Government of Western Australia
Department of Health

The Epidemiology of Notifiable Sexually Transmitted Infections and Blood-Borne Viruses in Western Australia 2023

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Disclaimer

Every endeavour has been made to ensure that the information provided in this document was accurate at the time of writing. However, infectious disease notification data are continuously updated and subject to change.

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Abbreviations

ASR(s)	Age-standardised notification rate(s) per 100,000 population
BBV(s)	Blood-borne virus(es)
BVSTIAC	WA Blood-borne Virus and Sexually Transmissible Infections Advisory Committee
DAA(s)	Direct acting antiviral(s)
GDHR	Growing and Developing Healthy Relationships
GtF	Get the Facts
HIV	Human immunodeficiency virus
MSM	Men who have sex with men
MDR	Multi-drug resistant
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and syringe program
NT	Northern Territory
PBS	Pharmaceutical Benefits Scheme
PoC	Point of care
PrEP	Pre-exposure prophylaxis for HIV
QLD	Queensland
SHBBVP	Sexual Health and Blood-borne Virus Program
STI(s)	Sexually transmitted infection(s)
WA	Western Australia

1 Introduction

This report describes the epidemiology of notifiable sexually transmitted infections (STIs) and blood-borne viruses (BBVs) in Western Australia (WA) for 2023, and trends over the ten-year period from 2014 to 2023. It is intended to be a reference document for organisations and individuals interested in the occurrence of these infectious diseases in WA.

Data presented in this report relate to notification and testing data received by the Western Australian Department of Health (Department of Health) and are likely to underestimate the true incidence of disease. These data nevertheless represent the most comprehensive information about these infections for public health surveillance in WA.

A detailed methodology and additional analyses of the notification data are available in the accompanying appendix[1].

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The epidemiology of notifiable STIs and BBVs in WA 2023

Chlamydia

- Notifications increased by 17% from 11,047 in 2022 to 12,944 in 2023.
- Testing data suggested this was due to increased testing.
- The WA notification rate was 9% higher than the national rate.

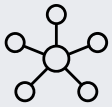
Gonorrhoea

- Notifications increased by 43% from 3,300 in 2022 to a 10-year high of 4,724 in 2023.
- Testing data suggested this resulted from a combination of increased testing and increased disease transmission.
- The WA notification rate was 8% higher than the national rate.

Infectious syphilis

- Notifications reached a 10-year high of 844 in 2021 and decreased by 18% to 693 in 2023.
- Testing data suggested the decrease resulted from decreased disease transmission, despite increased testing.
- The notification rate was 16-times higher among Aboriginal, compared to non-Aboriginal people.
- From 2014 to 2023, there were 18 congenital syphilis notifications; 4 reported in 2023.

HIV



- Notifications increased by 15% from 59 in 2022 to 68 in 2023.
- Testing data suggested this was due to increased testing.
- Newly acquired HIV notifications among MSM decreased by 44% between the 2014 to 2018 and 2019 to 2023 periods, reflecting a likely decrease in HIV transmission among MSM.
- 94% of HIV cases diagnosed in 2022 were on treatment.

Hepatitis B

- Total hepatitis B notifications increased by 23% from 415 in 2022 to 512 in 2023.
- Testing data suggested this was due to increased testing.
- Most unspecified hepatitis B notifications were acquired in South-East Asia and North-East Asia.

Hepatitis C

- Total hepatitis C notifications reached a 10-year high of 1,188 in 2016 and increased by 15% from 785 in 2022 to 902 in 2023.
- Testing data suggested this resulted primarily from increased testing.

3 Chlamydia

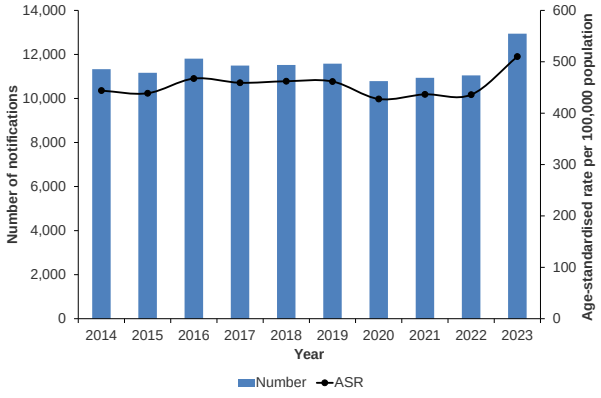
Key points

- Chlamydia was the most commonly notified STI in WA.
- The notification and testing rates were highest in people aged 15 to 24 years.
- The notification rate was higher in the Kimberley region than in other parts of the state.
- The notification rate was three-times higher among Aboriginal people compared to non-Aboriginal people.
- The WA crude notification rate was 9% higher than the national crude rate.

3.1 Trends over time

The number of chlamydia notifications in 2023 (n=12,944) was 17% higher than the number in 2022 (n=11,047) and 16% higher than the 2018 to 2022 five-year average of 11,175 notifications per year (Figure 3.1).

Figure 3.1 Number and ASR of chlamydia notifications, WA, 2014 to 2023



Between 2014 and 2020, the chlamydia testing rate increased by 18% (60 to 70/1,000 population) and the notification and test positivity rates both decreased by 12% (454 to 400/100,000 population and 4.5% to 3.9%, respectively). The increase in testing rate together with the decrease in test positivity rate indicates that the decrease in notifications over this period may have resulted primarily from reduced disease transmission (Figure 3.4).

