



COVID-19 Weekly Surveillance Report

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Summary for the week 17 April to 23 April 2023 (inclusive)

In the week of 17 April to 23 April 2023 there were:

- 3,334 COVID-19 cases reported
 - 442 diagnosed by polymerase chain reaction (PCR) tests
 - 2,892 diagnosed by rapid antigen tests (RAT)
- 1,230 were reinfections (see definition in Table 2)
- 46 new hospital admissions and 2 new admissions into an intensive care unit
- 12 deaths, aged 71 - 100 years old
- 4,896 COVID-19 PCR tests conducted

Surveillance summary

This week, **case numbers** increased by 2% compared to the previous week. Cases diagnosed by PCR increased by 9% and by RAT increased by 1%. **Reinfections** comprised 37% of total cases this week, compared with 33% last week.

The number of **PCR tests** conducted increased by 17% compared to the previous week, with a 7-day average positivity rate of 9.9%.

The moving seven-day average **case rate** per 100,000 population decreased in all regions except the Perth metropolitan, Midwest and Wheatbelt regions, which remained steady, and the Great Southern and Kimberley regions, which increased. The seven-day average case rate for the Perth metropolitan area (19 cases/100,000 population) is approximately 58% higher than the non-metropolitan regions combined (12 cases/100,000 population).

The seven-day average **age-specific rate** increased in all age groups, except the 0 – 9 and 30 – 49 years age groups, which decreased. The highest rates were in the 70+ years age group (25 cases/100,000 population), and the lowest rates in the 0 - 9 years age group (6 cases/100,000 population).

The 7-day average of **hospitalised cases** increased by 9% from 137 last week to 149 this week, while **intensive care unit cases** remained the same at 2 this week. **New hospital admissions** related to COVID-19 decreased by 16% from 55 last week to 46 this week, and **direct intensive care unit admissions** remained the same at 2 this week.

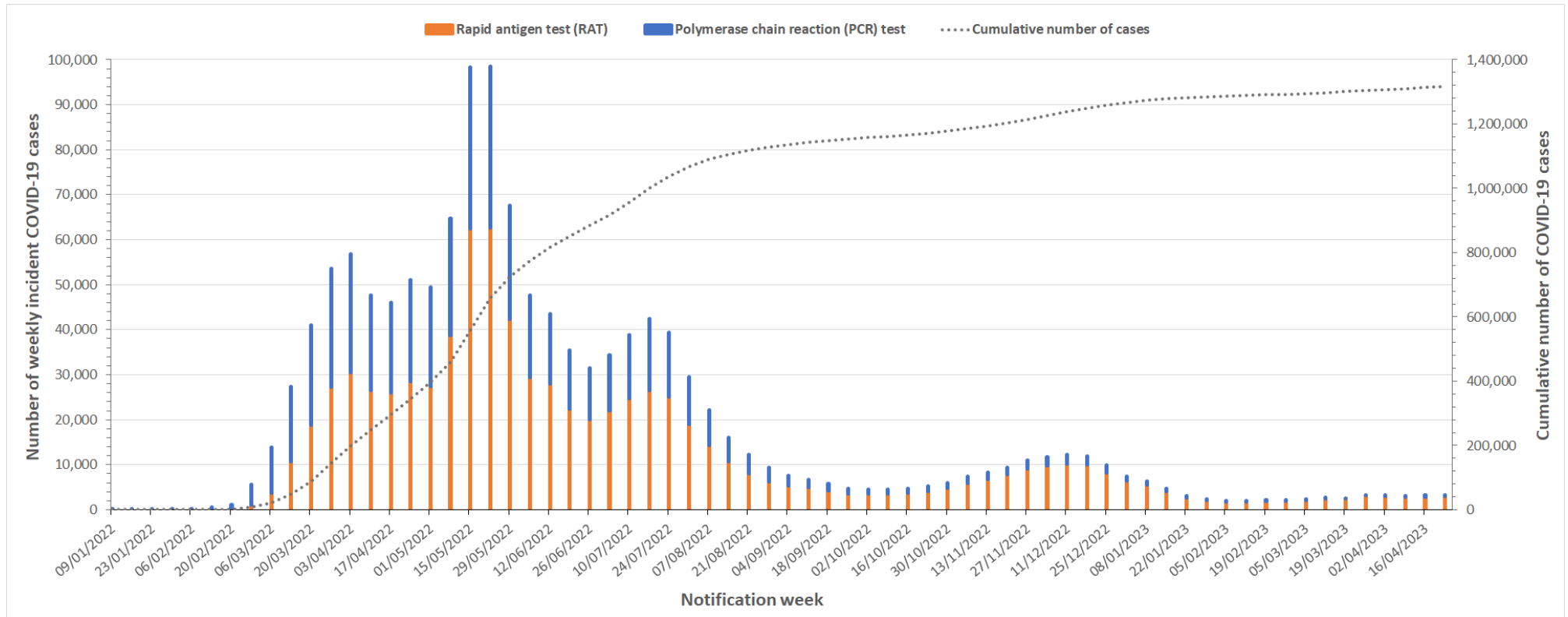
Deaths increased this week with 12 deaths reported compared to 6 last week.

This week, 70 cases were reported in the **Aboriginal population**, a 5% decrease compared to last week. Case rates in the Aboriginal population are lower than the non-Aboriginal population, with a 7-day average rate ratio of 0.5 this reporting week. There were no deaths reported in the Aboriginal population this week.

Nationally, the moving seven-day average case rates increased in all jurisdictions, except the Northern Territory, which remained steady, and South Australia, which decreased. Tasmania reported the highest rate (28 cases/100,000 population) and Queensland the lowest rate (11 cases/100,000 population). The rate in Western Australia was 18 cases/100,000 population.

