



COVID-19 Weekly Surveillance Report

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Summary for the week 28 November to 04 December 2022 (inclusive)

In the week of 28 November to 04 December 2022 there were:

- 11,827 COVID-19 cases reported
 - 2,045 with positive polymerase chain reaction (PCR) tests
 - 9,782 with positive rapid antigen tests (RAT)
 - 2,359 were reinfections (see definition in Table 2)
- 88 new hospital admissions and 1 new admission directly into an intensive care unit
- 15 deaths reported, aged between 75 and 96 years old
- 10,134 COVID-19 PCR tests conducted

Surveillance summary

This week, **case numbers** increased by 7% compared to the previous week. Cases diagnosed by PCR increased by 2% and by RAT increased by 8%. **Reinfections** comprised 20% of total cases this week, compared with 18% last week.

There was a 6% increase in **PCR tests** conducted compared to the previous week, with a 7-day average test positive rate for PCR tests of 21.4%.

The moving seven-day average **case rates** per 100,000 population increased in the Metropolitan, Midwest, Pilbara and South West regions. The seven-day average case rate for the Perth metropolitan area (70 cases/100,000 population) was approximately 93% 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 (77 cases/100,000 population), with the lowest rates in the 0 – 9 years age group (29 cases/100,000 population).

Nationally, the moving seven-day average case rates increased across all jurisdictions, with Tasmania having the highest rate (92 cases/100,000 population) and Queensland the lowest rate (28 cases/100,000 population).

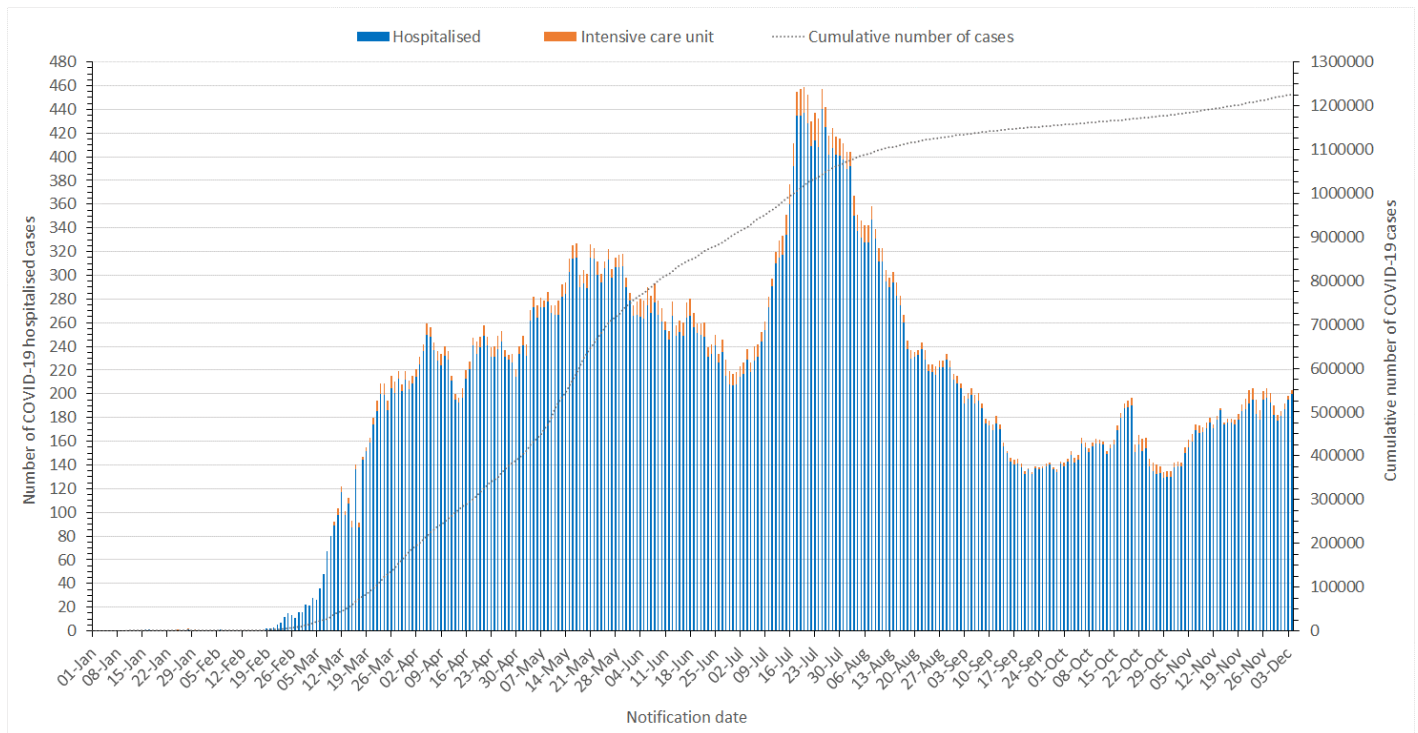
The 7-day average of **hospitalised cases** decreased by 1% from 190 last week to 188 this week. **Intensive care unit cases** decreased from 9 in the last reporting week to 5 this week. New hospital admissions related to COVID-19 increased by 28% from 69 last week to 88 this week, and direct intensive care unit admissions decreased from 5 last week to 1 this week.

