



COVID-19 Weekly Surveillance Report

Table of Contents

Summary for the week 12 December to 18 December 2022 (inclusive)	2
Hospitalisations, intensive care unit (ICU) inpatients and deaths	3
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 18 December 2022.	3
Table 1. Number of COVID-19 related deaths by vaccination status and age group, 05 December to 11 December 2022 and 01 January to 18 December 2022.....	4
Case data	5
Figure 2. COVID-19 cases by notification date and test type, Western Australia, 01 January to 18 December 2022.....	5
Figure 3. COVID-19 cases by age group and sex, Western Australia, 05 December to 18 December 2022.	6
Table 2. COVID-19 reinfections in Western Australia, 02 March to 18 December 2022.....	7
Figure 4. 7-day moving average of COVID-19 cases per 100,000 population by Australian jurisdiction, 01 December 2021 to 18 December 2022.....	7
Figure 5. 7-day moving average of COVID-19 cases per 100,000 by age group, Western Australia, 08 February to 18 December 2022.....	8
Figure 6. 7-day moving average of COVID-19 cases per 100,000 population by health region, Western Australia, 08 February 2022 to 18 December 2022.	9
Table 3. Number of COVID-19 cases and case rates per 100,000 population by region, Western Australia, 12 December to 18 December 2022 and 05 December to 11 December 2022.....	10
Figure 7 (a). Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, regional Western Australia, 12 December to 18 December 2022.....	11
(b) Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, Perth metropolitan area, 12 December to 18 December 2022.....	11
Aboriginal case summary	12
Figure 8. COVID-19 case rates per 100,000 population and rate ratio by Indigenous status and notification date, Western Australia, 08 February to 11 December 2022.	12
Testing data	13
Figure 9. The number of COVID-19 polymerase chain reaction tests and proportion positive by laboratory category and specimen date, 01 December 2021 to 18 December 2022.....	13
Appendix 1	14
Regional cases by postcode, 12 December – 18 December 2022.....	14

Summary for the week 12 December to 18 December 2022 (inclusive)

In the week of 12 December to 18 December 2022 there were:

- 11,860 COVID-19 cases reported
 - 1,927 with positive polymerase chain reaction (PCR) tests
 - 9,933 with positive rapid antigen tests (RAT)
 - 2,725 were reinfections (see definition in Table 2)
- 100 new hospital admissions and 4 new admissions directly into an intensive care unit
- 15 deaths reported, aged between 75 and 95 years old
- 9,225 COVID-19 PCR tests conducted

Surveillance summary

This week, **case numbers** decreased by 3% compared to the previous week. Cases diagnosed by PCR decreased by 9% and those diagnosed by RATs decreased by 2%. **Reinfections** comprised 23% of total cases this week, the same as last week.

There was a decrease of 6.8% in **PCR tests** conducted this week compared to the previous week, with a 7-day average test positive proportion of 20.4% for PCR tests.

The moving seven-day average **case rates** per 100,000 population increased in all regions except the Great South and Wheatbelt. The seven-day average case rate for the Perth metropolitan area (68 cases/100,000 population) was approximately 51% higher than the Western Australia Country Health Service (WACHS) regions combined (45 cases/100,000 population).

The highest seven-day average **age-specific rates** were in the 50 - 69 years age group (76 cases/100,000 population), with the lowest rates in the 0 – 9 years age group (32 cases/100,000 population).

Nationally, the moving seven-day average case rates increased across all jurisdictions, with Tasmania having the highest rate (104 cases/100,000 population) and Queensland the lowest rate (41 cases/100,000 population).

