests (RAT)
 Western Australia Country Health Service (WACHS) includes Goldfields, Great Southern, Kimberley, Midwest, Pilbara, South West and Wheatbelt health regions combined
 Perth metropolitan region includes East Metropolitan Health Service, North Metropolitan Health Service and South Metropolitan Health Service combined
 Population denominator sourced from Australian Bureau of Statistics 2020 estimates.

Table 3. Number of COVID-19 cases and case rates per 100,000 population by region, 21 November to 27 November 2022 and 14 November to 20 November 2022.

	Region	Week 21 November to 27 November 2022		Week 14 November to 20 November 2022	
		Number for current week	Rates for current week (cases/100,000 pop)	Number for previous week	Rates for previous week (cases/100,000 pop)
WACHS Regions	Goldfields	101	187	124	230
	Great Southern	261	426	263	429
	Kimberley	60	166	35	97
	Midwest	101	163	107	172
	Pilbara	115	183	92	146
	South West	532	293	533	293
	Wheatbelt	189	248	147	193
WACHS total*		1,359	254	1,301	244
Other**		91	-	82	-
Perth Metropolitan region		9,631	452	8,107	381
Total		11,081	416	9,490	356

Notes

Data sourced from Western Australia Department of Health dataset

Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022

Cases include all cases whose source of infection is classified as 'locally acquired', 'interstate acquired', 'overseas acquired' and 'source under investigation'

Case data is by place of usual residence for positive case (due to unavailability of data for specific location of acquisition)

Case data includes COVID-19 cases diagnosed by either polymerase chain reaction (PCR) tests and/or rapid antigen tests (RAT)

*Western Australia Country Health Service (WACHS) includes Goldfields, Great Southern, Kimberley, Midwest, Pilbara, South West and Wheatbelt public health regions combined

Total excludes WACHS*

Perth Metropolitan region includes East Metropolitan Health Service, North Metropolitan Health Service and South Metropolitan Health Service combined

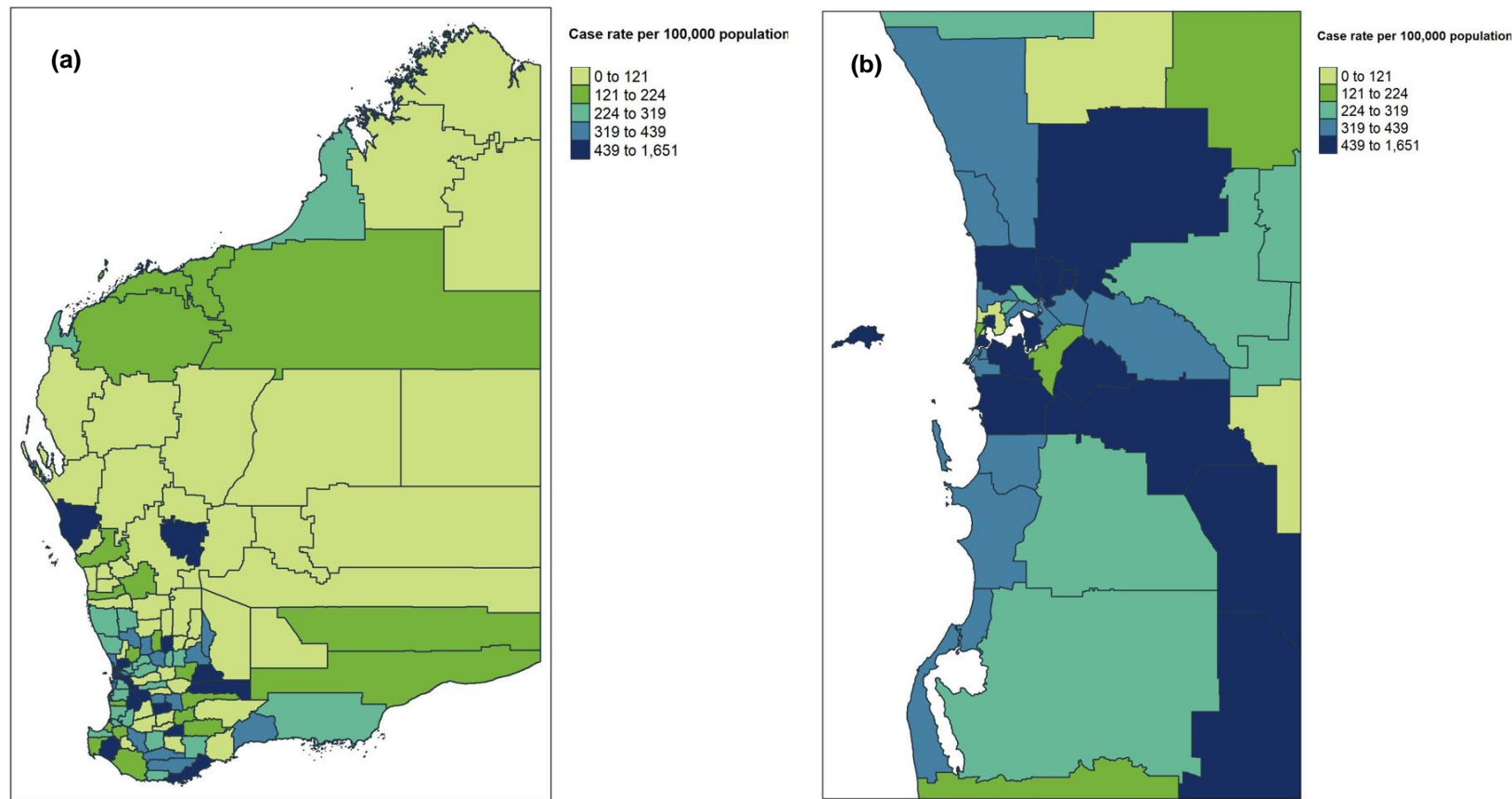
**Other includes cases with overseas and interstate residential addresses, and cases without residential address information