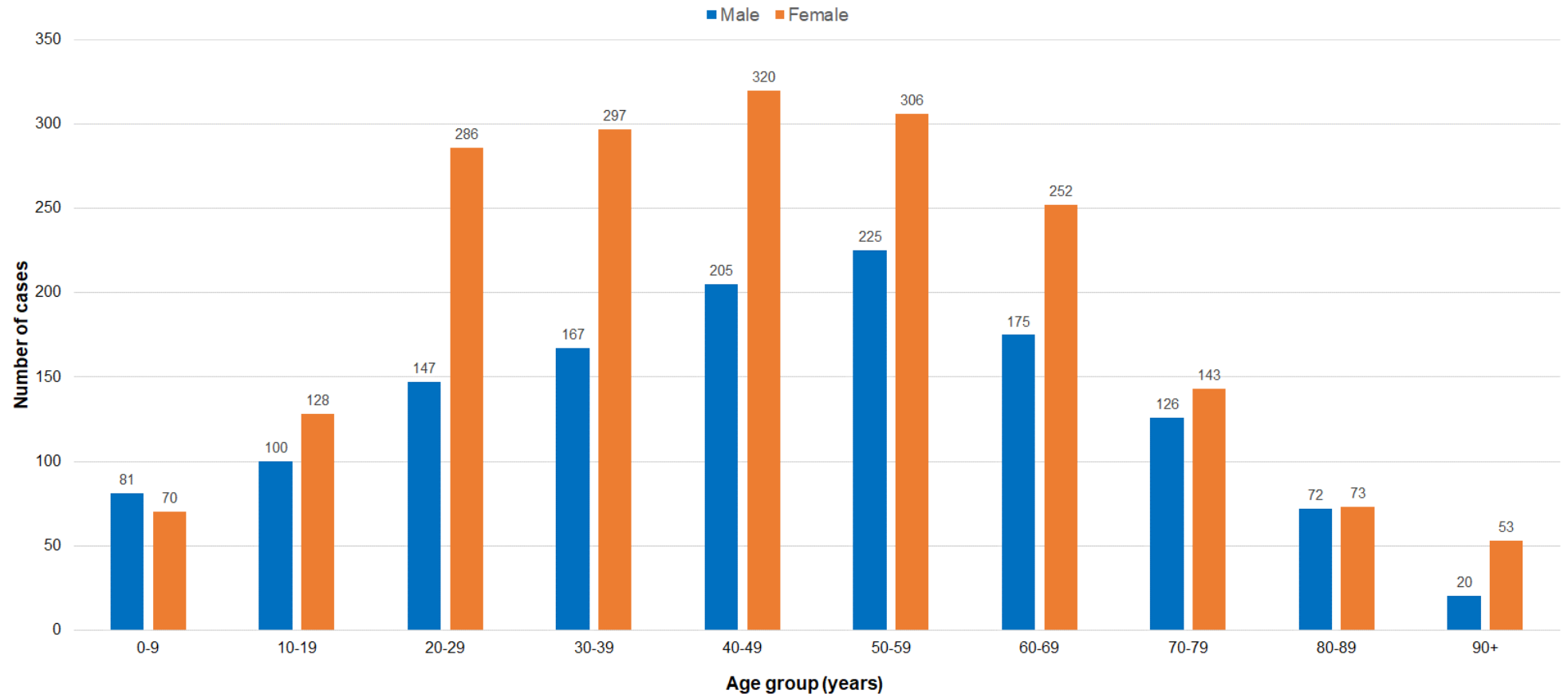
Case data

Figure 1. COVID-19 cases by notification week and test type, Western Australia, 03 January 2022 to 23 April 2023.



Notes
 Data sourced from Western Australia Department of Health dataset
 Following the resumption of large passenger cruise vessels entering WA waters on 24th October 2022, the daily and weekly number of COVID-19 notifications may intermittently be distorted by inclusion of vessel outbreak cases in WA data, irrespective of the place of residence of the cases
 Notification week refers to data reported over the 7 days Monday to Sunday.

Figure 2. COVID-19 cases by age group and sex, Western Australia, 17 April to 23 April 2023.



Notes
 Data sourced from Western Australia Department of Health dataset
 Following the resumption of large passenger cruise vessels entering WA waters on 24th October 2022, the daily and weekly number of COVID-19 notifications may intermittently be distorted by inclusion of vessel outbreak cases in WA data, irrespective of the place of residence of the cases
 Higher case numbers in females relative to males, particularly in those aged 20-69 years, are likely due to increased propensity of women to seek and undertake testing, whether by RAT or PCR, rather than true differences in the incidence of infection
 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=1,318 (40.6%) Females: n=1,928 (59.4%)
- Median age = 46 years; range: 0 to 101 years