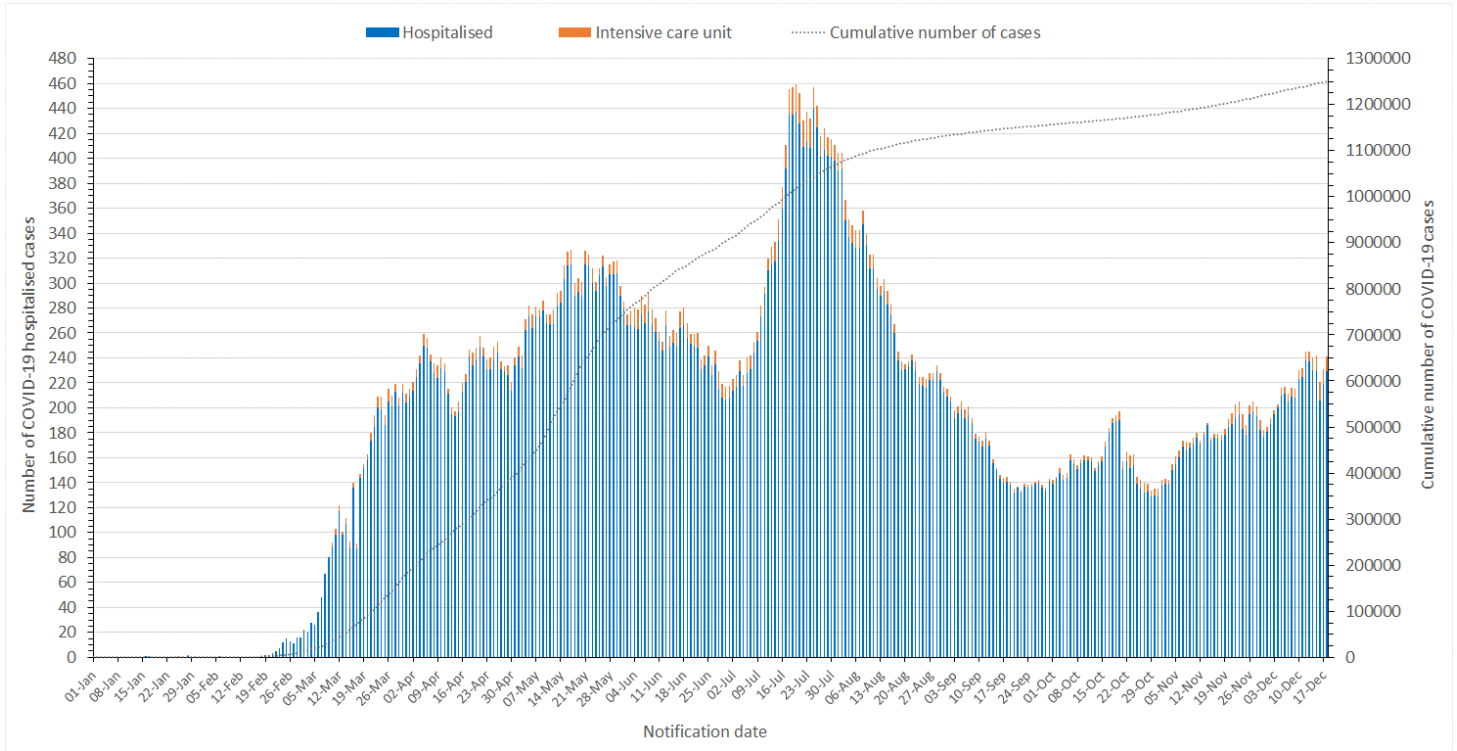
The 7-day average of **hospitalised cases** increased by 6.5% from 213 last week to 227 this week. **Intensive care unit cases** increased from 7 in the last reporting week to 11 this week.

Deaths decreased by 38% with 24 deaths in the last reporting week compared to 15 this week.

This week, 422 cases were reported in the **Aboriginal population**, a 19% 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 0.88 this reporting week. One death was 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 18 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.

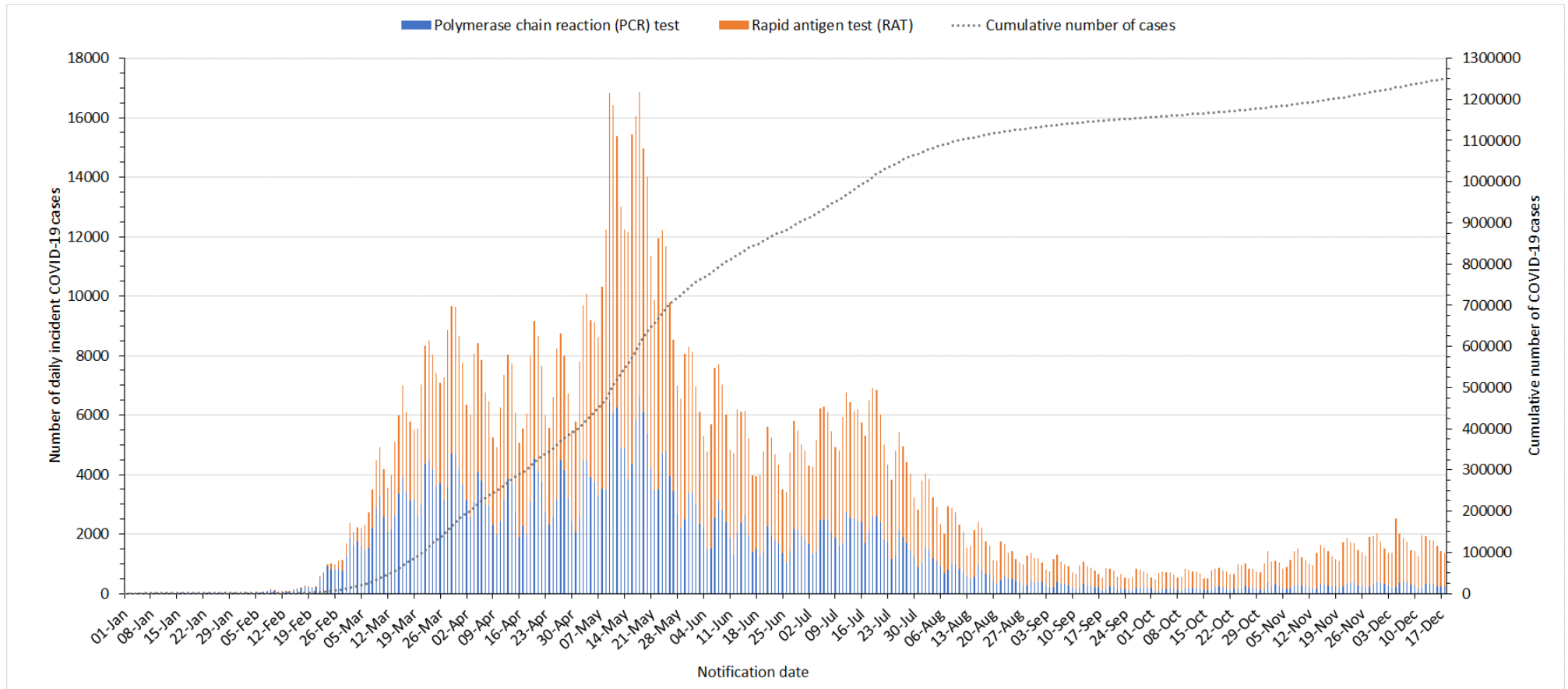
Table 1. Number of COVID-19 related deaths by vaccination status and age group, 05 December to 11 December 2022 and 01 January to 18 December 2022.