COVID-19 cases diagnosed onboard cruise vessels in WA are included in reporting week ending 06th November, resulting in a larger increase in cases than would be expected on current trends. These cases were identified through enhanced surveillance processes and there was no severe disease or deaths associated with these cases

Population denominator is sourced from Australian Bureau of Statistics 2020 estimates.

Figure 7 (a). Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, regional Western Australia, 21 November to 27 November 2022.

(b) Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, Perth metropolitan area, 21 November to 27 November 2022.



Notes

Data sourced from Western Australia Department of Health dataset

Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022

'Locally acquired' cases refers to cases where source of infection is classified as 'locally acquired' and 'source is under investigation' only (excludes interstate and overseas-acquired cases)

Cases are represented on the map according to their place of usual residence (no information for specific location of acquisition)

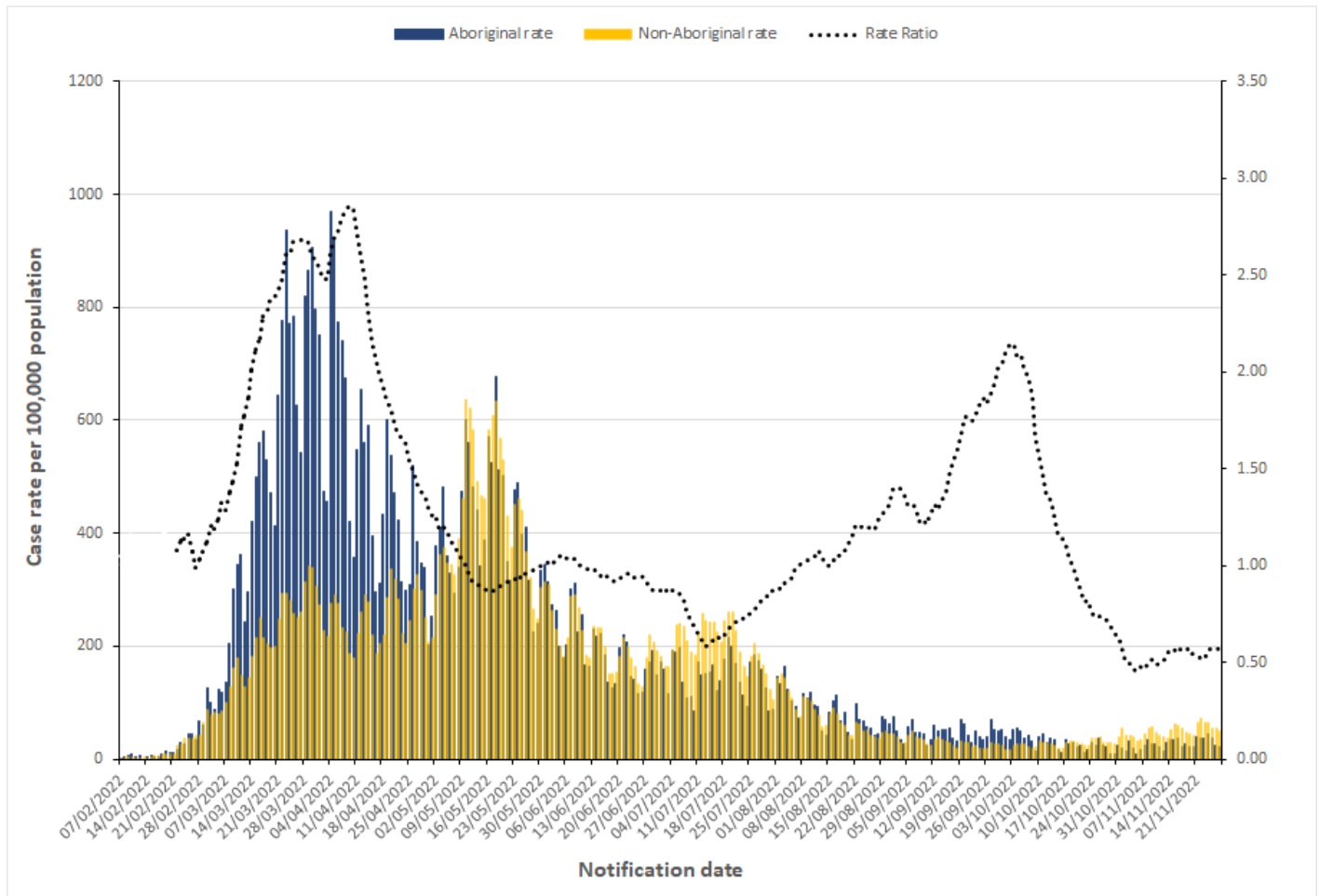
Cases include those detected by either polymerase chain reaction (PCR) tests or rapid antigen tests (RAT)