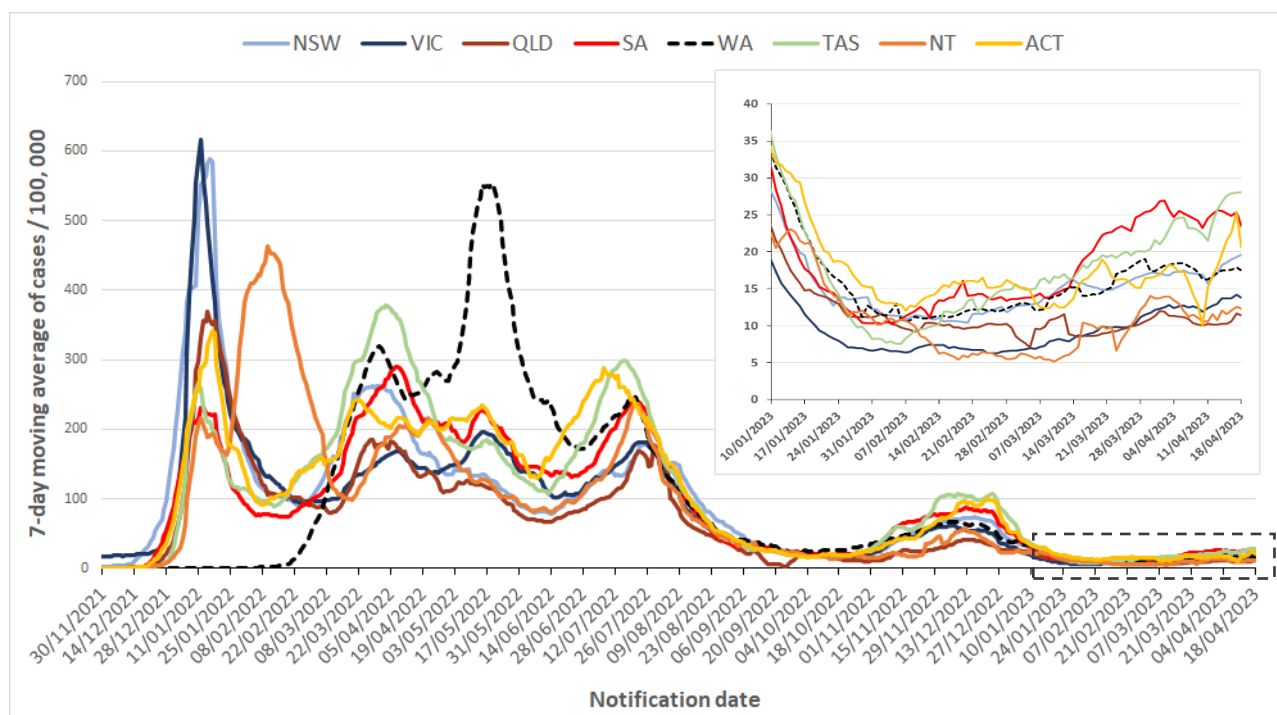
Table 1. COVID-19 reinfections, Western Australia, 02 March 2022 to 23 April 2023.

Month	Number of reinfections *
Mar-2022	14
Apr-2022	30
May-2022	115
Jun-2022	871
Jul-2022	5,073
Aug-2022	5,738
Sep-2022	4,053
Oct-2022	2,991
Nov-2022	7,107
Dec-2022	11,179
Jan-2023	5,499
Feb-2023	3,580
Mar-2023	5,036
Apr-2023^	4,033
Total	55,319

* 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 13 October 2022, COVID-19 reinfections were defined as a positive COVID-19 test occurring 28 days after previously recovering from the virus. From 14 October 2022 to date, COVID-19 reinfections are defined as a positive COVID-19 test occurring 35 days after the date of positive test for the most recent infection.

^ Data up to 23rd April 2023 inclusive

Figure 3. 7-day moving average of COVID-19 cases per 100,000 population by Australian jurisdiction, 01 December 2021 to 18 April 2023.



Notes

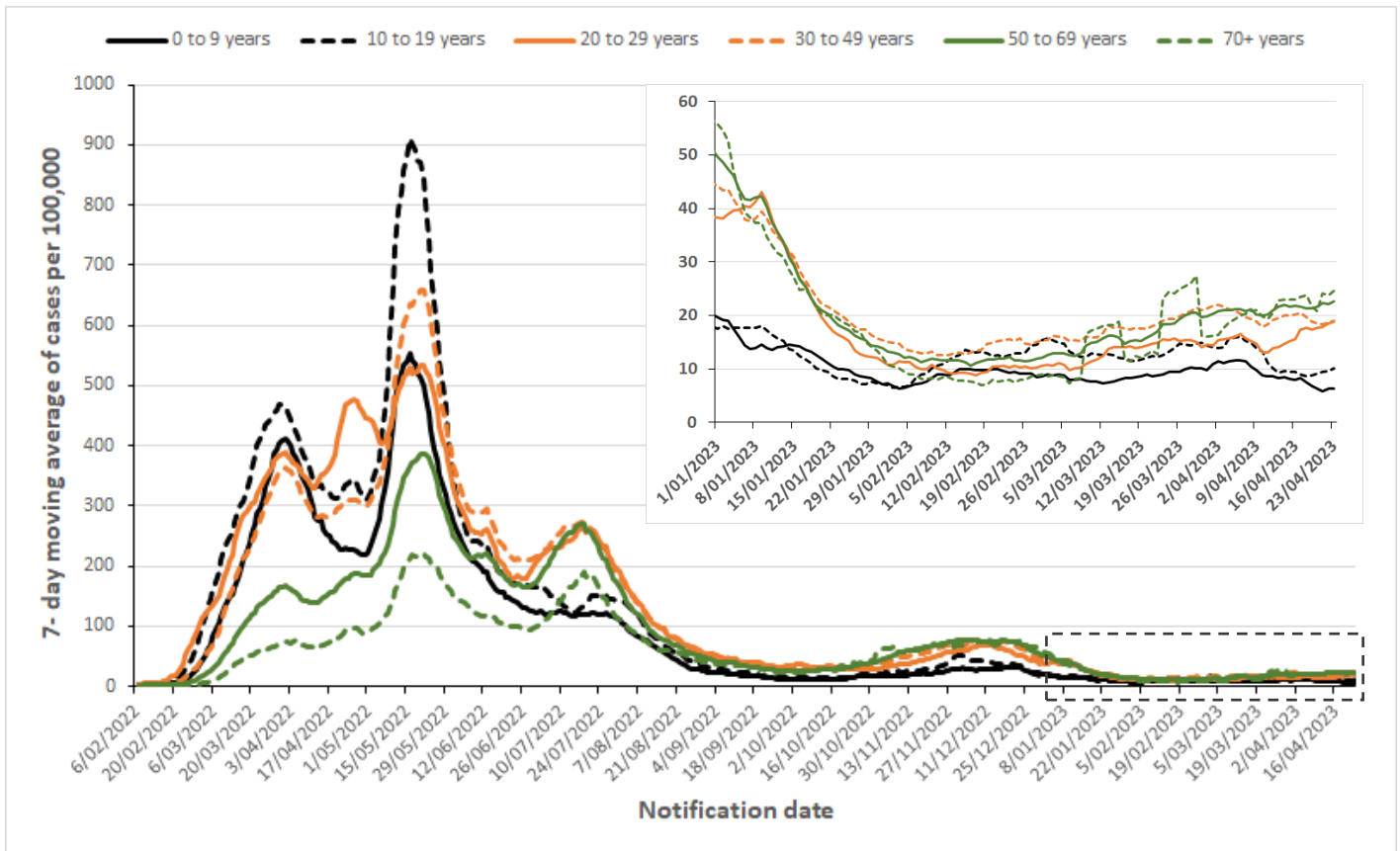
Data sourced from the jurisdictional health department datasets