	Current report week Week 12 Dec – 18 Dec 2022	Year to date 01 Jan 2022 – 18 Dec 2022
Number of COVID-19 vaccine doses	Deaths (n= 15)	Deaths (n= 799)
0	4 (27%)	148 (19%)
1	0 (0%)	27 (3%)
2	0 (0%)	95 (12%)
3+	11 (73%)	529 (66%)
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	0 (0%)	9 (1.1%)
50-59	0 (0%)	27 (3.4%)
60-69	0 (0%)	55 (6.4%)
70-79	2 (0%)	145 (18.3%)
80-89	6 (0%)	305 (38.5%)
90+	7 (0%)	250 (31.6%)

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 16th 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
 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 18 December 2022.



Notes

Data sourced from Western Australia Department of Health dataset

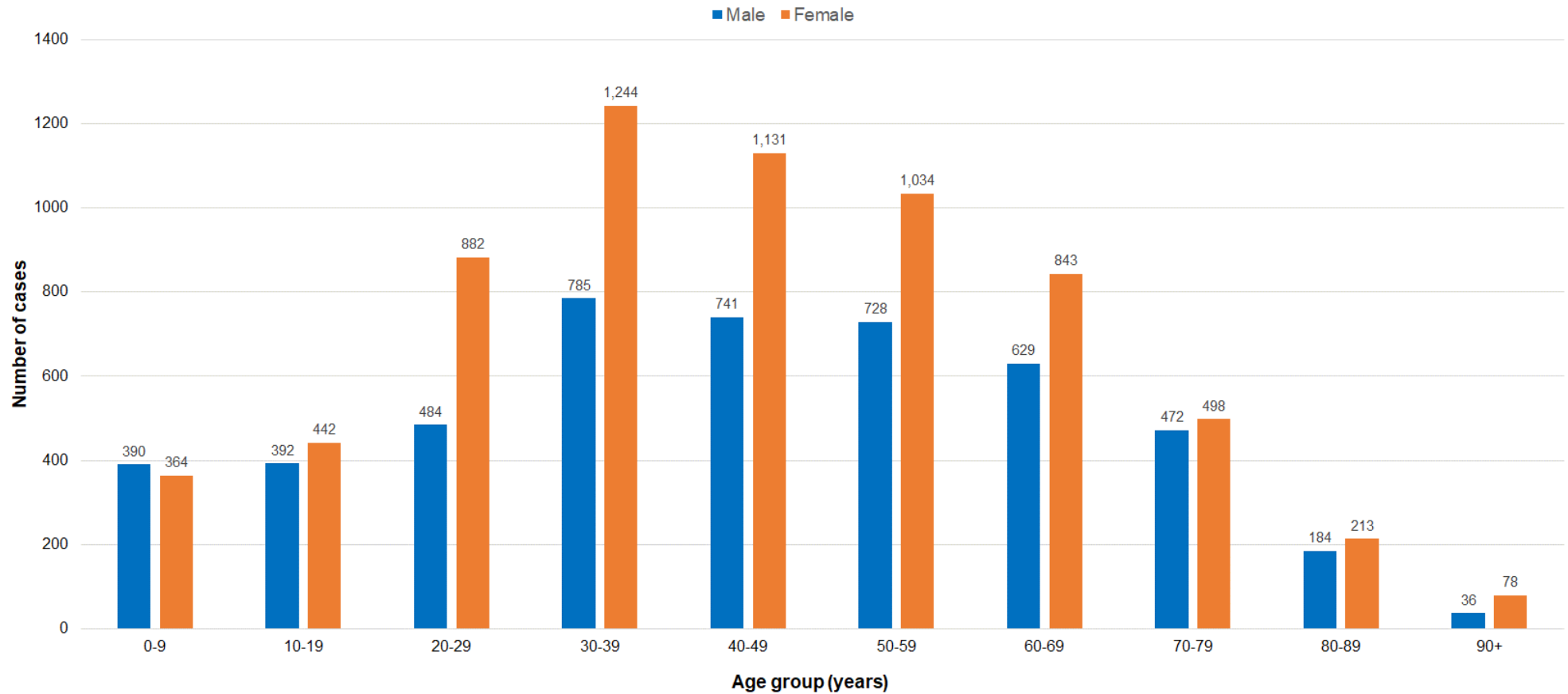
Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm

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 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, 05 December to 18 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=4,841 (41.8%) Females: n=6,729 (58.2%)
- Median age = 44 years; range: 0 to 103 years