Between 2020 and 2023, the chlamydia testing rate increased by 13% (to 79/1,000 population), the notification rate increased by 15% (to 461/100,000 population) and the test positivity rate increased by 8% (to 4.3%). This indicates that the increase in notifications over this period may have resulted from a combination of increased testing and disease transmission (Figure 3.4).

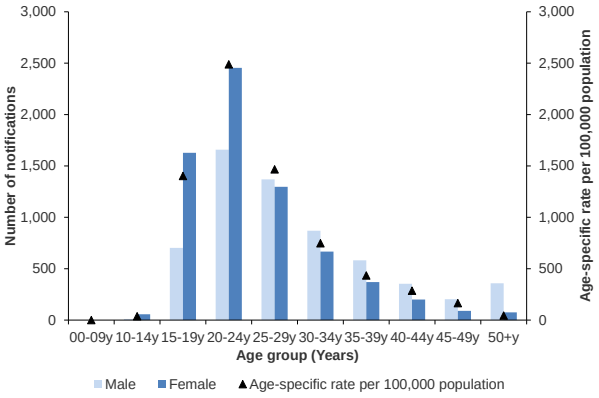
3.2 Distribution by age and sex

As in previous years, 70% of chlamydia notifications in 2023 occurred in people aged between 15 and 29 years and the highest notification rate occurred in those aged 20 to 24 years (2,488/100,000 population) (Figure 3.2). In 2023, the highest testing and test positivity rates were observed in people aged 15 to 24 years (164/1,000 population and 8.7%, respectively) and the test positivity rate in this age group increased by 12% from 2014 (Figure 3.3).

From 2014 to 2023, more females than males were notified with chlamydia each year (Appendix Figure 1[1]). A higher proportion of females was observed in people aged 24 years or younger, while the opposite trend was observed in people aged 25 years or older (Figure 3.2 and Appendix Table 2[1]).

In 2023, the testing rate among females was 74% higher than the rate among males (100 vs. 58/1,000 population), while the test positivity rate among males was 62% higher than the rate among females (5.7 vs. 3.5%) (Figure 3.4).

Figure 3.2 Number of chlamydia notifications by sex and overall age-specific rate, WA, 2023



Note: The overall age-specific rate includes one notification in a transgender person

Figure 3.3 Chlamydia testing rate, notification rate and test positivity rate by age group, WA, 2014 to 2023

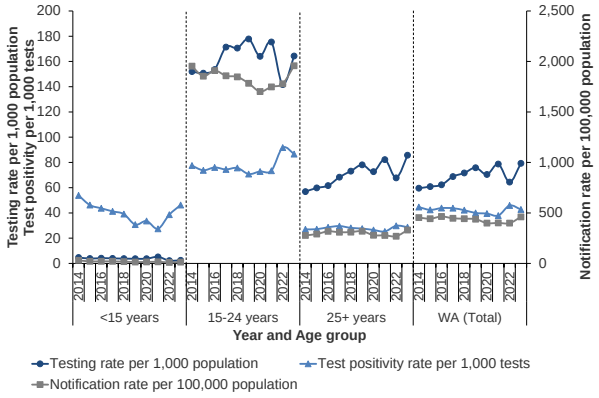
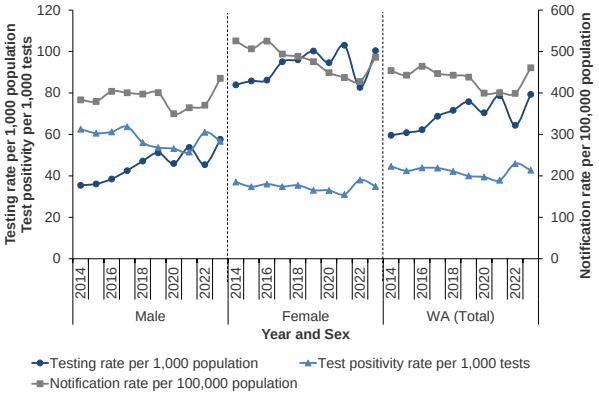


Figure 3.4 Chlamydia testing rate, notification rate and test positivity rate by sex, WA, 2014 to 2023

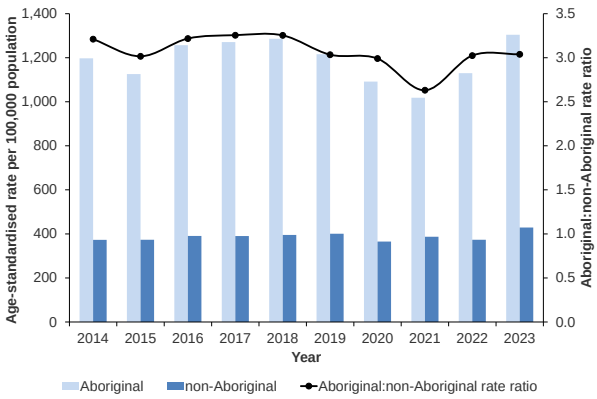


3.3 Notifications by Aboriginality

In 2023, 15% of chlamydia notifications were reported in Aboriginal people, 79% in non-Aboriginal people and 5% of notifications were of unknown Aboriginal status.

