



COVID-19 Weekly Surveillance Report

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Summary for the week 19 December to 25 December 2022 (inclusive)

In the week of 19 December to 25 December 2022 there were:

- 9,916 COVID-19 cases reported
 - 1,727 with positive polymerase chain reaction (PCR) tests
 - 8,189 with positive rapid antigen tests (RAT)
 - 2,141 were reinfections (see definition in Table 2)
- 136 new hospital admissions and 4 new admission directly into an intensive care unit
- 33 deaths reported, aged between 45 and 100 years old
- 7,510 COVID-19 PCR tests conducted

Surveillance summary

This week, **case numbers** decreased by 16% compared to the previous week. Cases diagnosed by PCR decreased by 10% and by RAT decreased by 18%. **Reinfections** comprised 22% of total cases this week, compared with 23% last week.

There was a 19% decrease in **PCR tests** conducted compared to the previous week, with a 7-day average test positive rate for PCR tests of 21.2%.

The moving seven-day average **case rates** per 100,000 population decreased in all regions except the Wheatbelt region, where the rate remained stable. The seven-day average case rate for the Perth metropolitan area (57 cases/100,000 population) was approximately 54% higher than the Western Australia Country Health Service (WACHS) regions combined (37 cases/100,000 population).

The highest seven-day average **age-specific rates** were in the 70+ years age group (70 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 decreased across all jurisdictions, except Victoria, which remained stable, and the ACT, which increased. Tasmania has the highest rate (100 cases/100,000 population) and Queensland the lowest rate (38 cases/100,000 population).

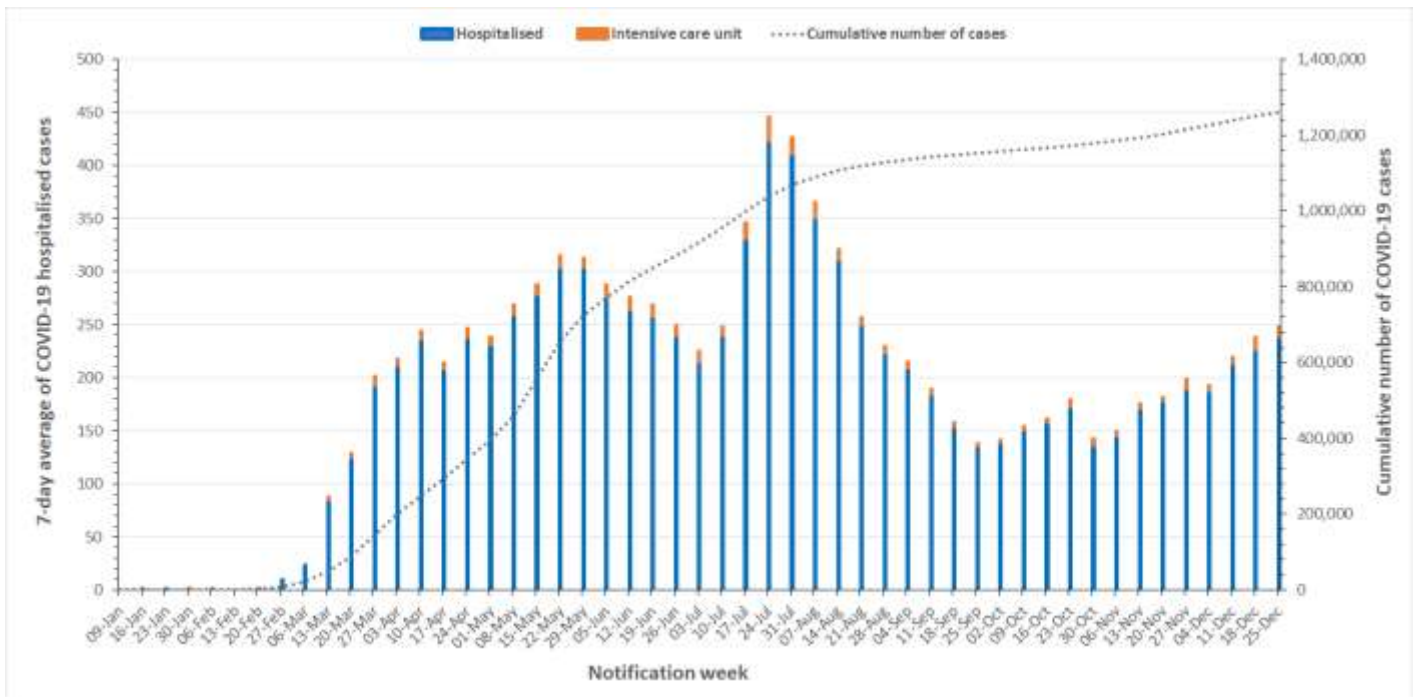
The 7-day average of **hospitalised cases** increased by 5% from 227 last week to 238 this week. **Intensive care unit cases** decreased from 11 in the last reporting week to 10 this week. New hospital admissions related to COVID-19 increased by 37% from 99 last week to 136 this week, and direct intensive care unit admissions increased from 7 last week to 4 this week.