Notification date refers to the date that a case is notified to the relevant jurisdictional health department

Data is only available up to and including Monday of current report week for all jurisdictions except Western Australia

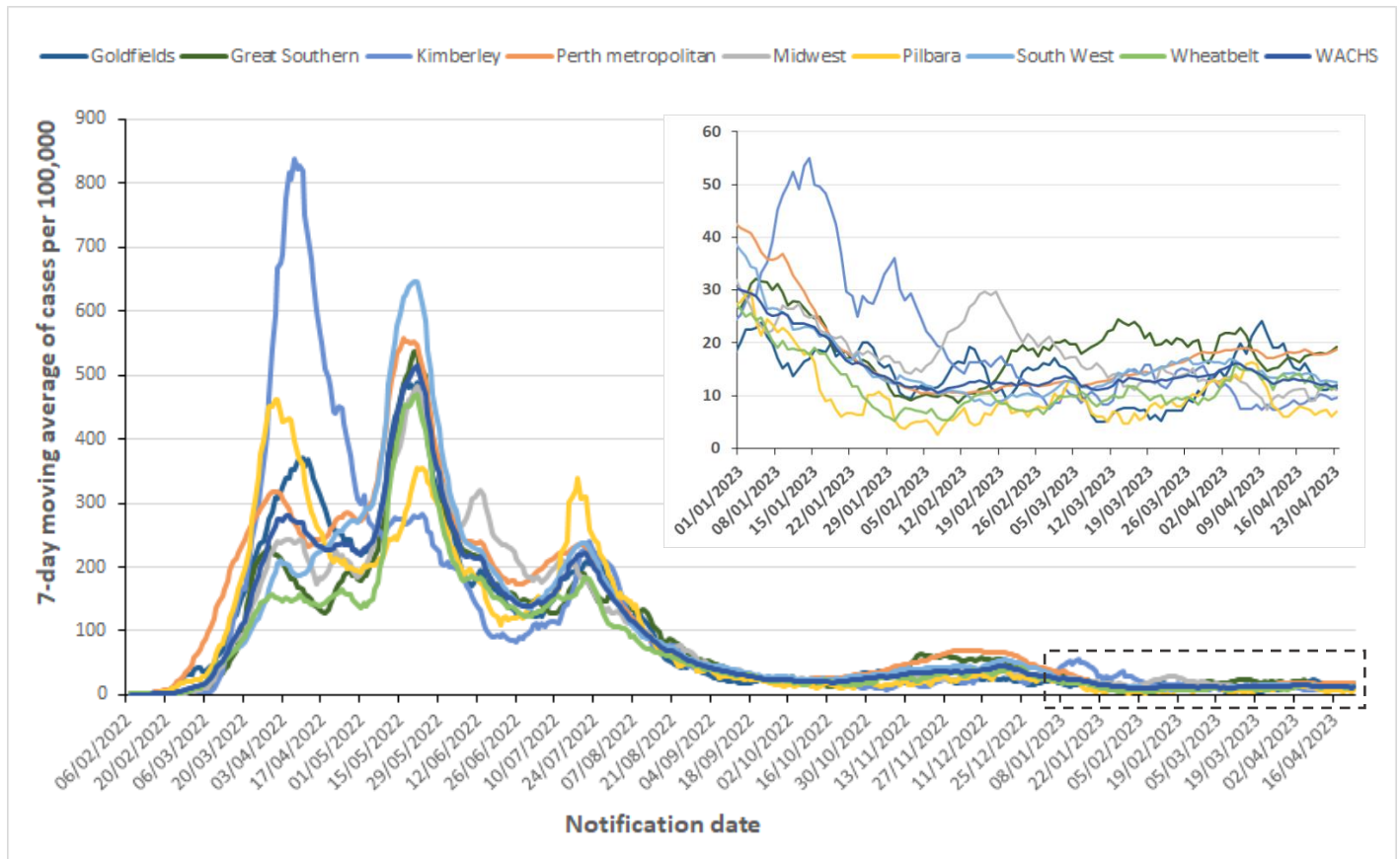
Population denominators are sourced from Australian Bureau of Statistics December 2020 estimates.