Deaths decreased by 12% this reporting week with 15 deaths compared to 17 last week.

This week, 302 cases were reported in the **Aboriginal population**, an 18% increase compared to last week. Case rates in the Aboriginal population were lower compared to the non-Aboriginal population, with the 7-day average rate ratio sitting at 0.63 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 04 December 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.

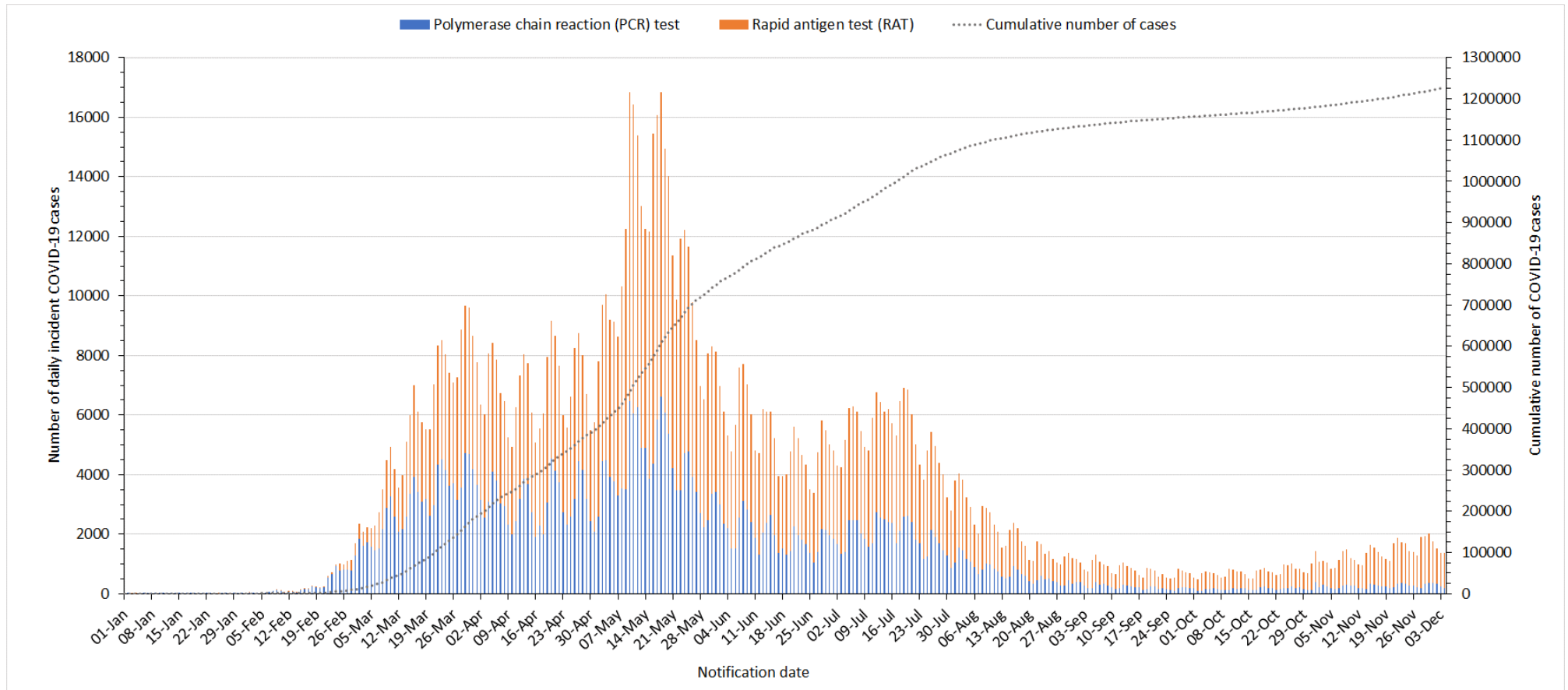
Table 1. Number of COVID-19 related deaths by vaccination status and age group, 28 November to 04 December 2022 and 01 January to 04 December 2022.

	Current report week	Year to date
	Week 28 Nov – 04 Dec 2022	01 Jan 2022 – 04 Dec 2022
Number of COVID-19 vaccine doses	Deaths (n= 15)	Deaths (n= 762)
0	2 (13.3%)	142 (18.6%)
1	0 (0%)	27 (3.5%)
2	3 (20.0%)	96 (12.6%)
3+	10 (66.7%)	497 (65.3%)
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 (3.5%)
60-69	0 (0%)	54 (7.1%)
70-79	2 (13.3%)	139 (18.2%)
80-89	8 (53.4%)	291 (38.3%)
90+	5 (33.3%)	235 (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 04 December 2022.