Deaths increased by 120% this reporting week with 33 deaths compared to 15 last week.

This week, 330 cases were reported in the **Aboriginal population**, a 22% decrease compared to last week. Case rates in the Aboriginal population were lower compared to the non-Aboriginal population, with a 7-day average rate ratio of 0.81 this reporting week. Four deaths were reported in the Aboriginal population this week.

Hospitalisations, intensive care unit (ICU) inpatients and deaths

Figure 1. 7-day average of active and cleared COVID-19 cases currently in hospital or in ICU, and cumulative number of COVID-19 notifications by notification week, 03 January to 25 December 2022.



Notes

Data sourced from Western Australia Department of Health dataset

Notification week refers to data for Monday to Sunday respectively

'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.

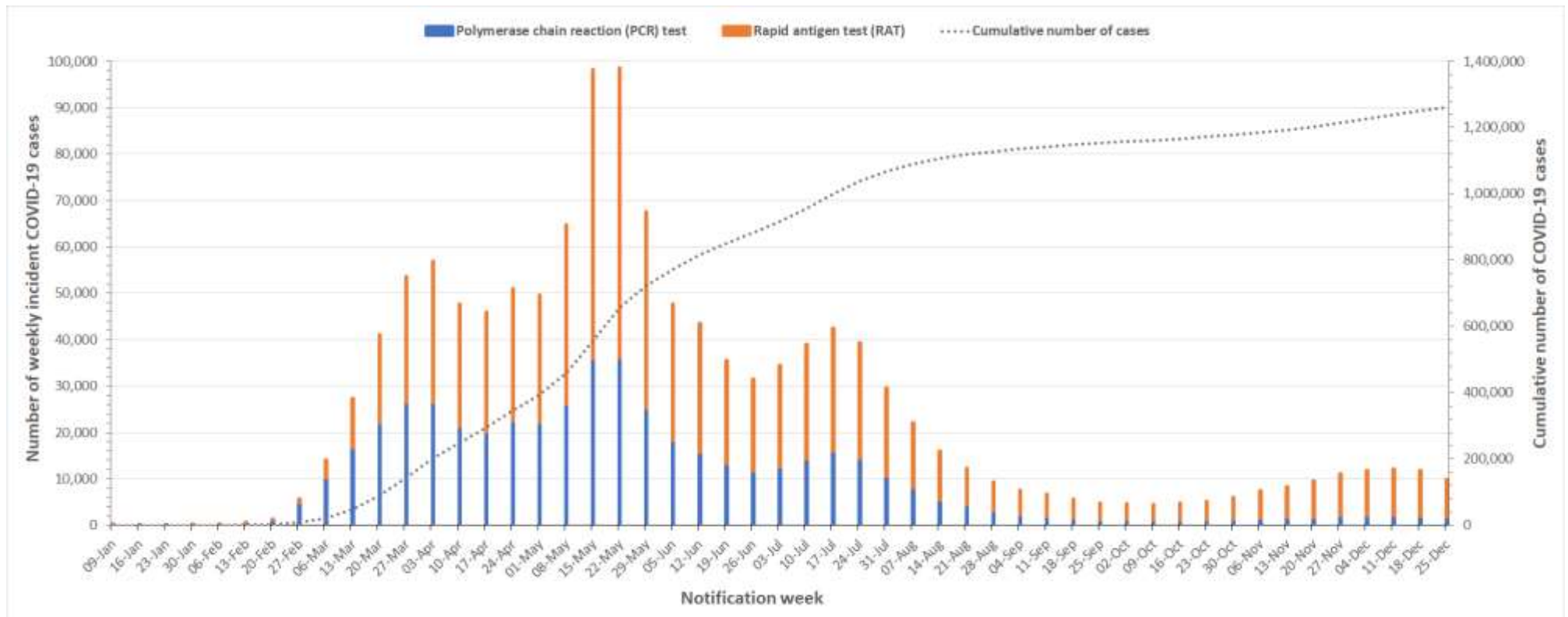
Table 1. Number of COVID-19 related deaths by vaccination status and age group, 19 December to 25 December 2022 and 01 January to 25 December 2022.

	Current report week	Year to date
	Week 19 Dec – 25 Dec 2022	01 Jan 2022 – 25 Dec 2022
Number of COVID-19 vaccine doses	Deaths (n= 33)	Deaths (n= 828)
0	6 (18.2%)	153 (18.5%)
1	1 (3.0%)	28 (3.4%)
2	2 (6.1%)	97 (11.7%)
3+	24 (72.7%)	550 (66.4%)
Age group (years)		
0-9	0 (0%)	0 (0%)
10-19	0 (0%)	2 (0.2%)
20-29	0 (0%)	1 (0.1%)
30-39	0 (0%)	4 (0.5%)
40-49	1 (3.0%)	10 (1.2%)
50-59	3 (9.1%)	30 (3.6%)
60-69	4 (12.1%)	59 (7.1%)
70-79	7 (21.2%)	151 (18.2%)
80-89	12 (36.4%)	315 (38.1%)
90+	6 (18.2%)	256 (31.0%)

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 9th December 2022 – 84.1% 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
 4 previously reported deaths were re-classified as non-COVID-related since most recent surveillance report
 Deaths are not necessarily associated with hospital and/or ICU admissions.