Figure 4. 7-day moving average of COVID-19 age-specific rates per 100,000 population, Western Australia, 06 February 2022 to 23 April 2023.



Notes
 Data sourced from Western Australia Department of Health dataset
 Notification date refers to the date that a case is notified to Western Australia Department of Health
 Following the resumption of large passenger cruise vessels entering WA waters on 24th October 2022, the daily and weekly number of COVID-19 notifications may intermittently be distorted by inclusion of vessel outbreak cases in WA data, irrespective of the place of residence of the cases
 Population denominator sourced from Australian Bureau of Statistics June 2021 estimates.

Figure 5. 7-day moving average of COVID-19 case rates per 100,000 population by health region of residence, Western Australia, 06 February 2022 to 23 April 2023.



Notes
 Data sourced from Western Australia Department of Health dataset
 Notification date refers to the date that a case is notified to Western Australia Department of Health
 Western Australia Country Health Service (WACHS) region includes all non-metropolitan health regions: Central-Wheatbelt, Goldfields, Great Southern, Kimberley, Midwest, Pilbara and South West
 Perth metropolitan region includes East Metropolitan Health Service, North Metropolitan Health Service and South Metropolitan Health Service
 Population denominator sourced from Australian Bureau of Statistics 2020 estimates.

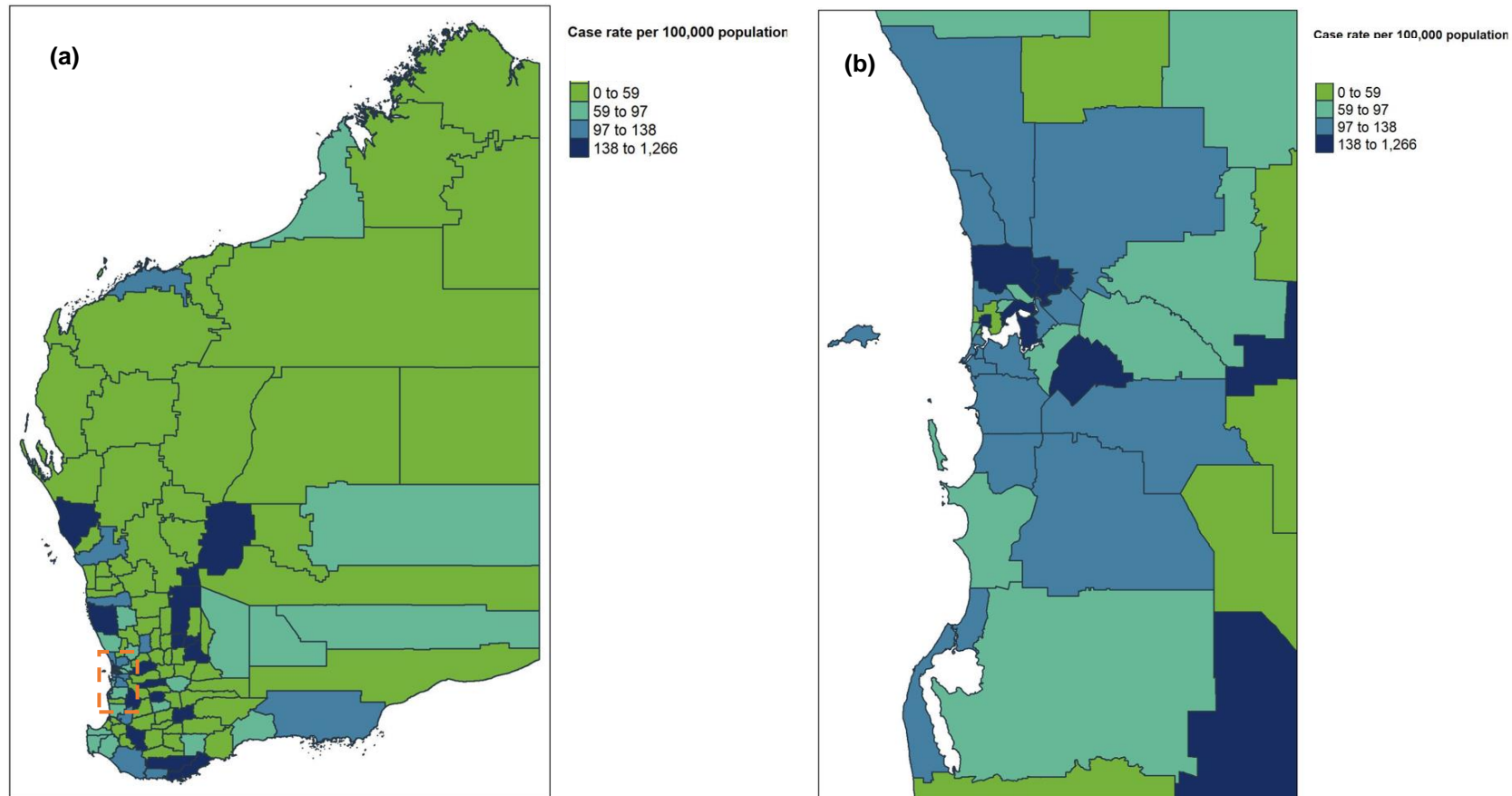
Table 2. Number of COVID-19 cases and rates per 100,000 population by reporting week and health region of residence, Western Australia.