Between 2014 and 2021, the notification rate decreased by 15% among Aboriginal people, remained stable among non-Aboriginal people, and the Aboriginal to non-Aboriginal rate ratio decreased from 3.2:1 to 2.6:1. From 2021 to 2023, the notification rate increased by 28% among Aboriginal people and by 11% among non-Aboriginal people. The Aboriginal to non-Aboriginal rate ratio increased to 3.0:1 (Figure 3.5). In 2023, the highest notification rate among both Aboriginal and non-Aboriginal people was reported from the Kimberley region (2,464/100,000 and 626/100,000 population, respectively). (Appendix Table 5[1]).

Figure 3.5 ASR of chlamydia notifications by Aboriginality, WA, 2014 to 2023



3.4 Regional distribution

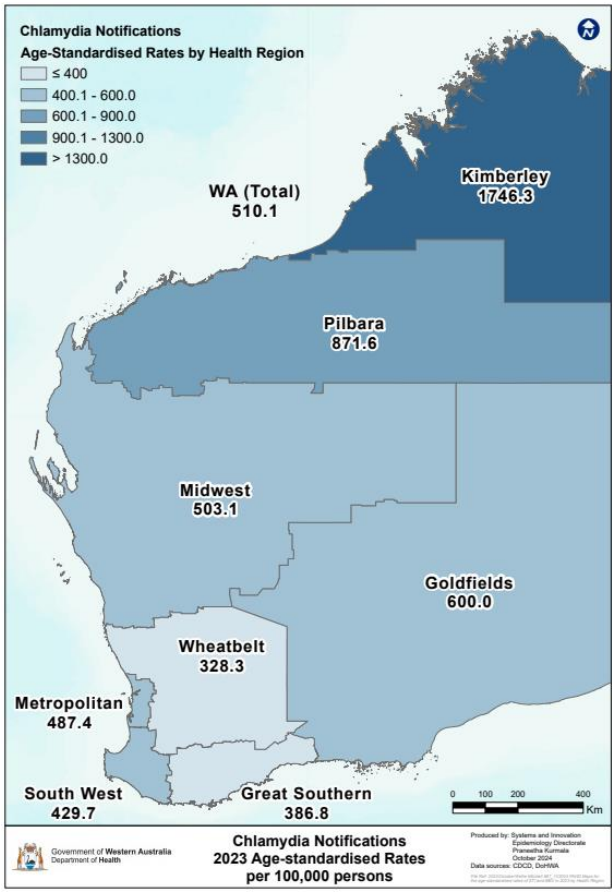
The highest chlamydia notification rate in 2023 was reported from the Kimberley region, where the rate was more than three-times the overall WA rate (1,746 vs. 510/100,000 population) (Map 3.1 and Appendix Table 4[1]).

From 2014 to 2023, the notification rate in the Kimberley region remained stable (1,771/100,000 to 1,746/100,000 population). In contrast, the notification rate increased by 37% in the Pilbara region (635/100,000 to 872/100,000 population) (Appendix Table 4[1]).

3.5 Place of acquisition

Of the 8,036 (62%) chlamydia notifications in 2023 that had place of acquisition recorded, 96% were reported as having been acquired in WA. This trend was comparable in males and females, although a larger proportion of males (5%) acquired their infections overseas than females (2%) (Appendix Table 7[1]).

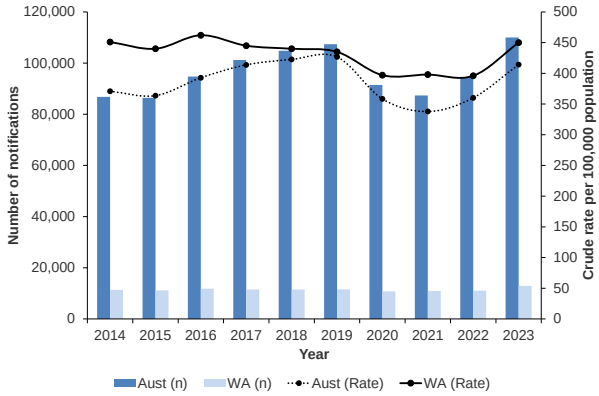
Map 3.1 ASR of chlamydia notifications by health region, WA, 2023



3.6 Interstate comparisons

In 2023, the crude chlamydia notification rate in WA (450/100,000 population) was the third highest in Australia after the Northern Territory (NT) (1,210/100,000 population) and Queensland (QLD) (479/100,000 population), and was 9% higher than that reported nationally (414/100,000 population) (Figure 3.6 and Appendix Table 8[1]).

Figure 3.6 Number and crude rate of chlamydia notifications, WA and Australia, 2014 to 2023



Note: Data sourced from NNDSS 11 June 2024

3.7 Outbreaks and other investigations

No significant outbreaks or clusters of chlamydia infections were reported in 2023, but given the generally high incidence of the disease, the likelihood of recognising outbreaks in subgroups of the population is low.