Case data

Figure 2. COVID-19 cases by notification week and test type, Western Australia, 03 January to 25 December 2022.



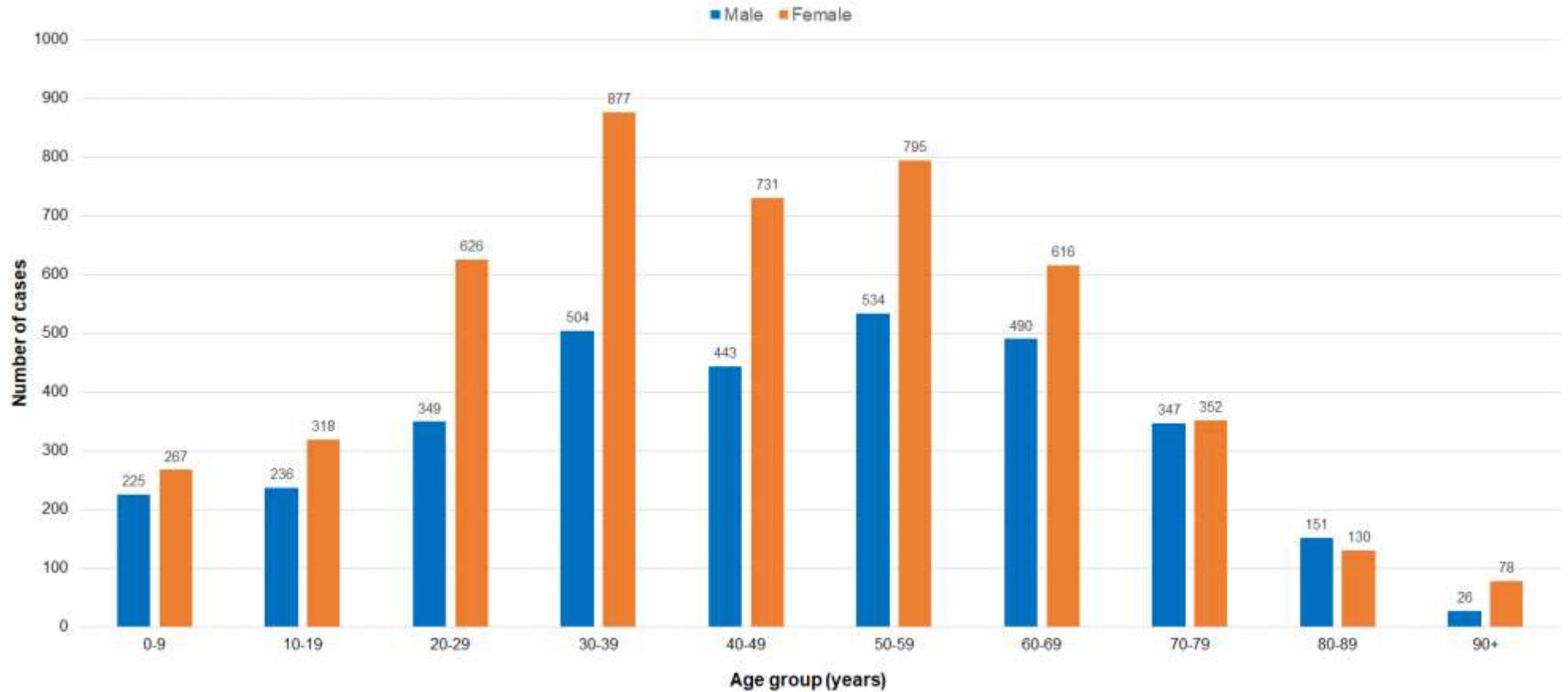
Notes

Data sourced from Western Australia Department of Health dataset

Notification week refers to data for Monday to Sunday respectively

COVID-19 cases diagnosed on cruise vessels in WA are included in report weeks ending 06th November and 11th December, 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, 19 December to 25 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=3,305 (40.8%) Females: n=4,790 (59.2%)
- Median age = 45 years; range: 0 to 103 years