Health Region		Current report week		Previous report week	
		Week 17 April to 23 April 2023		Week 10 April to 16 April 2023	
		Number	Rates [^]	Number	Rates [^]
Perth metropolitan region		2,796	131	2,730	128
WACHS Regions		446	83	481	90
	Goldfields	43	80	56	104
	Great Southern	83	135	70	114
	Kimberley	21	58	21	58
	Midwest	48	77	49	79
	Pilbara	27	43	33	53
	South West	160	88	176	97
	Wheatbelt	64	84	76	100
Other*		92	-	56	-
Total		3,334	122	3,267	121

Notes
 Data sourced from Western Australia Department of Health dataset
 Notification date refers to the date that a case is notified to Western Australia Department of Health
 Western Australia Country Health Service (WACHS) region includes all the non-metropolitan regions: Central-Wheatbelt, Goldfields, Great Southern, Kimberley, Midwest, Pilbara and South West
 Perth Metropolitan region includes East Metropolitan Health Service, North Metropolitan Health Service and South Metropolitan Health Service
 * Other includes cases with overseas and interstate residential addresses, and cases without residential address information
 ^ Rates reported as cases per 100,000 population. The total rate excludes "Other" cases, as there is no denominator population representing this group.
 Following the resumption of large passenger cruise vessels entering WA waters on 24th October 2022, the daily and weekly number of COVID-19 notifications may intermittently be distorted by inclusion of vessel outbreak cases in WA data, irrespective of the place of residence of the cases
 Population denominator is sourced from Australian Bureau of Statistics 2020 estimates.

Figure 6 (a). Locally acquired COVID-19 weekly case rates per 100,000 population by Local Government Area, Western Australia, 17 April to 23 April 2023.

(b) Locally acquired COVID-19 weekly case rates per 100,000 population by Local Government Area, Perth metropolitan area, 17 April to 23 April 2023.



Notes

Data sourced from Western Australia Department of Health dataset

Notification date refers to the date that a case is notified to Western Australia Department of Health

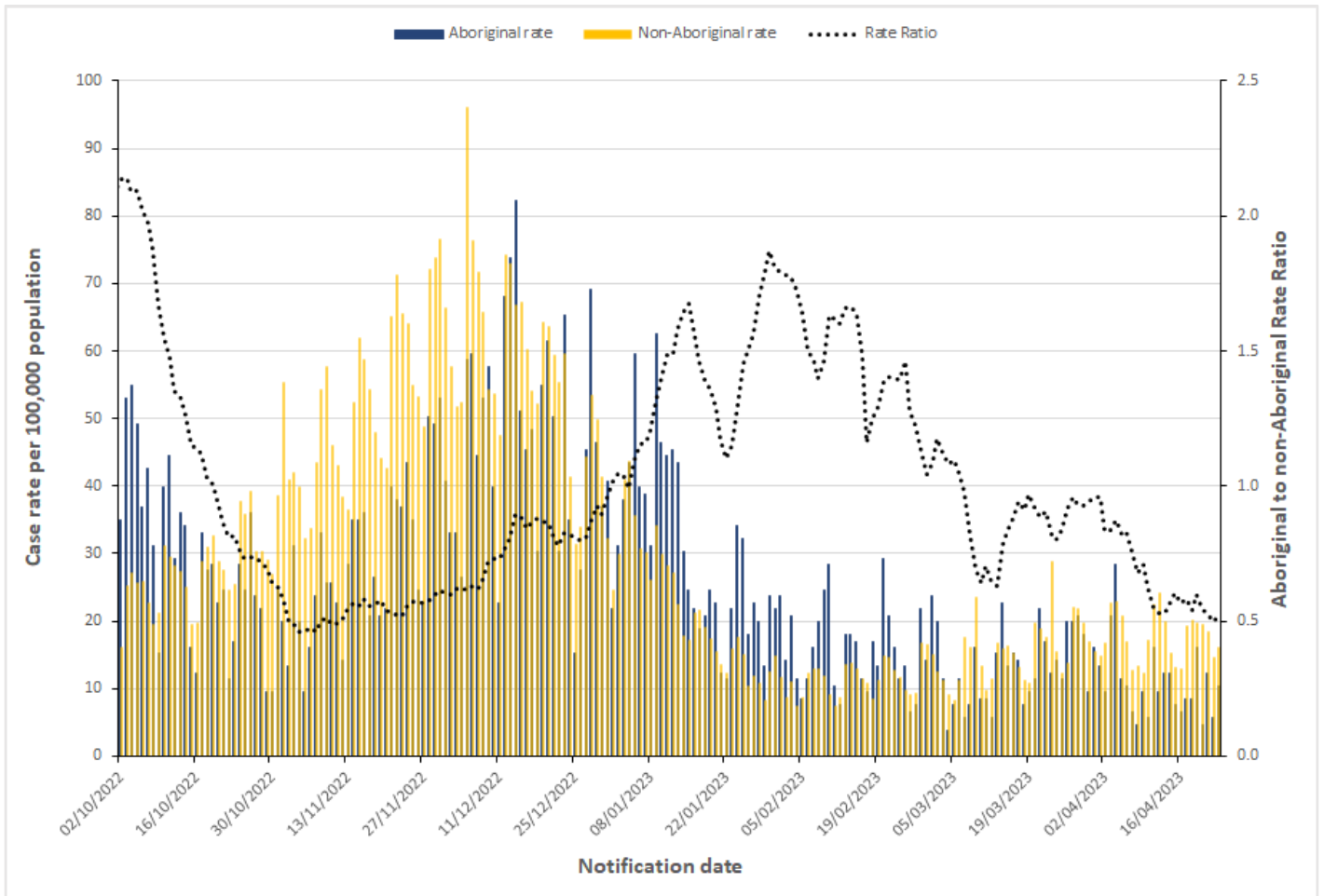
Areas on the map are defined by Local Government Area (LGA) boundaries