Notes

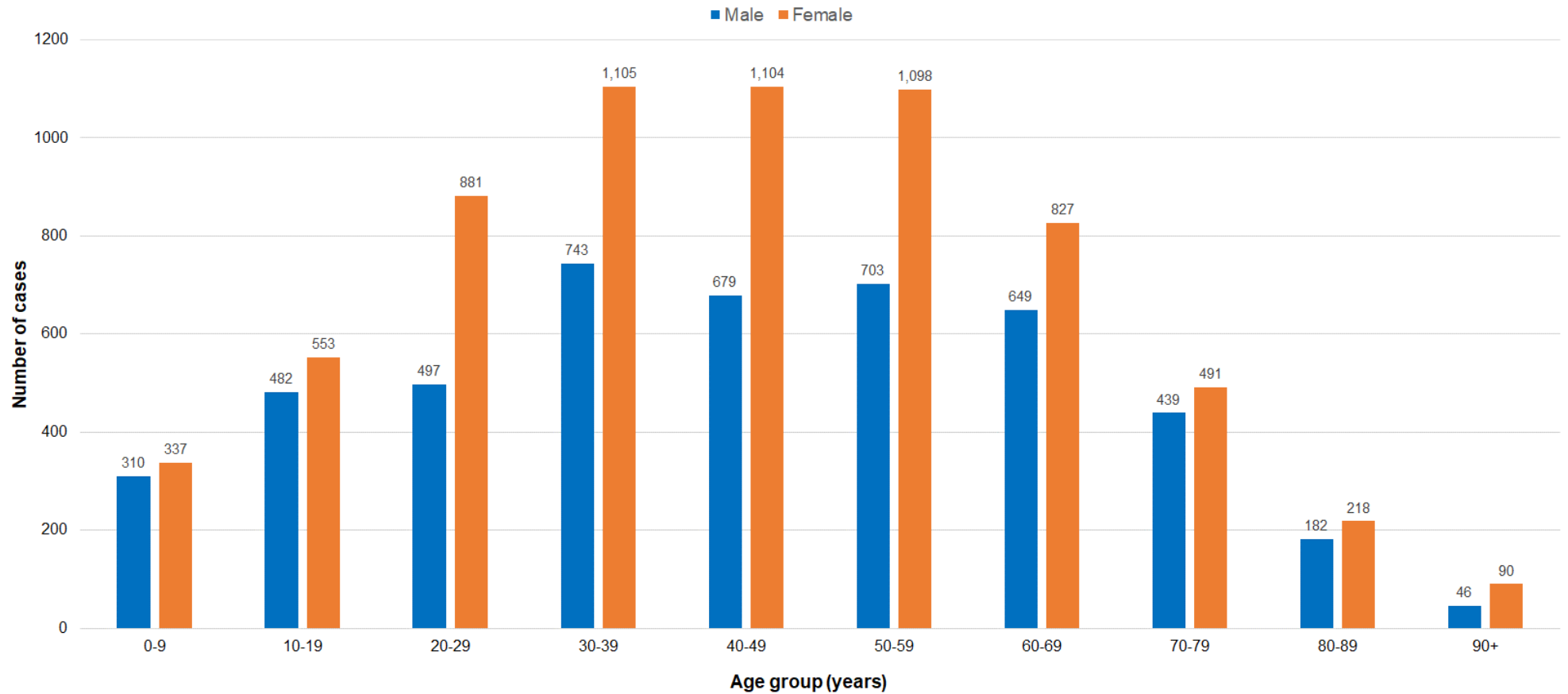
Data sourced from Western Australia Department of Health dataset

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, 28 November to 04 December 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=4,730 (41.4%) Females: n=6,704 (58.6%)
- Median age = 44 years; range: 0 to 102 years