Lymphogranuloma venereum (LGV) is a rare STI caused by subtypes of the bacteria *Chlamydia trachomatis* (serovars L1 – L3). Chlamydia and LGV have very different clinical presentations. LGV causes ulcers or sores on the genital area and invades the lymph glands in the pelvis and groin. In the final stages, LGV can cause widespread scarring and deformity in the affected area. In Australia, LGV occurs mainly in men who have sex with men (MSM). A total of 45 LGV cases were reported to the Department of Health between 2014 and 2023 and reached a peak of 14 notifications in 2015.

4 Gonorrhoea

Key points

- Gonorrhoea was the second most commonly notified STI in WA.
- The notification and testing rates were highest in people aged 15 to 24 years.
- The notification rate was higher in the Kimberley region than in other parts of the state.
- The notification rate was almost seven-times higher among Aboriginal people compared to non-Aboriginal people.
- The WA crude notification rate was 8% higher than the national crude rate.
- Both Aboriginal and non-Aboriginal people reported similar specimen sites for gonorrhoea testing but there were marked differences in terms of clinical settings, treatment and sexual exposure.

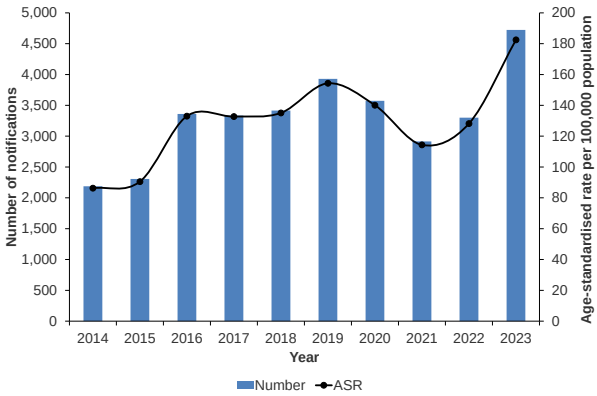
4.1 Trends over time

The number of gonorrhoea notifications reported to the Department of Health reached a ten-year high in 2023 (n=4,724) (Figure 4.1).

Between 2014 and 2021, the gonorrhoea testing and notification rates increased by 36% (57 to 77/1,000 population) and 22% (88 to 107/100,000 population) respectively, while the test positivity rate remained stable (at 1.1%). The increase in testing rate together with the stable test positivity rate indicates that the increase in notifications over this period may have resulted primarily from increased testing (Figure 4.4).

Between 2021 and 2023, the gonorrhoea testing rate remained stable (to 78/1,000 population) while the notification and test positivity rates increased by 58% (to 169/100,000 population) and 52% (to 1.7%) respectively. This indicates that the increase in notifications over this period may have primarily resulted from increased disease transmission (Figure 4.4).

Figure 4.1 Number and ASR of gonorrhoea notifications, WA, 2014 to 2023



4.2 Distribution by age and sex

As in previous years, 58% of gonorrhoea notifications in 2023 occurred in people aged between 20 and 34 years and the highest notification rate occurred in those aged 20 to 24 years (612/100,000 population) (

Figure 4.2). In 2023, the highest testing rate was observed in people aged 15 to 24 years and the highest test positivity rate was observed in people aged less than 15 years (162/1,000 population and 2.8%, respectively). The test positivity rate among those aged less than 15 years decreased by 10% from 2014 (3.1%) (Figure 4.3).

From 2014 to 2023, more males than females were notified with gonorrhoea each year (Appendix Figure 3[1]). A higher proportion of females was observed in people aged 24 years or younger, while the opposite trend was observed in people aged 25 years or older (

Figure 4.2 and Appendix Table 2[1]).

In 2023, the testing rate among females

was 71% higher than the rate among males (98 vs. 57/1,000 population), while the test positivity rate among males was almost three-times higher than the rate among females (2.8 vs. 1.1%) (Figure 4.4).

Figure 4.2 Number of gonorrhoea notifications by sex and overall age-specific rate, WA, 2023

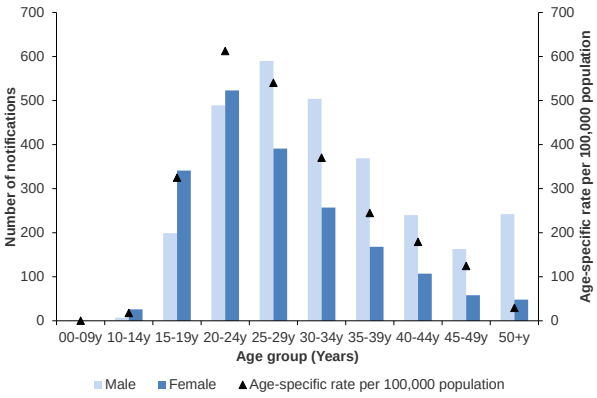


Figure 4.3 Gonorrhoea testing rate, notification rate and test positivity rate by age group, WA, 2014 to 2023