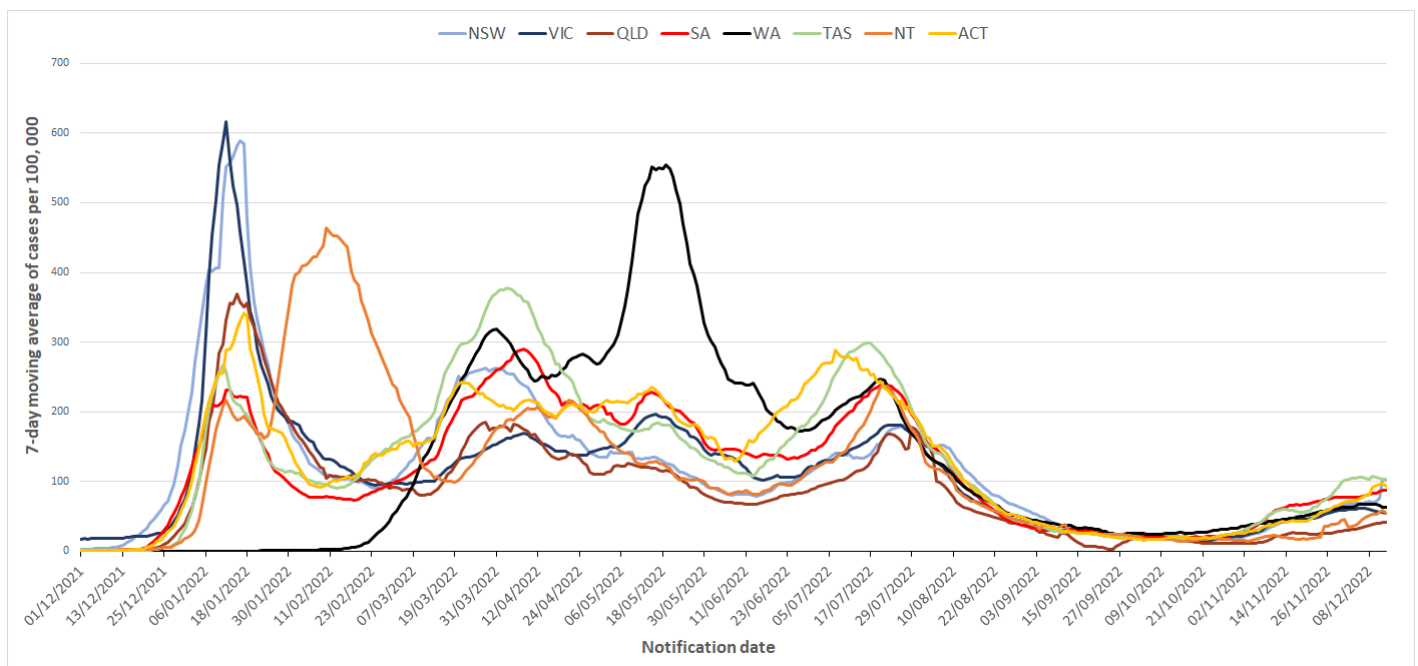
Table 2. COVID-19 reinfections in Western Australia, 02 March to 18 December 2022.

Month	Number of reinfections *
Mar-2022	14
Apr-2022	29
May-2022	105
Jun-2022	846
Jul-2022	5,041
Aug-2022	5,697
Sep-2022	4,025
Oct-2022	2,969
Nov-2022	6,978
Dec-2022[^]	6,803
Total	32,507

* 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 11th December inclusive

Figure 4. 7-day moving average of COVID-19 cases per 100,000 population by Australian jurisdiction, 01 December 2021 to 18 December 2022.