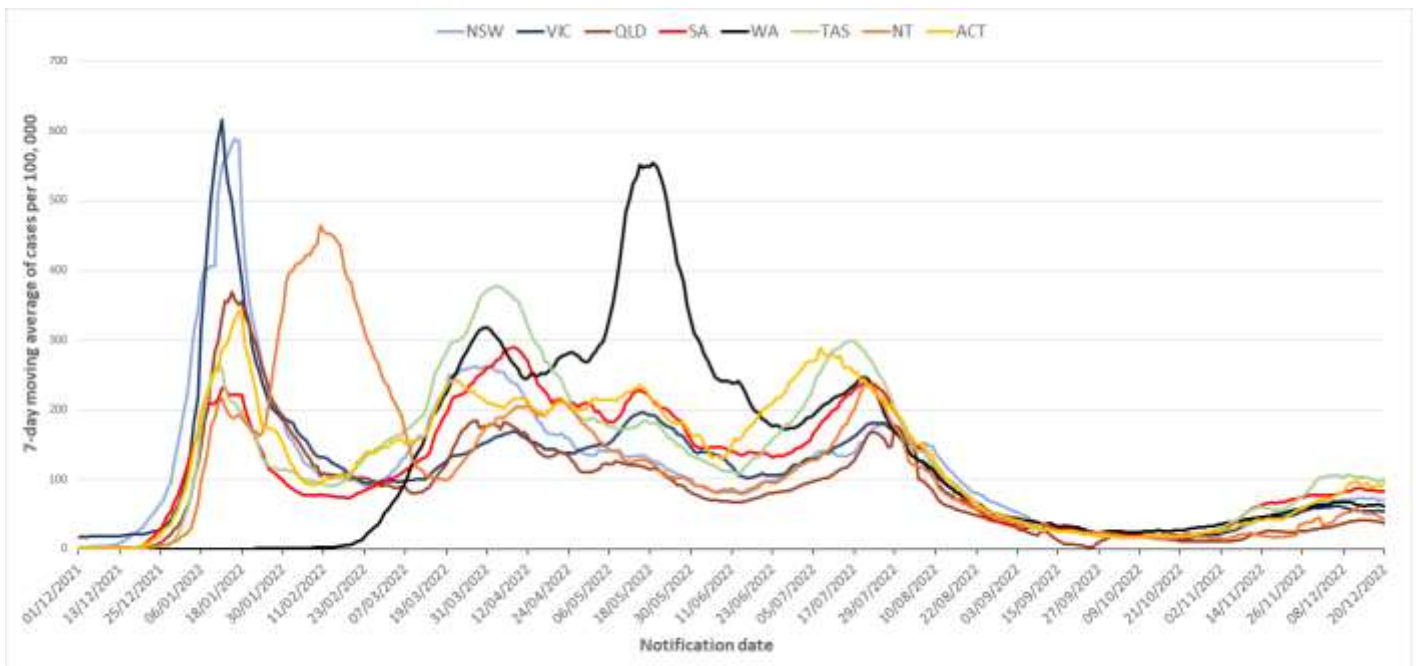
Table 2. COVID-19 reinfections in Western Australia, 02 March to 25 December 2022.

Month	Number of reinfections *
Mar-2022	14
Apr-2022	29
May-2022	105
Jun-2022	846
Jul-2022	5,041
Aug-2022	5,699
Sep-2022	4,024
Oct-2022	2,969
Nov-2022	7,016
Dec-2022[^]	9,258
Total	35,001

* 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 25th December inclusive

Figure 4. 7-day moving average of COVID-19 cases per 100,000 population by Australian jurisdiction, 01 December 2021 to 20 December 2022.



Notes

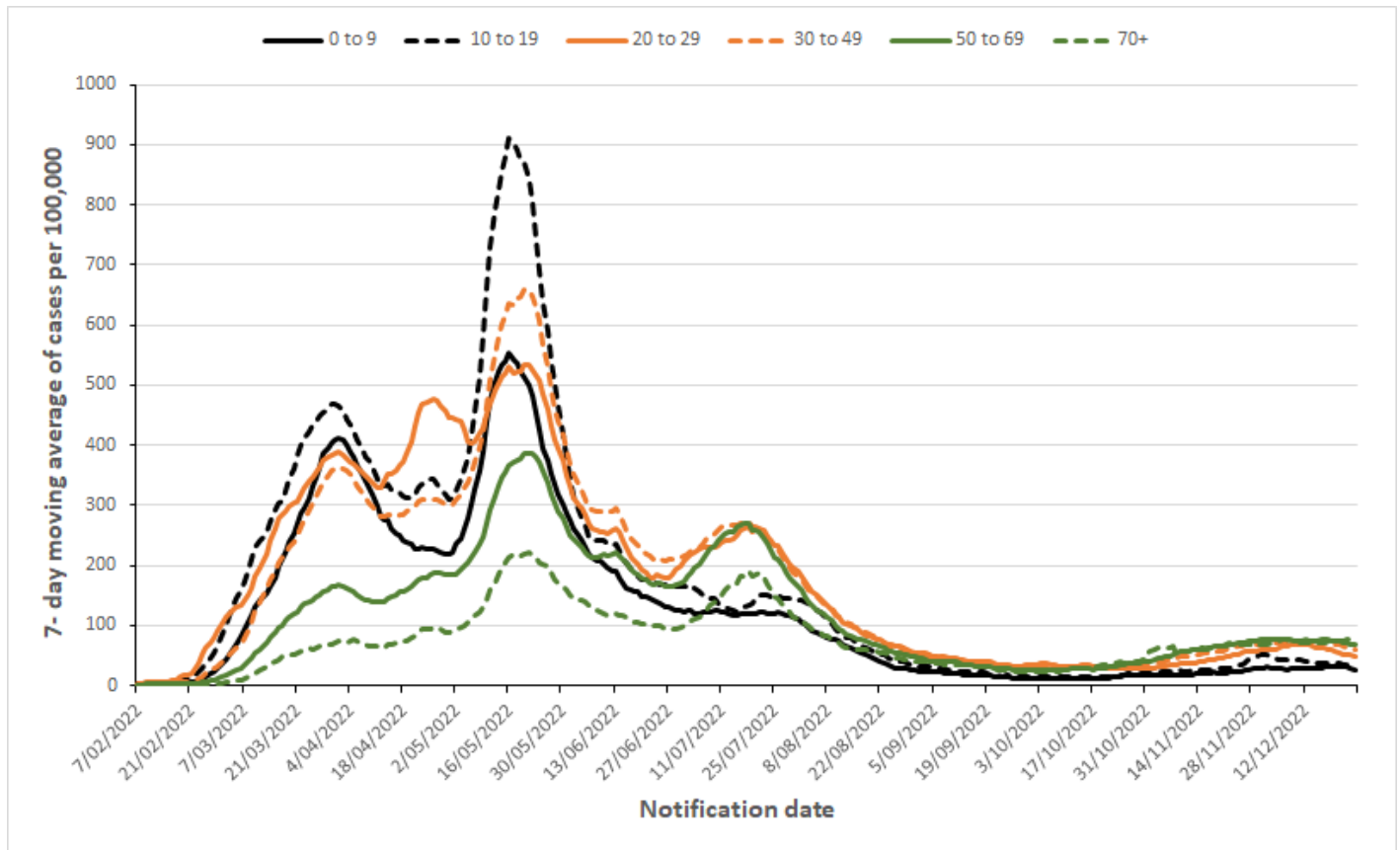
Data sourced from the respective jurisdictional health department datasets