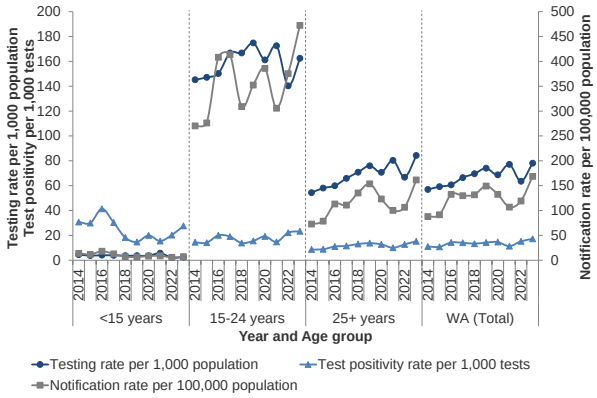
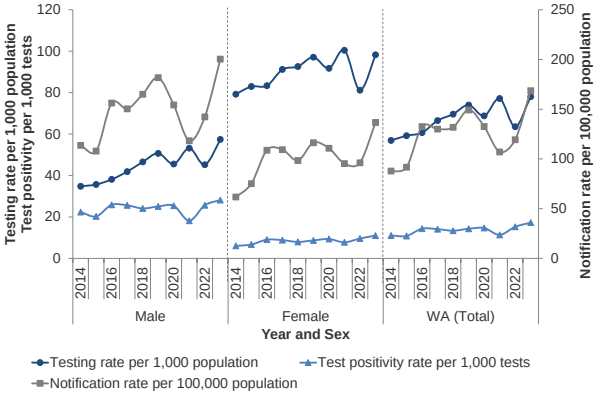


Figure 4.4 Gonorrhoea testing rate, notification rate and test positivity rate by sex, WA, 2014 to 2023

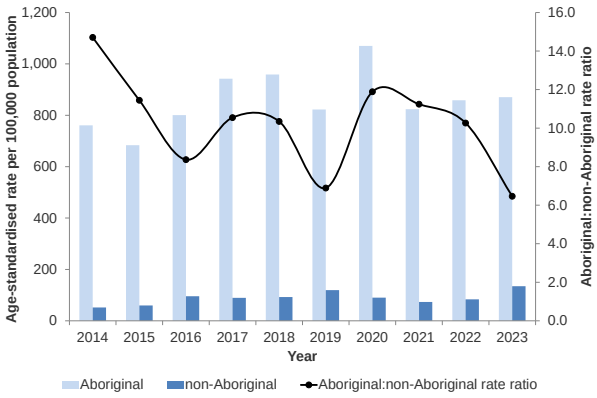


4.3 Notifications by Aboriginality

In 2023, 27% of gonorrhoea notifications were reported in Aboriginal people, 71% in non-Aboriginal people and 3% of notifications had an unknown Aboriginal status.

The Aboriginal to non-Aboriginal rate ratio decreased to a ten-year low in 2023 (6.5:1) (Figure 4.5). In 2023, the highest notification rate among Aboriginal people was reported from the Goldfields region and among non-Aboriginal people the highest notification rate was reported from the Kimberley region (2,400/100,000 and 204/100,000 population, respectively) (Appendix Table 13[1]).

Figure 4.5 ASR of gonorrhoea notifications by Aboriginality, WA, 2014 to 2023



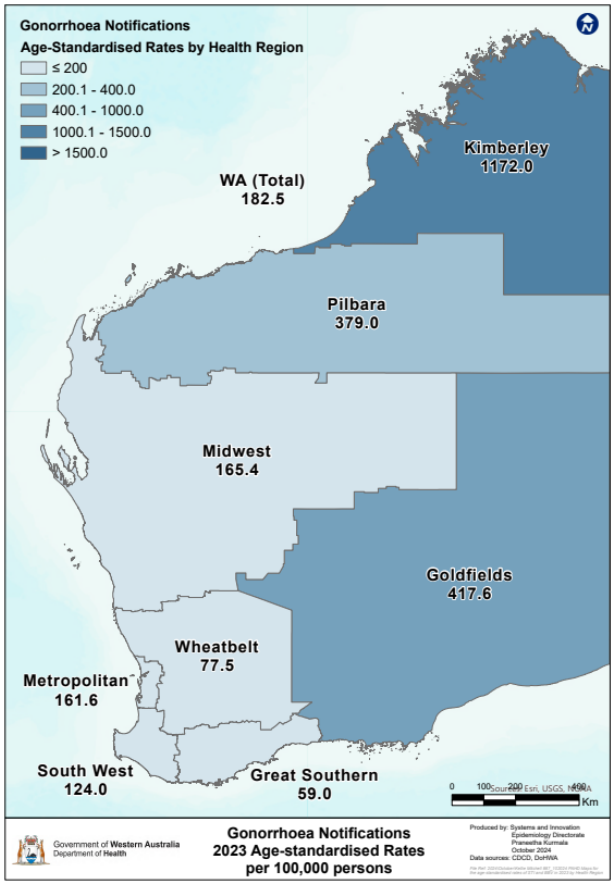
4.4 Regional distribution

The highest gonorrhoea notification rate in 2023 was reported from the Kimberley region, where the rate was more than six-times the overall WA rate (1,172 vs. 183/100,000 population) (

Map 4.1 and Appendix Table 12[1]).

While the notification rate in the Kimberley region increased by 19% from 2014 to 2023 (1,363/100,000 to 1,629/100,000 population), the notification rate in the Pilbara region increased three-fold (227/100,000 to 702/100,000 population) and more than doubled in the Wheatbelt region (33/100,000 to 78/100,000 population) (Appendix Table 12[1]).