Notes

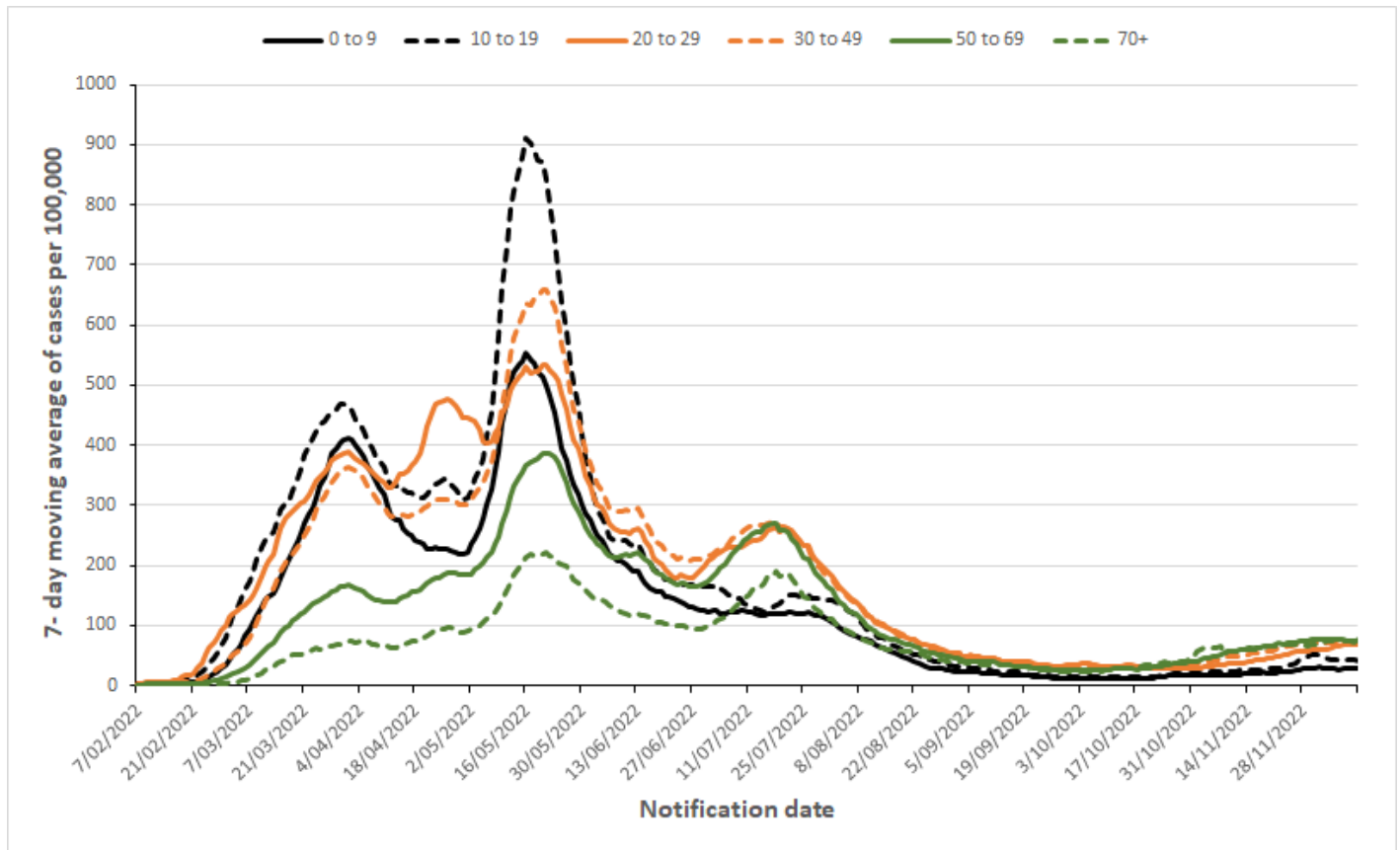
Data sourced from the respective jurisdictional health department datasets

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 2021 estimates.

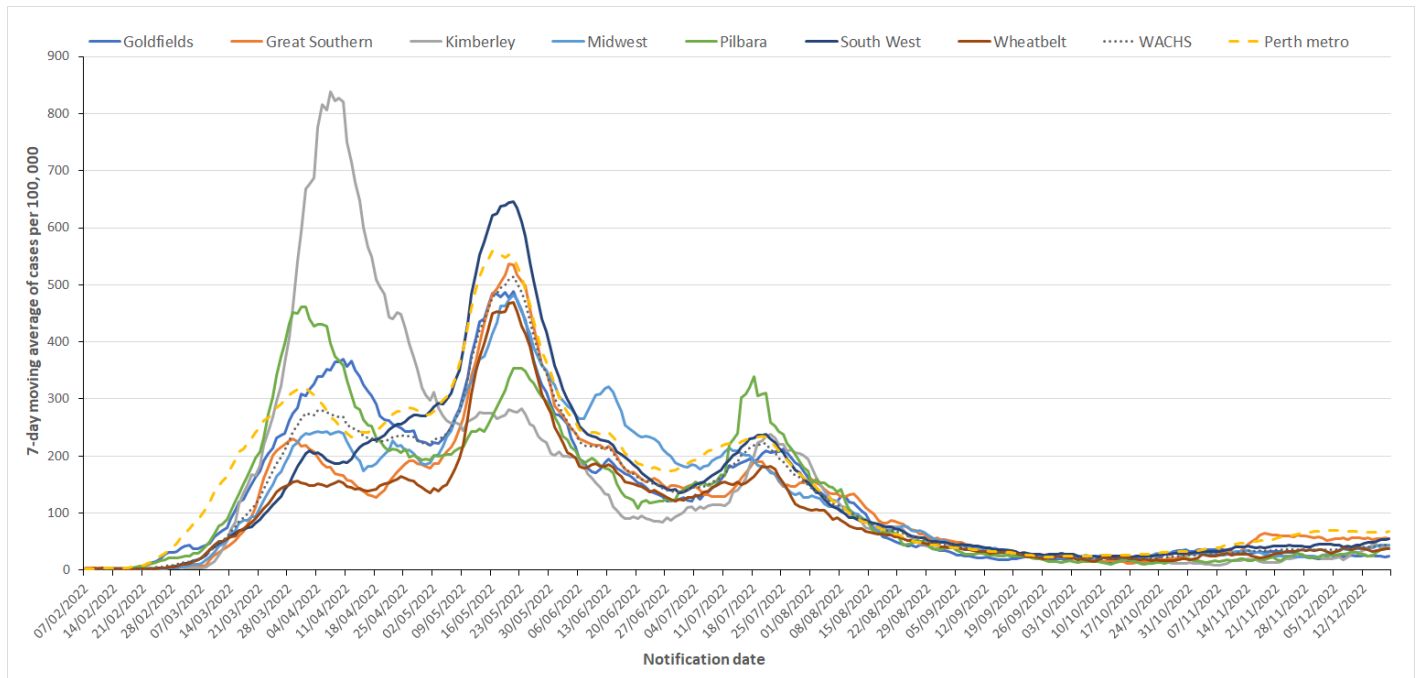
Figure 5. 7-day moving average of COVID-19 cases per 100,000 by age group, Western Australia, 08 February to 18 December 2022.