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

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

Aboriginal case summary

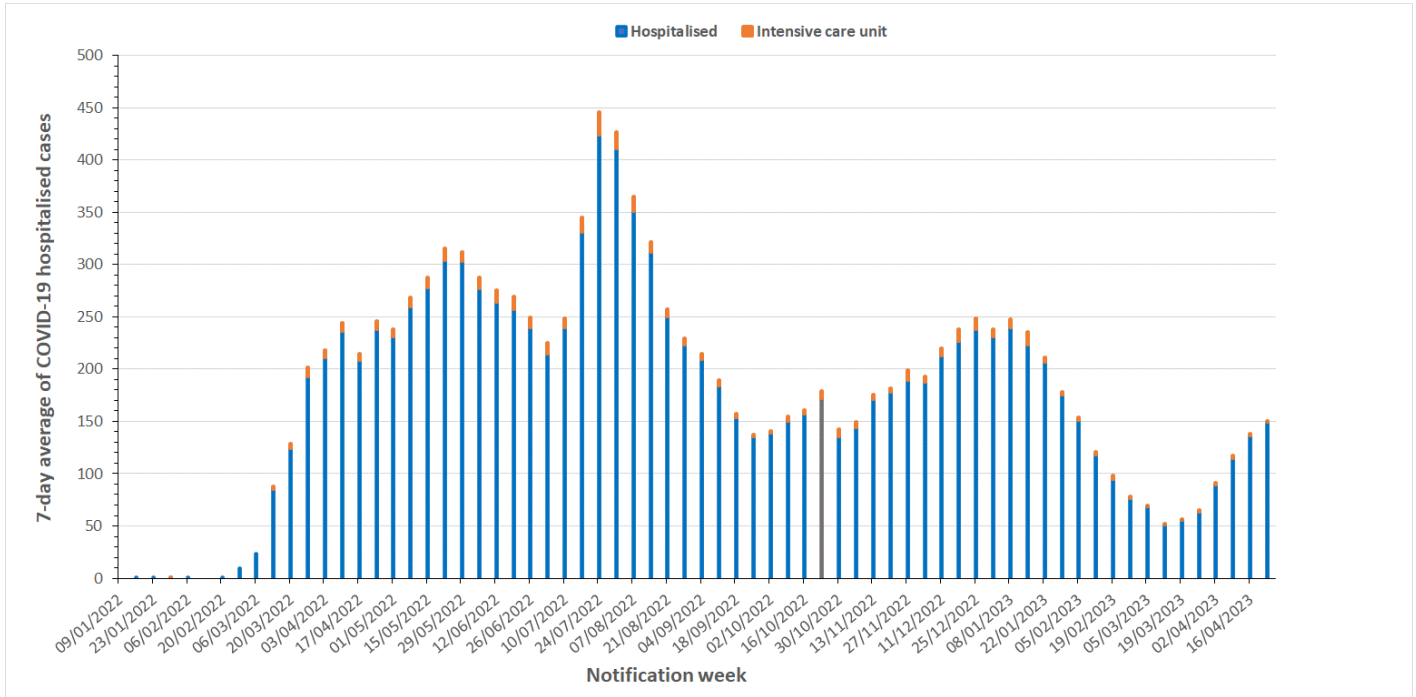
Figure 7. COVID-19 case rates per 100,000 population and rate ratio by Aboriginal status and notification date, Western Australia, 02 October 2022 to 23 April 2023.



Notes
 Data sourced from Western Australia Department of Health dataset
 Notification date refers to the date that a case is notified to Western Australia Department of Health
 Aboriginal 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 Aboriginal status was not stated were designated as non-Aboriginal
 Population denominator data were sourced from Australian Bureau of Statistics 2020 estimates
 Rate ratio is calculated by dividing the Aboriginal rate by the non-Aboriginal rate, with a 7-day average of the respective rate ratios applied to smooth the trend

Hospitalisations, intensive care unit (ICU) inpatients and deaths

Figure 8. 7-day average of COVID-19 cases currently in hospital or in ICU, 09 January 2022 to 23 April 2023.



Notes

Data sourced from Western Australia Department of Health dataset
 Notification week refers to data reported over the 7 days Monday to Sunday
 '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 3. Number of COVID-19 related deaths by sex and age group, 17 April to 23 April 2023 and 01 January 2022 to 23 April 2023.

	Current report week Week 17 Apr – 23 Apr 2023	Year 2022 to date 1 Jan 2022 – 23 Apr 2023
Sex	Deaths (n= 12)	Deaths (n= 1,002)
Female	7 (58.3%)	481 (15.8%)
Male	5 (41.7%)	521 (2.9%)
Unspecified	0 (0%)	0 (0%)
Age group (years)		
0-9	0 (0%)	0 (0%)
10-19	0 (0%)	2 (0.2%)
20-29	0 (0%)	0 (0%)
30-39	0 (0%)	6 (0.6%)
40-49	0 (0%)	12 (1.2%)
50-59	0 (0%)	30 (3.0%)
60-69	0 (0%)	65 (6.5%)
70-79	3 (25.0%)	187 (18.7%)
80-89	4 (33.3%)	384 (38.3%)
90+	5 (41.7%)	316 (31.5%)