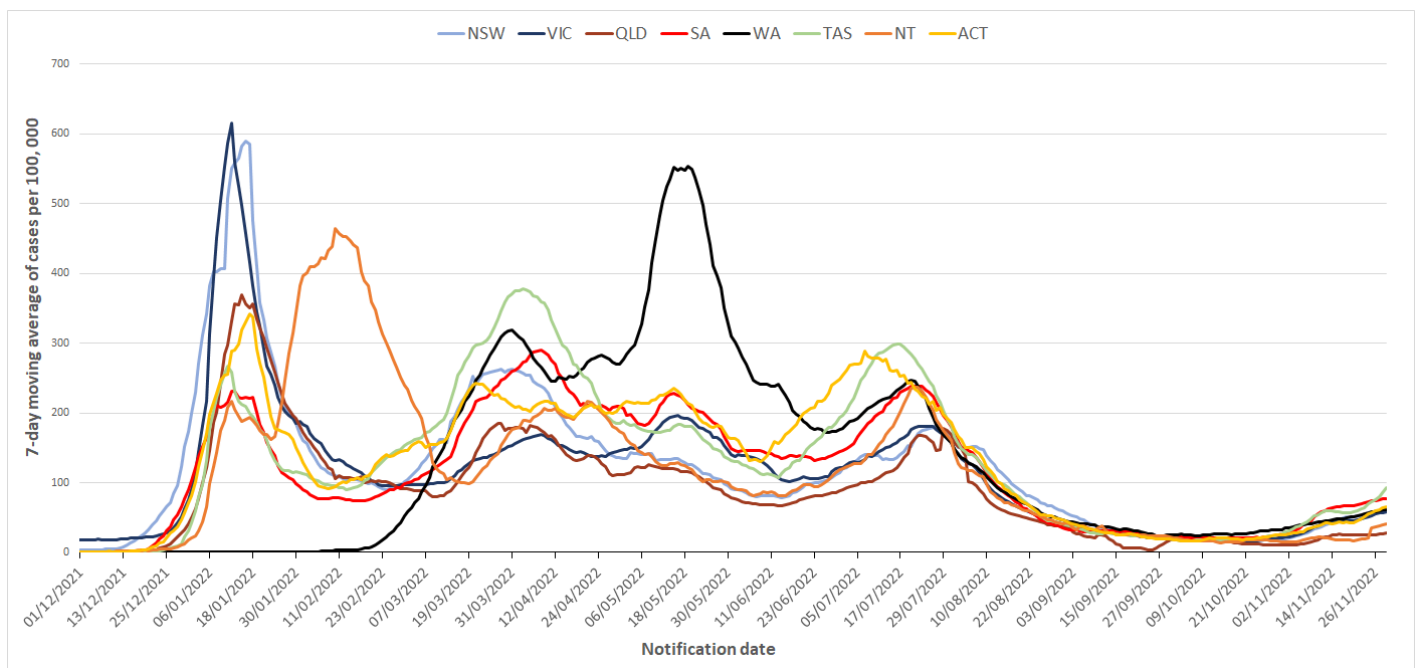
Table 2. COVID-19 reinfections in Western Australia, 02 March to 04 December 2022.

Month	Number of reinfections *
Mar-2022	14
Apr-2022	28
May-2022	105
Jun-2022	846
Jul-2022	5,041
Aug-2022	5,697
Sep-2022	4,024
Oct-2022	2,969
Nov-2022^	6,941
Dec-2022^	1,163
Total	26,828

* 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 December to 4th December inclusive

Figure 4. 7-day moving average of COVID-19 cases per 100,000 population by Australian jurisdiction, 01 December 2021 to 29 November 2022.



Notes

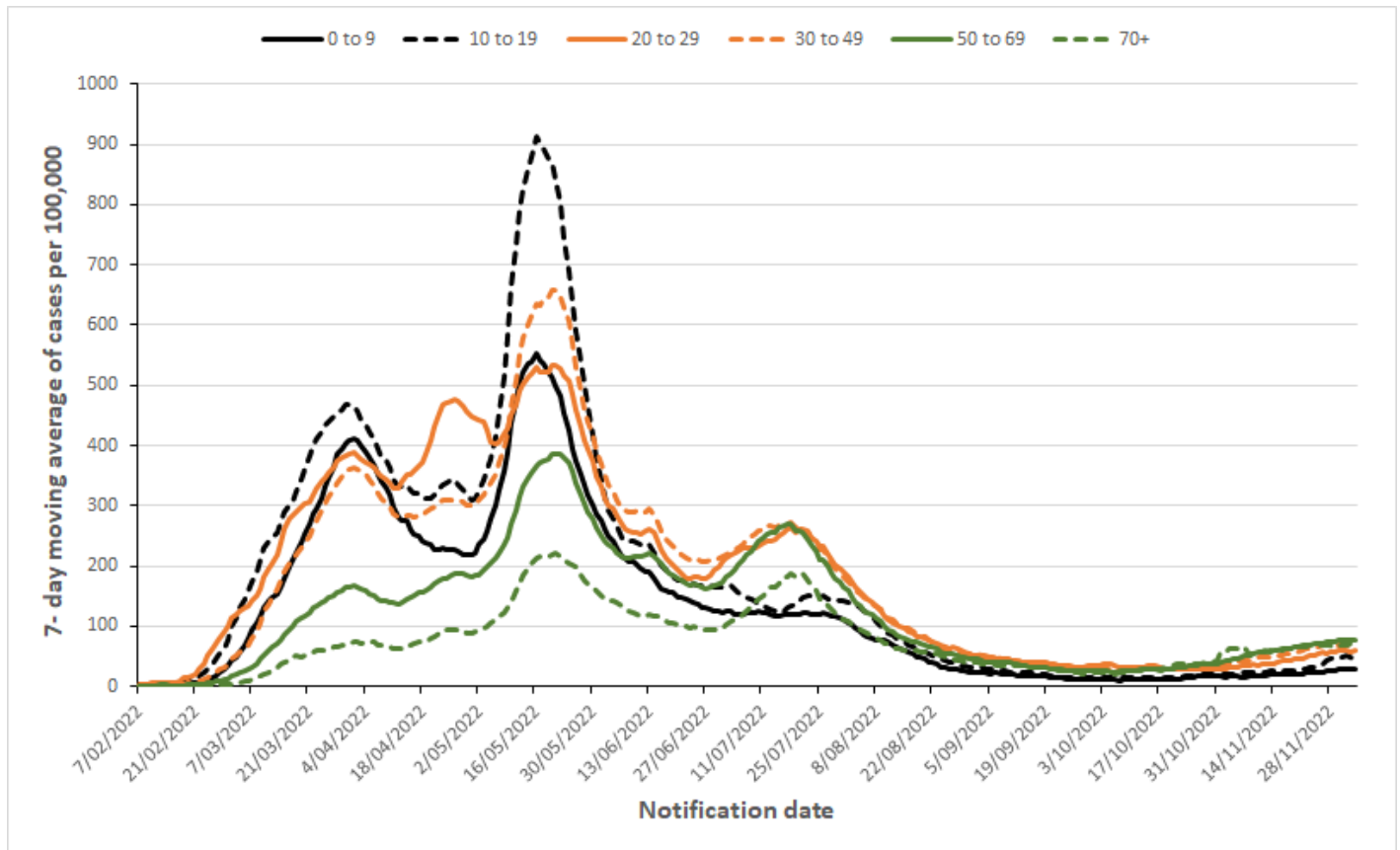
Data sourced from the respective jurisdictional health department datasets