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 2020 estimates.

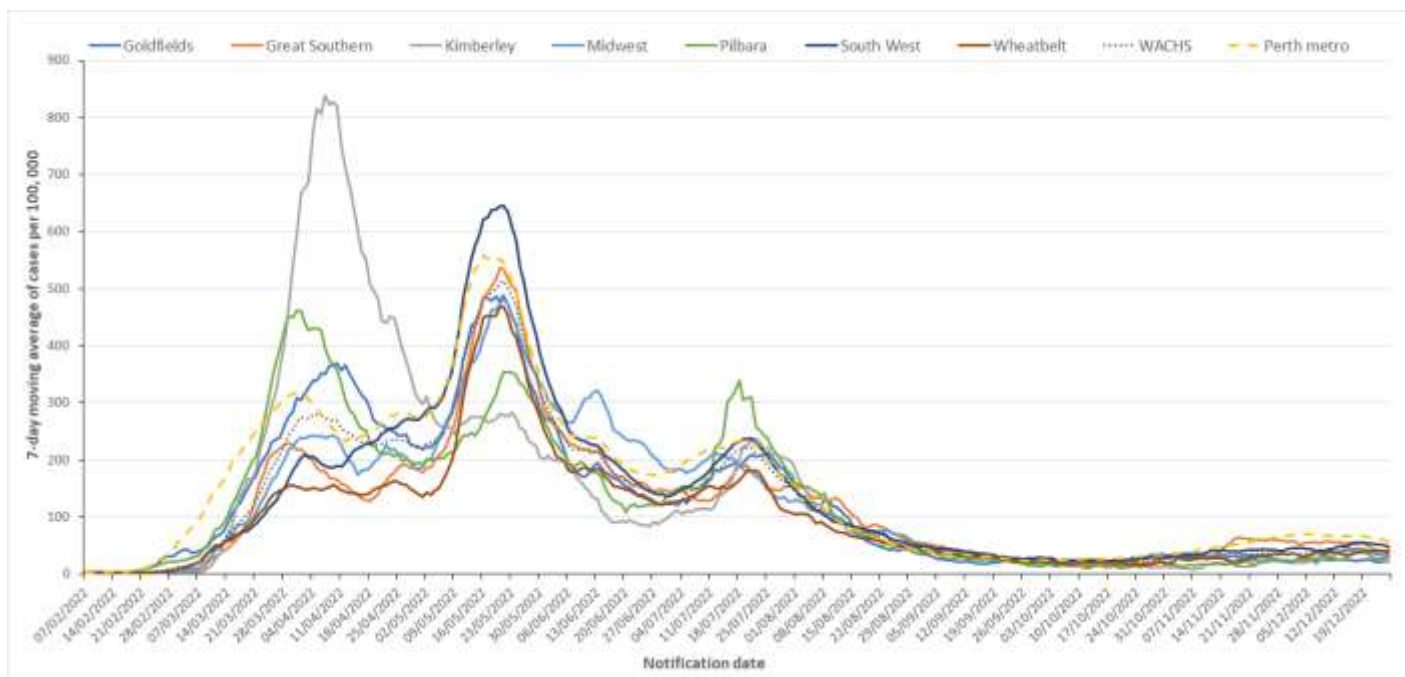
Figure 5. 7-day moving average of COVID-19 cases per 100,000 by age group, Western Australia, 08 February to 25 December 2022.