Map 4.1 ASR of gonorrhoea notifications by health region, WA, 2023



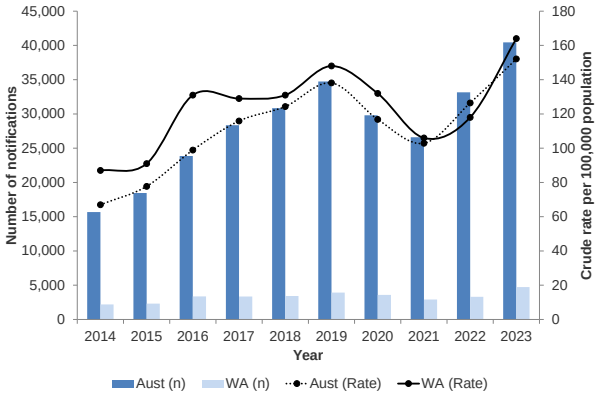
4.5 Place of acquisition

Of the 3,630 (77%) gonorrhoea notifications in 2023 that had place of acquisition recorded, 94% were reported as having been acquired in WA (Appendix Table 15[1]).

4.6 Interstate comparisons

In 2023, the crude gonorrhoea notification rate in WA (164/100,000 population) was the second highest in Australia and was 8% higher than the national crude rate (152/100,000 population) (Figure 4.6 and Appendix Table 16[1]).

Figure 4.6 Number and crude rate of gonorrhoea notifications, WA and Australia, 2014 to 2023



Note: Data sourced from NNDSS 11 June 2024

4.7 Enhanced gonorrhoea surveillance

In 2023, complete enhanced surveillance data were available for 56% (n=2,622/4,724) of all gonorrhoea notifications, representing 52% of notifications among Aboriginal people (n=660/1,258) and 58% of non-Aboriginal people (n=1,932/3,339).

Among Aboriginal people, gonorrhoea notifications were equally distributed between males and females. Most Aboriginal people were diagnosed at an Aboriginal medical service or public hospital / community health clinic on the basis of a urine sample and were treated

with ceftriaxone and azithromycin, or a combination of amoxycillin/probenecid and azithromycin (37%; n=246/660). The vast majority of Aboriginal people reported acquiring gonorrhoea from a person of the opposite sex and only three cases reported being a current sex worker (

Table 4.1).

Among non-Aboriginal people, more males than females were notified with gonorrhoea. While the majority also reported acquiring gonorrhoea from a person of the opposite sex, 33% reported acquiring the infection from a person of the same sex, and almost all these cases were male. Almost half of the cases among non-Aboriginal people were diagnosed through a urine sample.

Non-Aboriginal cases were more likely to be diagnosed at a general practice or sexual health clinic based on a throat or rectal swab and to be treated with a combination of ceftriaxone and azithromycin. Twenty-six cases were current sex workers (

Table 4.1).

Trends for both Aboriginal and non-Aboriginal people remained stable over time.

In 2023, 28% (n=727/2,622) of completed gonorrhoea enhanced surveillance forms had an exposure category identified as MSM. Of these, 57% (n=414/727) were born in Australia and 90% (n=653/727) reported acquiring the infection in WA. Most MSM cases were non-Aboriginal, lived in the Perth metropolitan region and were diagnosed at a sexual health clinic based on a throat or rectal swab. The majority of MSM cases were treated with a combination of ceftriaxone and azithromycin. Five MSM cases reported being a current sex worker (Table 4.2).

4.8 Outbreaks and other investigations

Antimicrobial resistance in gonorrhoea has led to an increase in the prevalence of multi-drug resistant (MDR) strains which are highly resistant to all the antibiotics that are routinely used to treat the infection. MDR gonorrhoea can be difficult to treat, and infection with these strains can prolong illness and increases the risk of long-term complications in these people.

A total of 12 MDR gonorrhoea cases were reported to the Department of Health between 2014 and 2023: three in 2019, one in 2021, four in 2022 and four in 2023.

Of these 12 cases, nine were male, three were female and all were reported among non-Aboriginal people. Six cases acquired their illness in WA and five acquired their illness overseas, predominately in South-East Asia. Nine cases had a heterosexual exposure, one had an MSM exposure and two had unknown exposures.

Penicillin resistance was detected in nine cases; ceftriaxone decreased susceptibility was detected in nine cases and ciprofloxacin resistance was detected in ten cases. Three cases were co-resistant to penicillin, ciprofloxacin, tetracycline, and azithromycin. All three cases were acquired in South-East Asia through a heterosexual exposure.