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 04 December 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

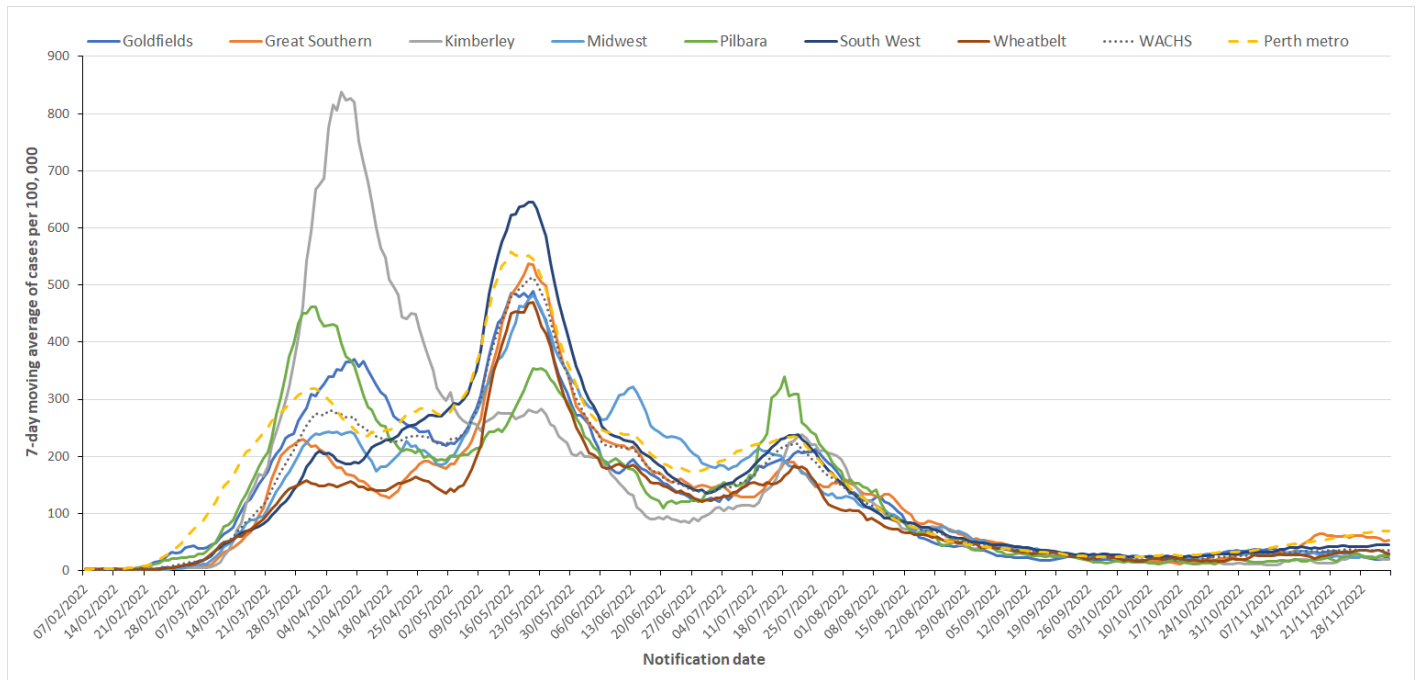
Cases include cases whose source of infection is classified as 'locally-acquired', 'interstate-acquired', 'overseas-acquired' and 'source under investigation'

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 04 December 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.