Areas on the map are defined by Local Government Area (LGA) boundaries

Population denominator is sourced from Australian Bureau of Statistics 2020 estimates.

Aboriginal case summary

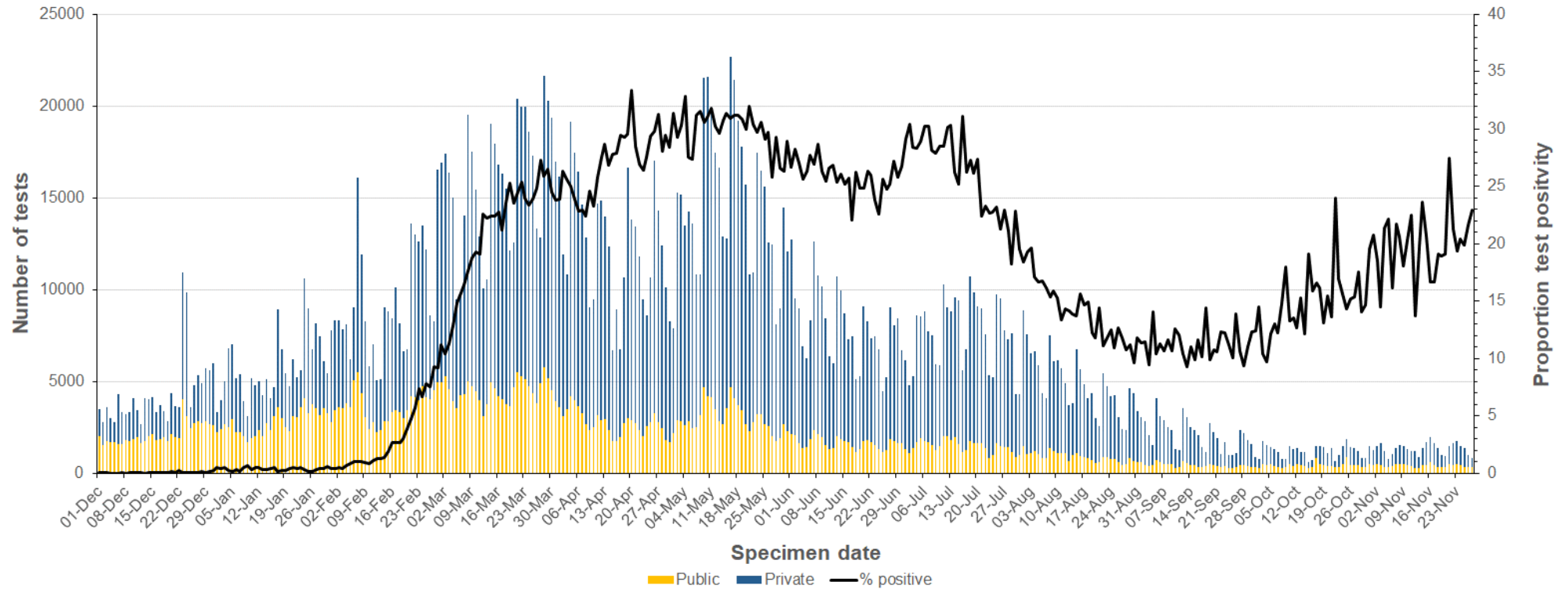
Figure 8. COVID-19 cases in Western Australia per 100,000 population and rate ratio by Indigenous status and notification date, 08 February to 27 November 2022.