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 18 December 2022.



Notes

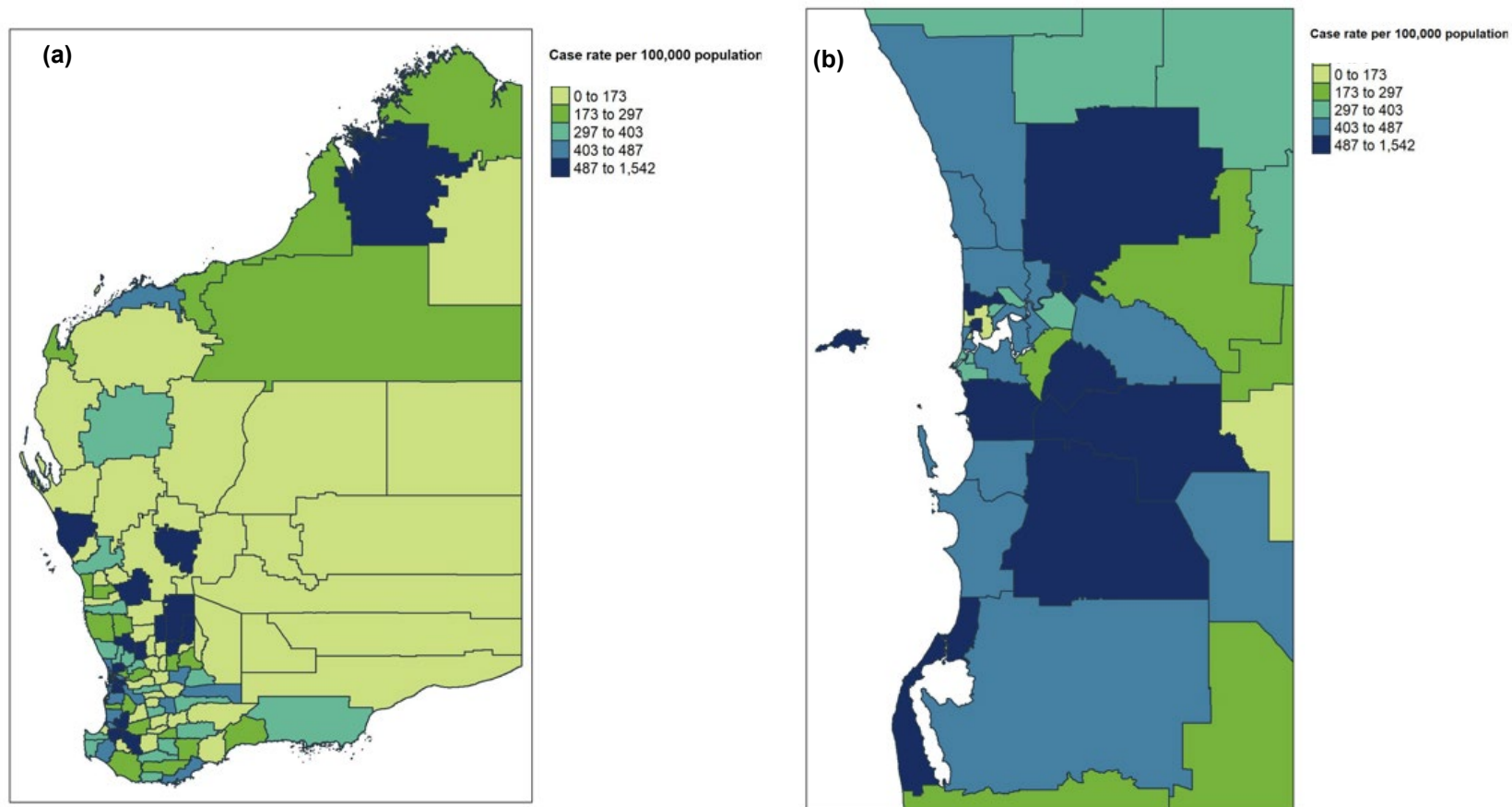
Data sourced from Western Australia Department of Health dataset
 Notification date refers to data collected up to the end of the 24-hour reporting period 8pm to 8pm
 The reporting period transitioned to a 6pm to 6pm cycle from 18th June 2022 and then to a 4pm to 4pm cycle from 24th August 2022
 Cases 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, Western Australia, 12 December to 18 December 2022 and 05 December to 11 December 2022.

	Region	Current report week		Previous report week	
		Week 12 December to 18 December 2022		Week 05 December to 11 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	96	178	93	172
	Great Southern	240	391	245	400
	Kimberley	111	308	79	219
	Midwest	188	303	167	269
	Pilbara	157	250	122	194
	South West	695	382	569	313
	Wheatbelt	205	269	209	274
WACHS total*		1692	317	1,484	278
Other**		107	-	731	-
Perth Metropolitan region		10,061	472	10,035	471
Total		11,860	445	12,250	460

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, 12 December to 18 December 2022.
(b) Locally acquired COVID-19 weekly case rates per 100,000 population by LGA, Perth metropolitan area, 12 December to 18 December 2022.