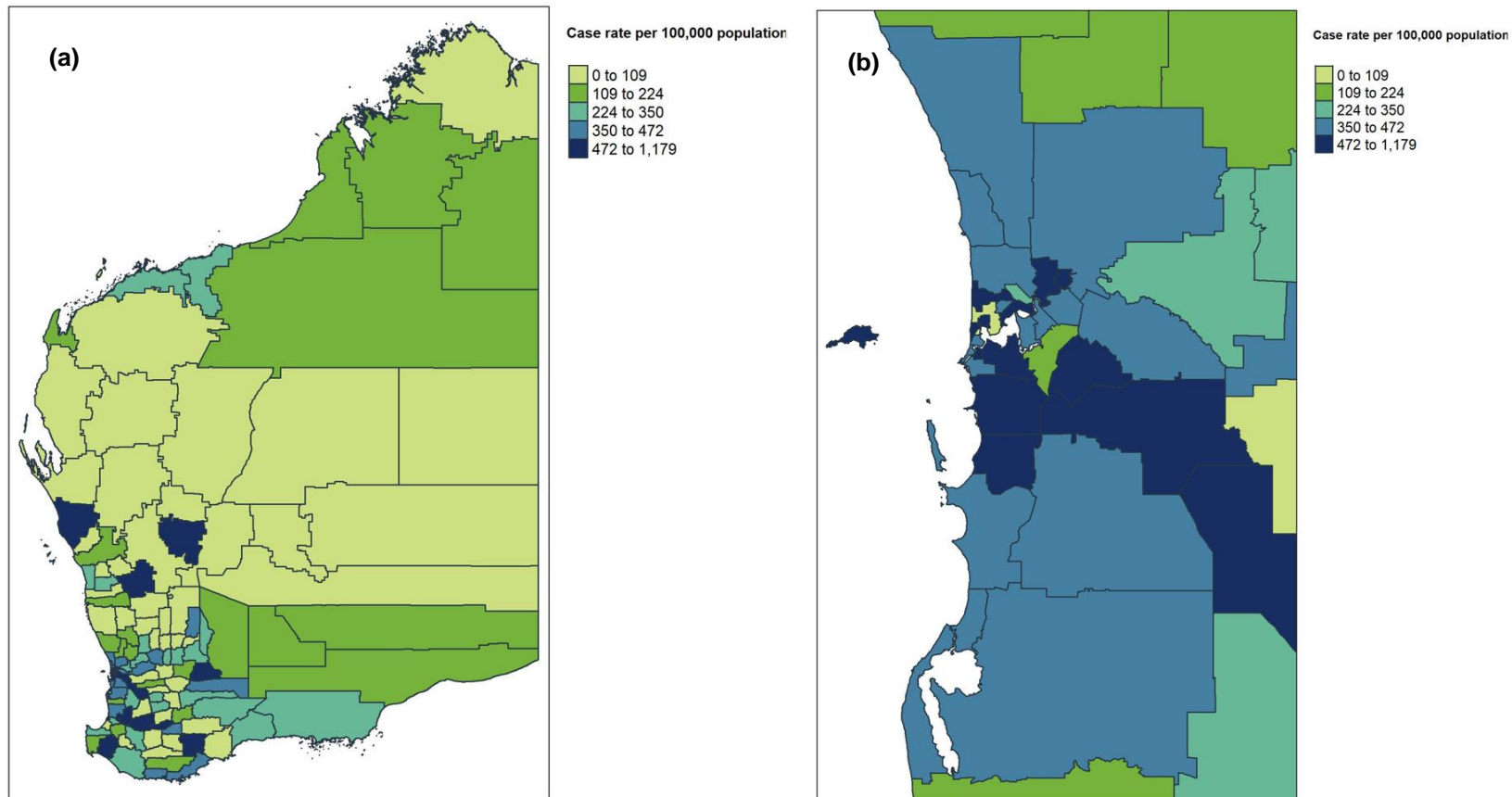
Table 3. Number of COVID-19 cases and case rates per 100,000 population by region, 28 November to 04 December 2022 and 21 November to 27 November 2022.

	Region	Week 28 November to 04 December 2022		Week 21 November to 27 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	78	145	101	187
	Great Southern	231	377	261	426
	Kimberley	50	139	60	166
	Midwest	134	216	101	163
	Pilbara	124	197	115	183
	South West	573	315	532	293
	Wheatbelt	160	210	189	248
WACHS total*		1,350	253	1,359	254
Other**		108	-	91	-
Perth Metropolitan region		10,369	487	9,631	452
Total		11,827	444	11,081	416

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, 28 November to 04 December 2022.