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
 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 25 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
 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, Western Australia, 19 December to 25 December 2022 and 12 December to 18 December 2022.

	Region	Current report week		Previous report week	
		Week 19 December to 25 December 2022		Week 12 December to 18 December 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	79	146	96	178
	Great Southern	150	245	240	391
	Kimberley	56	155	111	308
	Midwest	136	219	188	303
	Pilbara	114	181	157	250
	South West	609	335	695	382
	Wheatbelt	221	290	205	269
WACHS total*		1,365	256	1,692	317
Other**		122	-	107	-
Perth Metropolitan region		8,429	396	10,061	472
Total		9,916	372	11,860	445

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

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

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

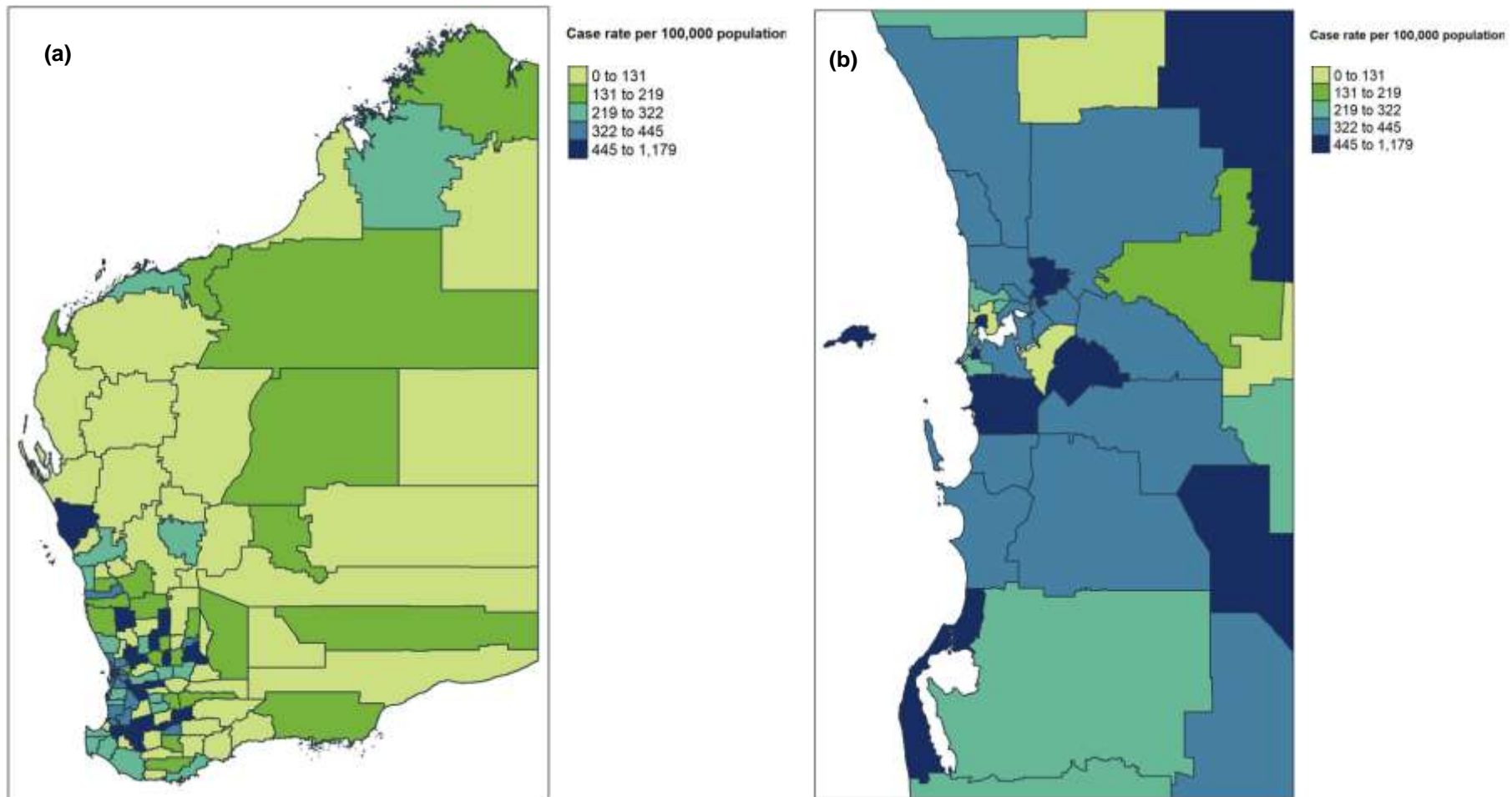
**Other includes cases with overseas and interstate residential addresses, and cases without residential address information

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, 19 December to 25 December 2022.