Table 4.1 Behavioural and demographic characteristics of people notified with gonorrhoea by Aboriginality, WA, 2023

Behavioural and demographic characteristics		Aboriginality					
		Aboriginal		non-Aboriginal		Total	
		(n=660)		(n=1,932)		(n=2,622)	
		Number	Percent	Number	Percent	Number	Percent
Sex	Male	273	41.4%	1,367	70.8%	**1,661**	**63.3%**
	Female	387	58.6%	564	29.2%	**960**	**36.6%**
Clinical setting	Public hospital/community health clinic	221	33.5%	171	8.9%	**393**	**15.0%**
	Sexual health clinic/family planning clinic	14	2.1%	680	35.2%	**708**	**27.0%**
	Aboriginal medical service	276	41.8%	3	0.2%	**279**	**10.6%**
	General practice	99	15.0%	1,007	52.1%	**1,119**	**42.7%**
	Prison/detention centre	43	6.5%	31	1.6%	**75**	**2.9%**
	Other	2	0.3%	38	2.0%	**41**	**1.6%**
	Unknown	2	0.3%	0	0.0%	**2**	**0.1%**
Specimen site	Urine (PCR/LCR)	524	79.4%	955	49.4%	**1,491**	**56.9%**
	Urethral swab	43	6.5%	343	17.8%	**388**	**14.8%**
	Cervical/vaginal swab	167	25.3%	305	15.8%	**475**	**18.1%**
	Throat swab	6	0.9%	447	23.1%	**461**	**17.6%**
	Rectal swab	8	1.2%	342	17.7%	**358**	**13.7%**
	Other	4	0.6%	23	1.2%	**28**	**1.1%**
	Unknown	0	0.0%	3	0.2%	**3**	**0.1%**
Treatment	Ceftriaxone and Azithromycin	357	54.1%	1,772	91.7%	**1,821**	**69.5%**
	Amoxycillin/Probenecid	254	38.5%	19	1.0%	**274**	**10.5%**
	Ciprofloxacin	1	0.2%	51	2.6%	**53**	**2.0%**
	Other drugs	69	10.5%	419	21.7%	**492**	**18.8%**
	Unknown	0	0.0%	1	0.1%	**1**	**0.0%**
Sexual exposure	Person(s) of opposite sex only	480	72.7%	1,036	53.6%	**1,531**	**58.4%**
	Person(s) of same sex only	31	4.7%	639	33.1%	**682**	**26.0%**
	Person(s) of either sex	2	0.3%	61	3.2%	**63**	**2.4%**
	No sexual contact	1	0.2%	1	0.1%	**2**	**0.1%**
	Unknown	146	22.1%	195	10.1%	**344**	**13.1%**
Current sex worker	Yes	3	0.5%	26	1.3%	**32**	**1.2%**
	No	221	33.5%	1,268	65.6%	**1,510**	**57.6%**
	Unknown	436	66.1%	638	33.0%	**1,080**	**41.2%**

Notes: Specimen sites and treatments are not mutually exclusive
Only enhanced surveillance forms with behavioural and demographic characteristics identified were included.

Table 4.2 Behavioural and demographic characteristics of people notified with gonorrhoea by exposure category, WA, 2023

Behavioural and demographic characteristics		Exposure category							
		MSM		Heterosexual Male		Female		Total	
		(n=727)		(n=735)		(n=960)		(n=2622)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Aboriginality	Aboriginal	26	3.6%	174	23.7%	387	40.3%	**660**	**25.2%**
	non-Aboriginal	689	94.8%	554	75.4%	564	58.8%	**1,932**	**73.7%**
Area	Metropolitan	673	92.6%	502	68.3%	554	57.7%	**1,827**	**69.7%**
	non-Metropolitan	47	6.5%	224	30.5%	405	42.2%	**777**	**29.6%**
Infection acquired	Western Australia	653	89.8%	644	87.6%	904	94.2%	**2,349**	**89.6%**
	Interstate	23	3.2%	10	1.4%	8	0.8%	**42**	**1.6%**
	Overseas	37	5.1%	63	8.6%	19	2.0%	**133**	**5.1%**
	Unknown	14	1.9%	18	2.4%	29	3.0%	**98**	**3.7%**
Clinical setting	Public hospital/community health clinic	11	1.5%	112	15.2%	221	23.0%	**393**	**15.0%**
	Sexual health clinic/family planning clinic	516	71.0%	104	14.1%	81	8.4%	**708**	**27.0%**
	Aboriginal medical service	9	1.2%	74	10.1%	162	16.9%	**279**	**10.6%**
	General practice	177	24.3%	394	53.6%	445	46.4%	**1,119**	**42.7%**
	Prison/detention centre	1	0.1%	41	5.6%	29	3.0%	**75**	**2.9%**
	Other	12	1.7%	10	1.4%	17	1.8%	**41**	**1.6%**
	Unknown	0	0.0%	0	0.0%	2	0.2%	**2**	**0.1%**
Specimen site	Urine (PCR/LCR)	185	25.4%	589	80.1%	553	57.6%	**1,491**	**56.9%**
	Urethral swab	100	13.8%	231	31.4%	6	0.6%	**388**	**14.8%**
	Cervical/vaginal swab	0	0.0%	0	0.0%	472	49.2%	**475**	**18.1%**
	Throat swab	318	43.7%	48	6.5%	90	9.4%	**461**	**17.6%**
	Rectal swab	320	44.0%	8	1.1%	24	2.5%	**358**	**13.7%**
	Other	3	0.0%	3	0.4%	17	1.8%	**28**	**1.1%**
	Unknown	2	0.3%	1	0.1%	0	0.0%	**3**	**0.1%**
Treatment	Ceftriaxone and Azithromycin	400	55.0%	546	74.3%	731	76.1%	**1,821**	**69.5%**
	Amoxycillin/Probenecid	4	0.6%	98	13.3%	138	14.4%	**274**	**10.5%**
	Ciprofloxacin	43	5.9%	7	1.0%	3	0.3%	**53**	**2.0%**
	Other drugs	274	37.7%	76	10.3%	136	14.2%	**509**	**19.4%**
	Unknown	1	0.1%	0	0.0%	0	0.0%	**1**	**0.0%**
Sexual exposure	Person(s) of opposite sex only	10	1.4%	735	100.0%	786	81.9%	**1,531**	**58.4%**
	Person(s) of same sex only	662	91.1%	0	0.0%	20	2.1%	**682**	**26.0%**
	Person(s) of either sex	51	7.0%	0	0.0%	11	1.1%	**63**	**2.4%**
	No sexual contact	0	0.0%	0	0.0%	0	0.0%	**2**	**0.1%**
	Unknown	4	0.6%	0	0.0%	143	14.9%	**344**	**13.1%**
Current sex worker	Yes	5	0.7%	4	0.5%	22	2.3%	**32**	**1.2%**
	No	586	80.6%	457	62.2%	434	45.2%	**1,510**	**57.6%**
	Unknown	136	18.7%	274	37.3%	504	52.5%	**1,080**	**41.2%**