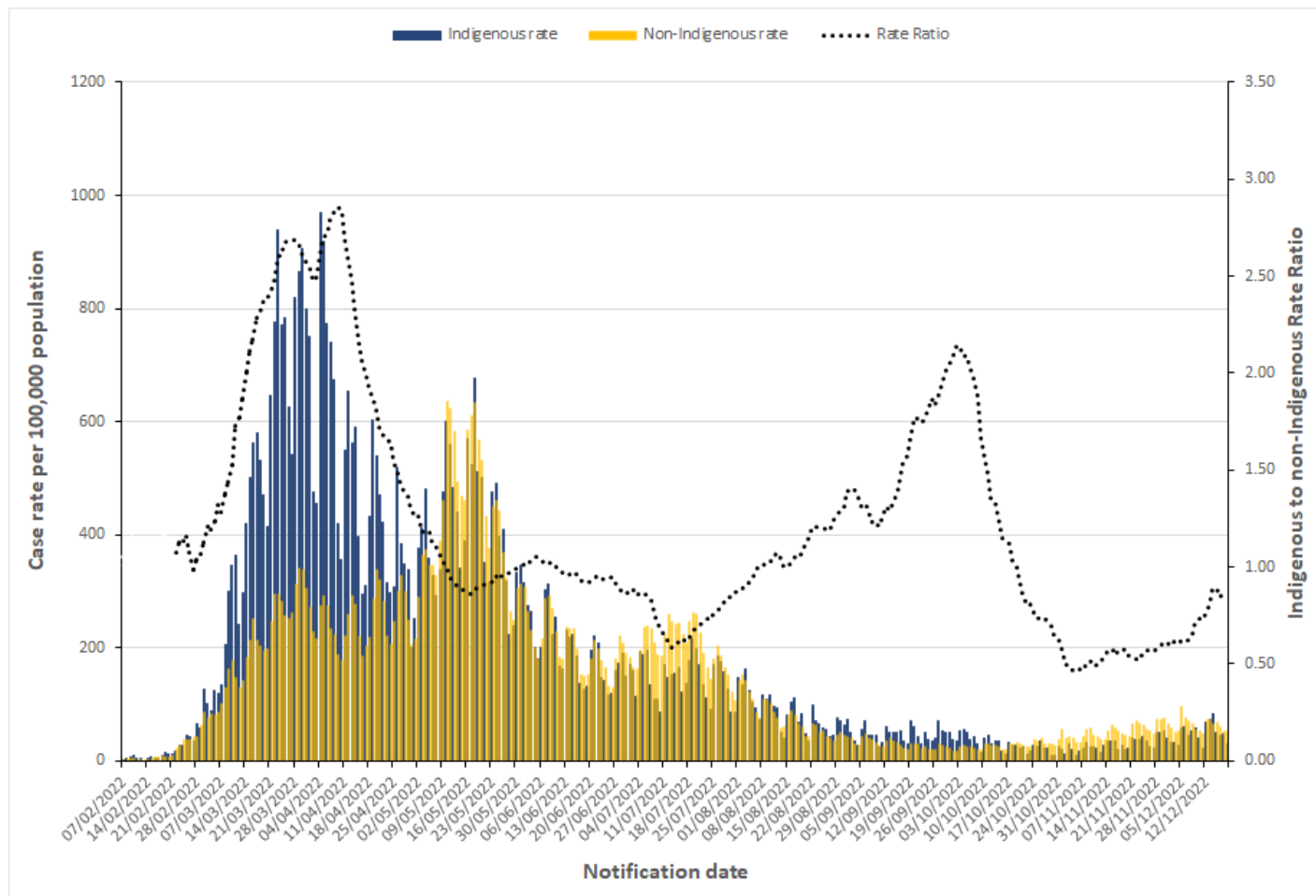


Notes

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 case rates per 100,000 population and rate ratio by Indigenous status and notification date, Western Australia, 08 February to 11 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)