Notes

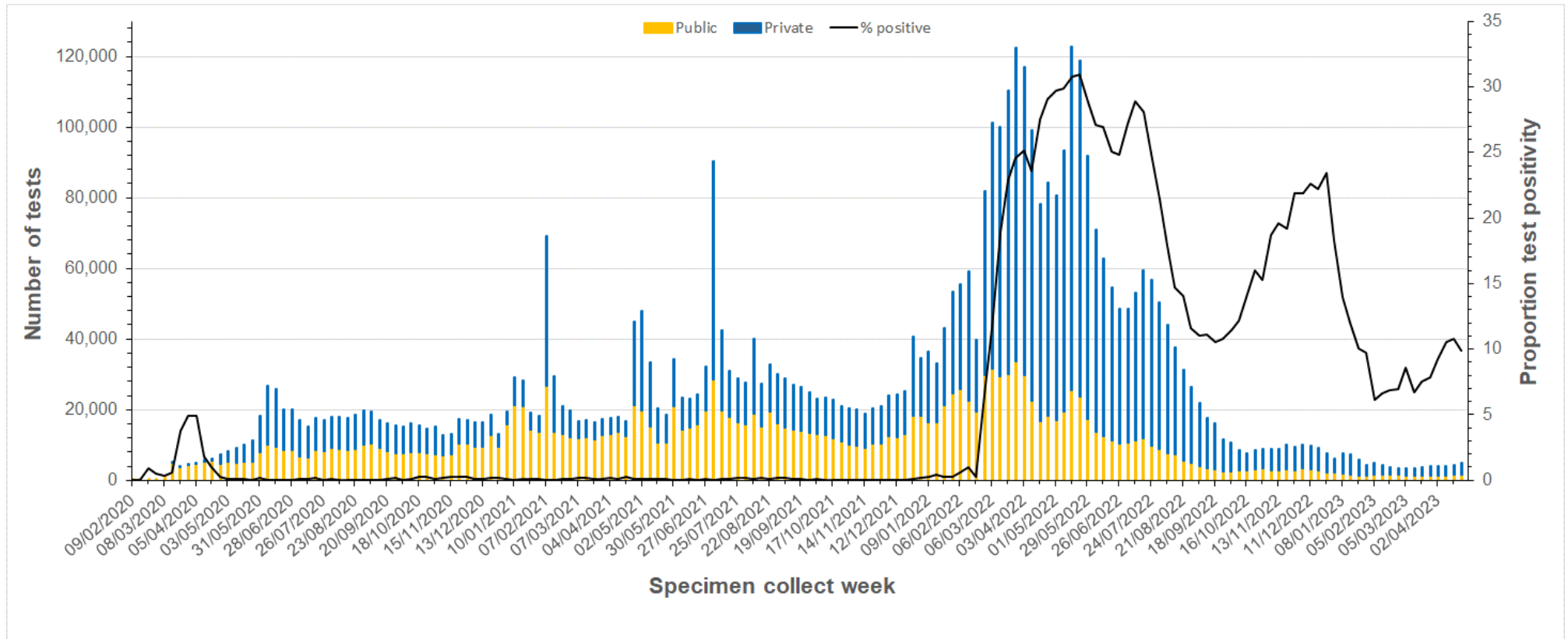
Data sourced from Western Australia Department of Health dataset

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

Testing data

Figure 9. Number of COVID-19 polymerase chain reaction tests and positivity by laboratory category and week of specimen collection, 09 February 2020 to 23 April 2023.



Notes

Data sourced from Western Australian public and private pathology laboratories

Specimen collect week refers to specimens collected between Monday to Sunday

Number of tests includes both positive and negative tests

From 01 October 2022, testing at private pathology providers requires a referral from a GP

From 03 March 2023, Murdoch COVID-19 public PCR testing clinic closed. From this time forward public access to COVID-19 PCR testing is only via GP referral to private pathology providers.

Appendix 1

Number of regional cases by postcode, 17 April – 23 April 2023

WACHS Regions	Postcode	Week 17 Apr to 23 Apr 2023	WACHS Regions	Postcode	Week 17 Apr to 23 Apr 2023	WACHS Regions	Postcode	Week 17 Apr to 23 Apr 2023
Goldfields	6429	<5	Pilbara (continued)	6720	<5	Wheatbelt (continued)	6309	<5
	6430	18		6721	<5		6312	<5
	6432	7		6722	<5		6313	<5
	6440	<5		6753	<5		6350	<5
	6442	<5		6754	<5		6375	<5
	6447	<5	South West	6219	<5		6390	<5
	6450	13		6220	<5		6401	<5
Great Southern	6317	<5		6224	<5		6403	<5
	6323	<5		6225	9		6415	6
	6324	6		6226	<5		6426	<5
	6327	<5		6227	<5		6460	<5
	6330	62		6230	49		6477	<5
	6333	7		6232	<5		6489	<5
	6335	<5		6233	19		6490	<5
	6348	<5		6236	<5	6501	<5	
	6397	<5	6239	<5	6502	<5		
Kimberley	6725	11	6240	<5	6503	<5		
	6726	<5	6244	<5	6511	<5		
	6728	<5	6255	5	6516	10		
	6740	<5	6258	7	6560	<5		
	6743	<5	6260	<5	6562	<5		
	6765	<5	6271	<5	6566	<5		
	6770	<5	6275	<5	6575	<5		
Midwest	6514	<5	6280	27				
	6525	<5	6281	9				
	6530	38	6282	<5				
	6532	<5	6285	7				
	6535	<5	6286	<5				
	6639	<5	6290	<5				
	6707	<5	Wheatbelt	6041	<5			
Pilbara	6713	<5		6043	<5			
	6714	17		6302	6			
	6718	<5		6306	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 the date in which a case is notified to Western Australia Department of Health

Case data is based on the residential postcode of each case

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

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