Notes
 Data sourced from Western Australia Department of Health dataset
 Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm
 The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022
 Indigenous status is defined as those who identify as 'Aboriginal and Torres Strait Islander (TSI) origin'/'Aboriginal but not TSI origin'/'TSI but not Aboriginal origin'
 Cases where Indigenous status was not stated were designated as non-Indigenous
 Cases include those detected by both polymerase chain reaction (PCR) tests and rapid antigen tests (RAT)
 Population denominator data were sourced from Australian Bureau of Statistics 2020 estimates
 Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate, with a 7-day average of the respective rate ratios applied to smooth the trend
 Rate ratio is only plotted from 22nd February 2022 as prior to this, case numbers were too low.

Testing data

Figure 9. The number of COVID-19 polymerase chain reaction tests and proportion positive by laboratory category and specimen date, 01 December 2021 to 27 November 2022.



Notes

Data sourced from Western Australian public and private pathology laboratories

Specimen date refers to the date that specimen was collected

Number of tests includes both positive and negative tests.

From 01 October, testing at private pathology providers require a referral from a GP

Appendix 1

Regional cases by postcode, 21 November – 27 November 2022

WACHS Regions	Postcode	Week 21 Nov to 27 Nov 2022	WACHS Regions	Postcode	Week 21 Nov to 27 Nov 2022	WACHS Regions	Postcode	Week 21 Nov to 27 Nov 2022
Goldfields	6346	<5	Midwest (continued)	6535	8	South West (continued)	6262	5
	6430	39		6536	<5		6271	23
	6432	13		6623	<5		6272	<5
	6433	<5		6638	<5		6275	9
	6437	<5		6701	<5		6280	93
	6438	<5		6707	8		6281	24
	6442	<5	Pilbara	6710	<5		6282	<5
	6443	<5		6713	5		6284	5
	6448	<5		6714	39		6285	17
	6450	39		6720	<5		6286	<5
Great Southern	6317	24	South West	6721	12	Wheatbelt	6041	6
	6318	<5		6722	18		6042	<5
	6321	<5		6751	12		6044	<5
	6322	<5		6753	15		6302	9
	6323	<5		6754	<5		6304	<5
	6324	17		6762	<5		6306	<5
	6327	<5	6220	10	6308		7	
	6330	182	6221	<5	6309		<5	
	6333	16	6224	<5	6312		24	
	6335	<5	6225	26	6313		<5	
	6336	<5	6226	5	6315		<5	
	6337	<5	6227	<5	6350		<5	
	6338	<5	6229	<5	6359		<5	
	6343	<5	6230	145	6365		<5	
	6348	<5	6232	33	6367		<5	
	6395	5	6233	75	6369		<5	
	6396	<5	6236	7	6370		<5	
	Kimberley	6725	35	6237	5		6372	<5
		6726	13	6238	<5		6383	<5
		6728	7	6239	10		6390	7
6740		<5	6243	<5	6391	<5		
6770		<5	6244	<5	6401	19		
Midwest	6517	<5	6253	<5	6407	5		
	6525	<5	6255	<5	6409	<5		
	6528	<5	6256	<5	6410	<5		
	6530	53	6258	12	6415	13		
	6532	17	6260	<5	6418	<5		

WACHS Regions	Postcode	Week 21 Nov to 27 Nov 2022	WACHS Regions	Postcode	Week 21 Nov to 27 Nov 2022	WACHS Regions	Postcode	Week 21 Nov to 27 Nov 2022
Wheatbelt (continued)	6421	<5	Wheatbelt (continued)	6562	8			
	6422	<5		6564	<5			
	6460	<5		6566	9			
	6461	<5		6568	<5			
	6485	<5		6569	<5			
	6501	<5		6575	<5			
	6502	<5						
	6503	<5						
	6505	<5						
	6507	<5						
	6510	5						
	6511	<5						
	6516	7						
	6560	5						

Notes

Data sourced from Western Australia Department of Health dataset

Exact number of cases less than 5 not reported for confidentiality

Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022

Cases include all cases whose source of infection is classified as 'locally acquired', 'interstate acquired', 'overseas acquired' and 'source under investigation'

Case data is based on the residential postcode of each case. The case may have an isolation address based in another regional postcode.

Case data includes those determined by both polymerase chain reaction (PCR) tests and rapid antigen tests (RAT)

*Western Australia Country Health Service (WACHS) includes Goldfields, Great Southern, Kimberley, Midwest, Pilbara, South West and Wheatbelt public health regions

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