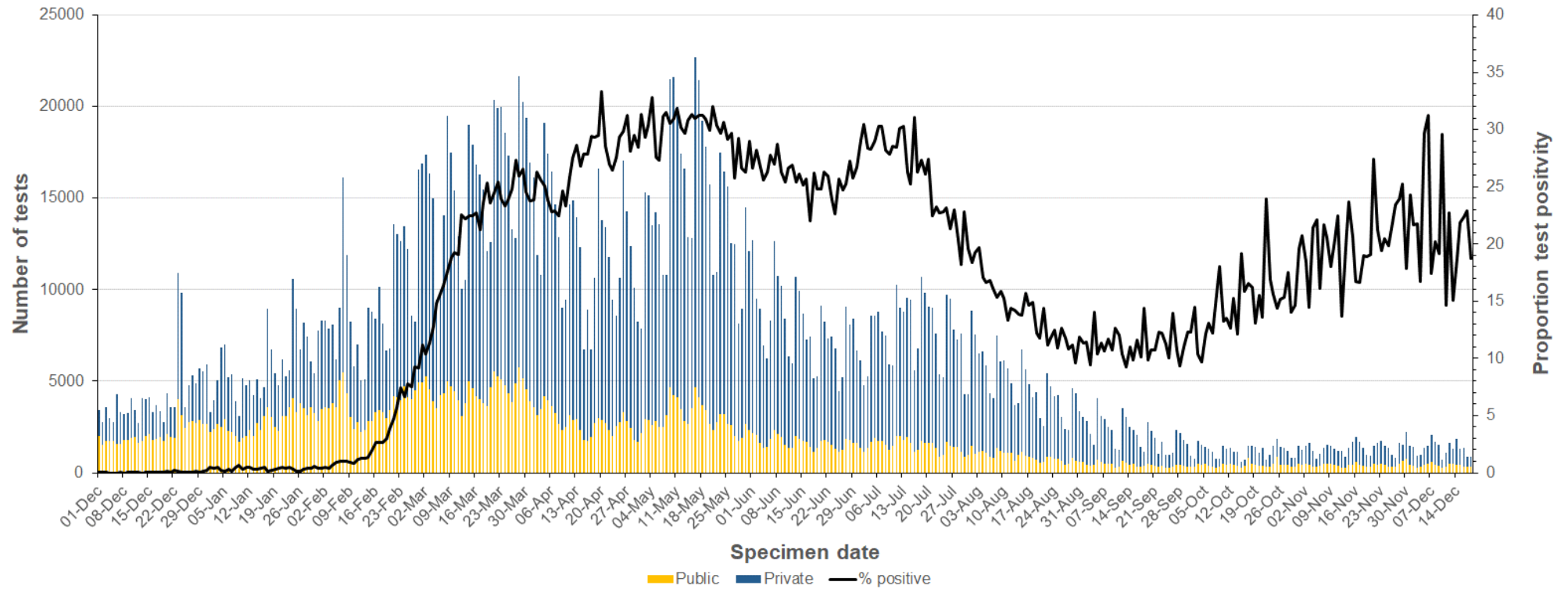
Population denominator data were sourced from Australian Bureau of Statistics 2020 estimates

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 18 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, 12 December – 18 December 2022

WACHS Regions	Postcode	Week 05 Dec to 18 Dec 2022	WACHS Regions	Postcode	Week 05 Dec to 18 Dec 2022	WACHS Regions	Postcode	Week 05 Dec to 18 Dec 2022
Goldfields	6429	<5	Midwest (continued)	6530	199	South West (continued)	6232	65
	6430	51		6532	25		6233	157
	6432	23		6535	<5		6236	18
	6438	<5		6537	<5		6237	11
	6440	<5		6620	<5		6239	43
	6442	<5		6623	<5		6244	12
	6450	66		6630	<5		6251	<5
Great Southern	6316	<5	Pilbara	6638	9	6253	5	
	6317	15		6701	14	6254	<5	
	6318	6		6705	<5	6255	12	
	6321	<5		6707	6	6258	29	
	6322	<5		3350	<5	6260	<5	
	6323	<5		6710	<5	6262	<5	
	6324	11		6713	8	6271	15	
	6328	<5		6714	88	6275	6	
	6330	247		6716	<5	6280	171	
	6333	24		6718	6	6281	31	
	6335	<5		6720	17	6282	5	
	6337	<5		6721	17	6284	10	
	6338	<5		6722	33	6285	50	
	6341	<5		6751	17	6286	<5	
	6343	<5		6753	18	6288	<5	
	6348	7		6754	<5	6290	8	
	6395	<5		6758	<5	6820	<5	
6396	<5	6762	12	6041	9			
Kimberley	6725	38	South West	6218	8	Wheatbelt	6044	5
	6726	14		6219	<5		6302	13
	6728	61		6220	7		6304	<5
	6729	<5		6221	<5		6306	5
	6740	<5		6223	<5		6308	5
	6743	24		6224	7		6312	26
	6770	<5		6225	63		6315	6
Midwest	6514	<5	Midwest	6226	11	6350	<5	
	6517	<5		6227	<5	6355	<5	
	6519	<5		6228	<5	6365	<5	
	6525	11		6229	<5	6367	6	
	6528	<5		6230	285	6369	<5	

WACHS Regions	Postcode	Week 05 Dec to 18 Dec 2022	WACHS Regions	Postcode	Week 05 Dec to 18 Dec 2022	WACHS Regions	Postcode	Week 05 Dec to 18 Dec 2022
Wheatbelt (continued)	6370	<5	Wheatbelt (continued)	6461	<5	Wheatbelt (continued)	6509	<5
	6372	<5		6470	<5		6510	13
	6383	<5		6472	6		6511	<5
	6390	5		6477	<5		6516	<5
	6391	<5		6479	<5		6560	9
	6401	40		6480	<5		6562	12
	6407	<5		6485	<5		6564	<5
	6409	<5		6488	<5		6566	25
	6410	<5		6489	<5		6567	<5
	6411	<5		6501	7		6569	<5
	6415	14		6502	13		6571	<5
	6418	6		6503	7		6572	<5
	6425	<5		6504	<5		6603	10
	6426	<5		6507	6		6606	<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

This document can be made available in alternative formats on request for a person with disability.

© Department of Health 2022

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.

health.wa.gov.au