(b) Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, Perth metropolitan area, 28 November to 04 December 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)

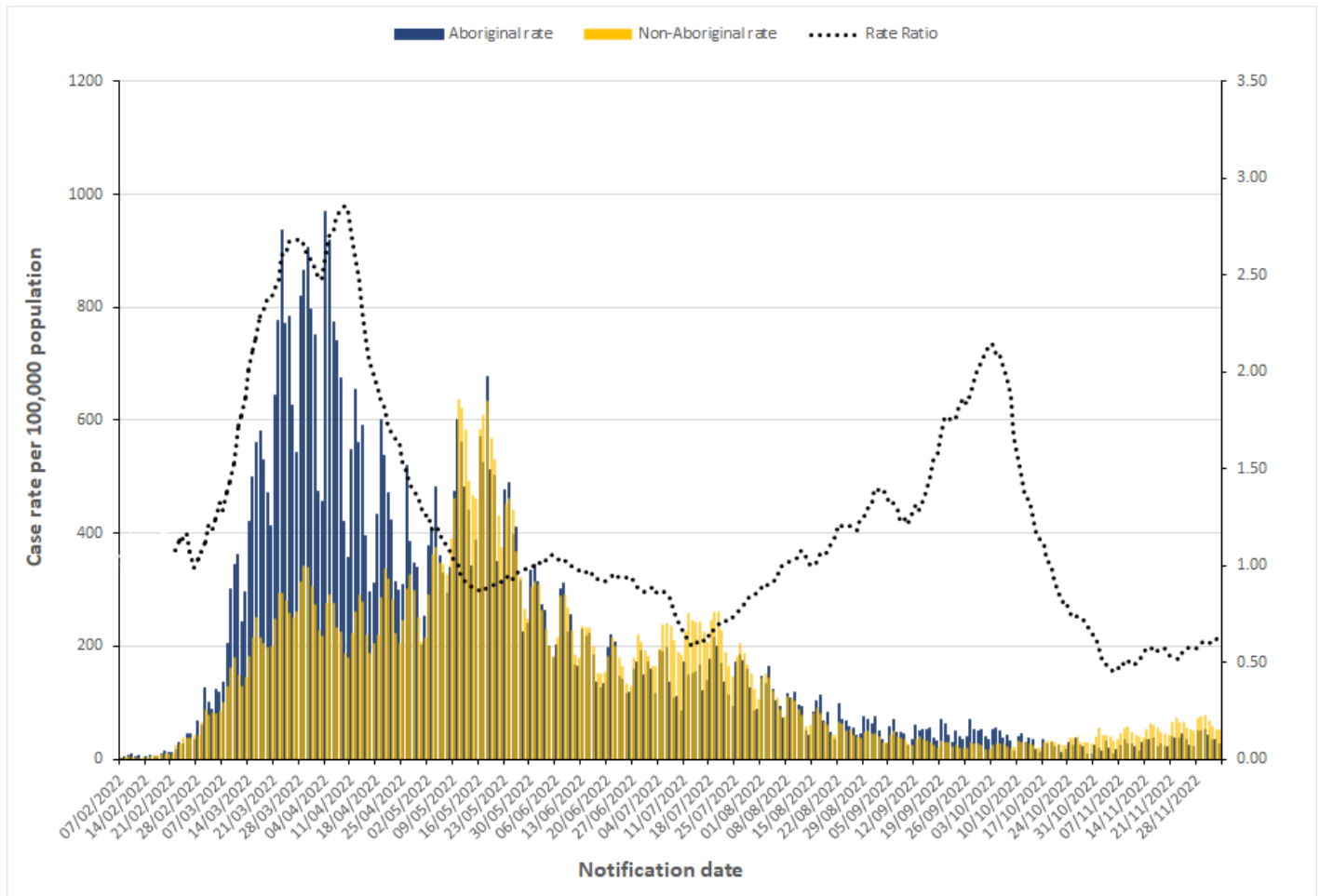
Cases include those detected by either polymerase chain reaction (PCR) tests or rapid antigen tests (RAT)