(b) Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, Perth metropolitan area, 19 December to 25 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 are represented on the map according to their place of usual residence (no information for specific location of acquisition)

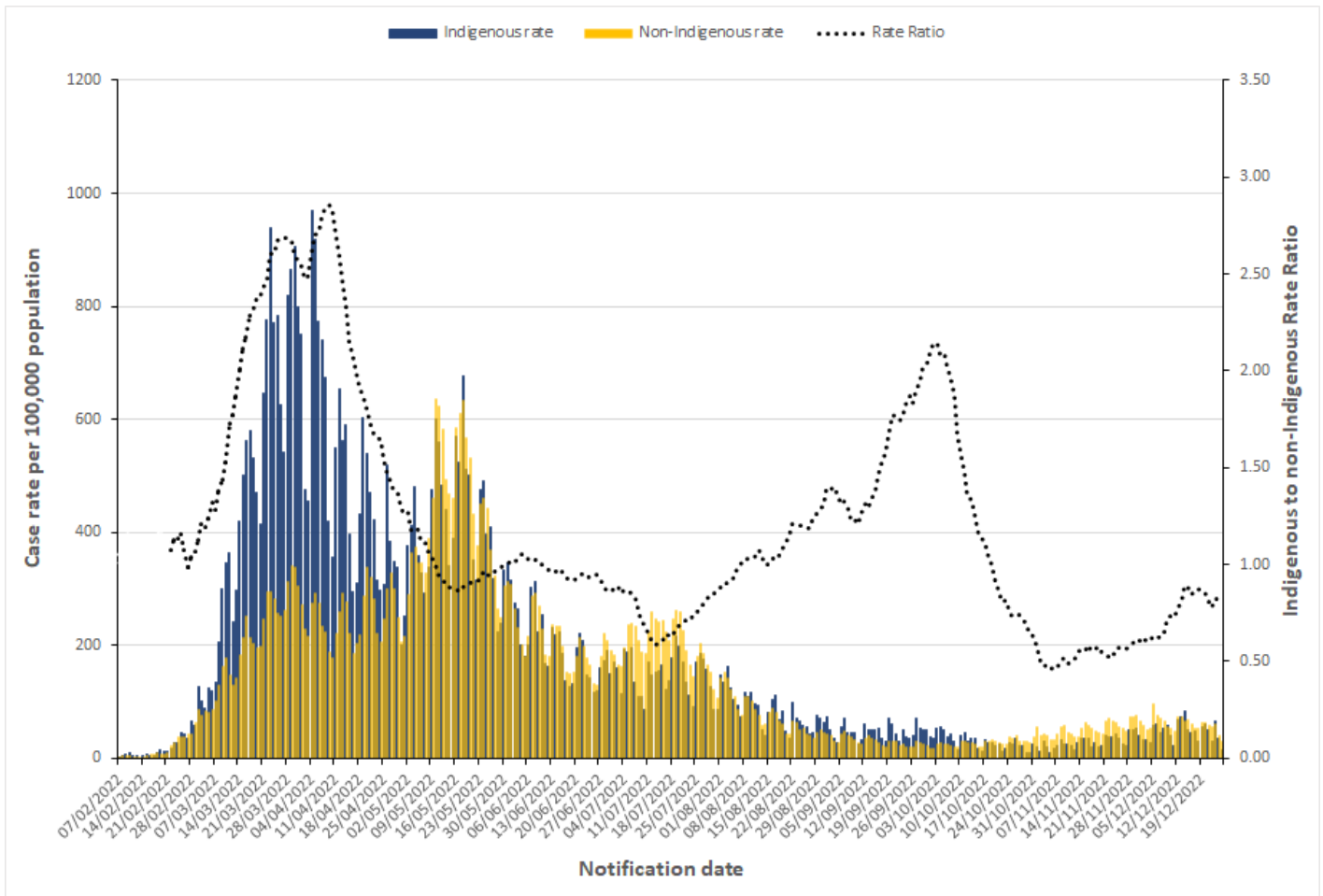
Cases include those detected by either polymerase chain reaction (PCR) tests or rapid antigen tests (RAT)

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 case rates per 100,000 population and rate ratio by Indigenous status and notification date, Western Australia, 08 February to 25 December 2022.

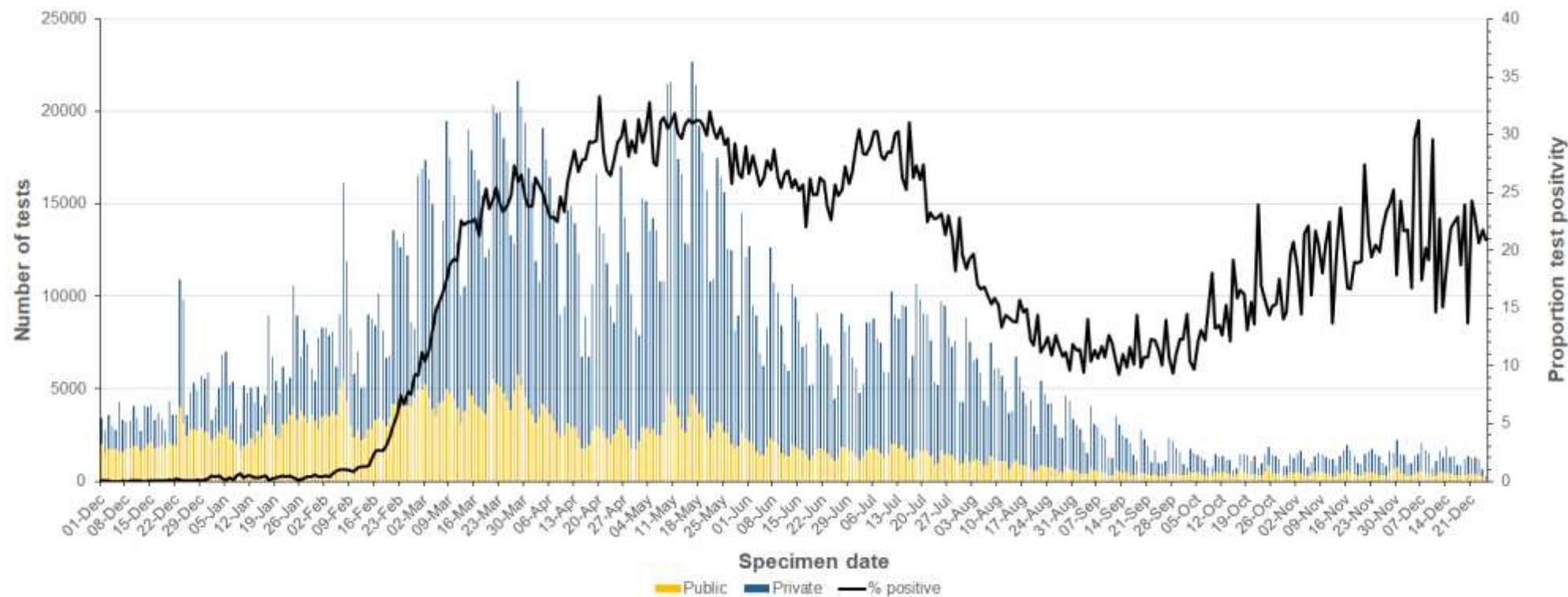


Notes

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 25 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

Numbers of regional cases by postcode, 19 December – 25 December 2022

WACHS Regions	Postcode	Week 19 Dec to 25 Dec 2022	WACHS Regions	Postcode	Week 19 Dec to 25 Dec 2022	WACHS Regions	Postcode	Week 19 Dec to 25 Dec 2022
Goldfields	6429	<5	Midwest (continued)	6642	<5	South West (continued)	6260	<5
	6430	31		6701	6		6262	<5
	6432	23		6707	6		6271	10
	6438	<5	Pilbara	6710	<5		6275	<5
	6448	<5		6713	<5		6280	88
	6450	20		6714	40		6281	15
	6646	<5		6716	<5		6282	<5
Great Southern	6316	<5		6718	<5		6284	8
	6317	14		6720	10		6285	26
	6318	<5		6721	9		6286	<5
	6321	<5	6722	16	6288	<5		
	6323	<5	6751	12	6290	<5		
	6324	8	6753	16	6380	<5		
	6328	<5	6762	<5	6398	<5		
	6330	108	South West	6218	<5	Wheatbelt	6041	<5
	6333	5		6219	<5		6042	<5
	6335	<5		6220	9		6044	5
6337	<5	6224		6	6302		<5	
6348	<5	6225		38	6304		<5	
Kimberley	6725	22	6226	5	6306		5	
	6728	18	6227	<5	6308		5	
	6740	<5	6228	<5	6309		<5	
	6743	13	6230	160	6311		<5	
	6770	<5	6232	47	6312		14	
Midwest	6514	<5	6233	93	6315	7		
	6515	<5	6234	<5	6350	<5		
	6517	<5	6236	6	6355	<5		
	6518	<5	6237	9	6361	<5		
	6519	<5	6239	25	6365	<5		
	6525	8	6240	<5	6367	<5		
	6528	<5	6243	<5	6369	<5		
	6530	87	6244	5	6383	<5		
	6532	16	6251	<5	6384	<5		
	6535	<5	6253	<5	6390	8		
	6536	<5	6254	<5	6401	33		
	6620	<5	6255	10	6407	<5		
	6638	<5	6258	16	6409	<5		

WACHS Regions	Postcode	Week 19 Dec to 25 Dec 2022	WACHS Regions	Postcode	Week 19 Dec to 25 Dec 2022	WACHS Regions	Postcode	Week 19 Dec to 25 Dec 2022
Wheatbelt (continued)	6410	<5	Wheatbelt (continued)	6502	<5			
	6411	<5		6503	6			
	6413	<5		6507	<5			
	6415	16		6510	16			
	6418	<5		6511	<5			
	6425	<5		6516	<5			
	6426	<5		6560	7			
	6460	<5		6562	10			
	6461	7		6564	<5			
	6475	<5		6566	26			
	6479	<5		6567	<5			
	6485	<5		6603	<5			
	6490	<5		6609	<5			
	6501	<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

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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