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

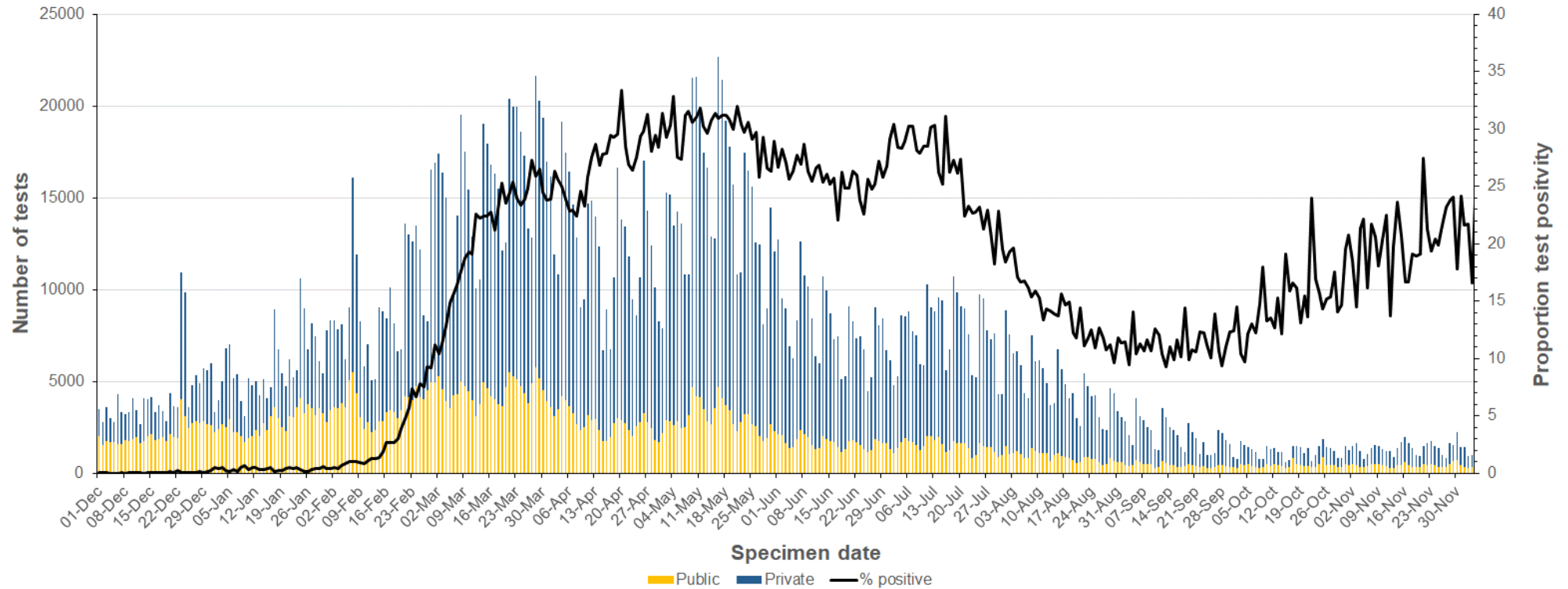
Figure 8. COVID-19 cases in Western Australia per 100,000 population and rate ratio by Indigenous status and notification date, 08 February to 04 December 2022.



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 04 December 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, 28 November – 04 December 2022

WACHS Regions	Postcode	Week 28 Nov to 04 Dec 2022	WACHS Regions	Postcode	Week 28 Nov to 04 Dec 2022	WACHS Regions	Postcode	Week 28 Nov to 04 Dec 2022
Goldfields	6429	<5	Midwest (continued)	6532	17	South West (continued)	6258	19
	6430	31		6535	<5		6262	5
	6432	<5		6536	<5		6271	14
	6434	<5		6623	<5		6275	8
	6438	<5		6630	<5		6280	88
	6442	<5		6638	<5		6281	15
	6443	<5		6642	<5		6284	12
	6448	<5		6701	<5		6285	19
	6450	35		6707	7		6286	<5
Great Southern	6316	<5	Pilbara	6713	<5	Wheatbelt	6290	<5
	6317	17		6714	52		6325	<5
	6320	<5		6718	<5		6041	5
	6323	<5		6720	<5		6044	<5
	6324	<5		6721	12		6302	17
	6326	<5		6722	26		6304	<5
	6327	<5		6751	11		6306	<5
	6330	159		6753	11		6308	5
	6333	24		6754	<5		6309	<5
	6335	<5		6758	<5		6312	14
	6337	<5	6762	<5	6315		<5	
	6338	8	South West	6218	<5		6350	<5
	6348	<5		6220	14		6353	<5
	6394	<5		6224	<5		6359	<5
	6395	<5		6225	40		6365	<5
Kimberley	6725	21		6226	<5	6367	<5	
	6726	8		6227	5	6369	8	
	6728	12		6229	<5	6375	<5	
	6740	<5	6230	180	6383	<5		
	6743	<5	6232	24	6386	<5		
	6765	<5	6233	85	6390	5		
	6770	<5	6236	<5	6392	<5		
Midwest	6514	<5	6237	6	6401	21		
	6515	<5	6239	11	6407	5		
	6519	<5	6244	<5	6409	<5		
	6525	8	6254	<5	6410	<5		
	6530	81	6255	<5	6415	10		
	6531	<5	6256	<5	6422	<5		

WACHS Regions	Postcode	Week 28 Nov to 04 Dec 2022	WACHS Regions	Postcode	Week 28 Nov to 04 Dec 2022	WACHS Regions	Postcode	Week 28 Nov to 04 Dec 2022
Wheatbelt (continued)	6425	<5	Wheatbelt (continued)	6568	<5			
	6460	<5		6603	<5			
	6479	<5		6608	<5			
	6484	<5						
	6501	<5						
	6502	9						
	6503	<5						
	6507	<5						
	6510	<5						
	6516	<5						
	6560	7						
	6562	<5						
	6564	<5						
	6566	8						

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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