Notes: Specimen sites and treatments are not mutually exclusive
Only enhanced surveillance forms with behavioural and demographic characteristics identified were included.

5 Syphilis

Key points

- There was a total of 18 congenital syphilis notifications over the past ten years.
- Notifications of infectious and non-infectious syphilis reached a ten-year peak in 2021 and 2023, respectively.
- Notification rates for infectious and non-infectious syphilis were highest in the 20 to 39 year age group and 30 to 34 year age group, respectively. The testing rate was highest in the 15 to 24 year age group.
- In comparison to other parts of the state, notification rates for both infectious and non-infectious syphilis were highest in the Pilbara region.
- The Aboriginal to non-Aboriginal rate ratio was 16:1 for infectious syphilis and 14:1 for non-infectious syphilis.
- In comparison to national crude rates, the WA infectious syphilis crude rate was comparable, and the non-infectious syphilis crude rate was 18% lower.
- There were marked differences between Aboriginal and non-Aboriginal people in terms of reason for presentation, sex and type of partner and mode of transmission of infectious syphilis.

Syphilis notifications have been classified into 'infectious' (primary syphilis + secondary syphilis + early latent syphilis [less than two years duration]), 'non-infectious' (more than two years or unknown duration) and 'congenital' syphilis.

5.1 Congenital syphilis

5.1.1 Trends over time

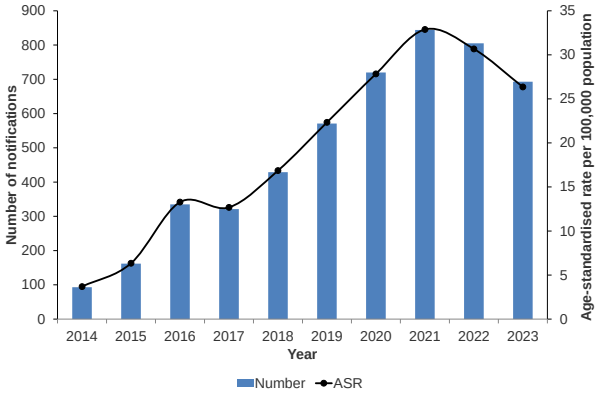
From 2014 to 2023, there were a total of 18 congenital syphilis notifications: one each in 2018 and 2019 and four each in 2020, 2021, 2022 and 2023. There were 11 notifications among Aboriginal children (three in the Perth metropolitan region and eight in the non-metropolitan area) and seven notifications among non-Aboriginal children (all in the Perth metropolitan region). Five congenital syphilis cases resulted in stillbirth: one in an Aboriginal child in the Perth metropolitan region, three in Aboriginal children in the non-metropolitan area and one in a non-Aboriginal child in the Perth metropolitan region.

5.2 Infectious syphilis

5.2.1 Trends over time

The number of infectious syphilis notifications reached a ten-year peak in 2021 (n=844) (Figure 5.1), reflecting an outbreak among Aboriginal people across northern Australia[2] (see section 5.5), an increase among people with a heterosexual exposure in the Perth metropolitan region, and a continuing increase among MSM. Notifications decreased by 18% to 2023 (n=693) (Figure 5.1).

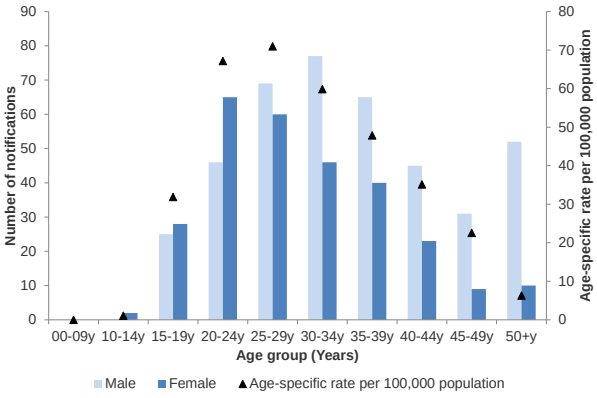
Figure 5.1 Number and ASR of infectious syphilis notifications, WA, 2014 to 2023



5.2.2 Distribution by age and sex

In 2023, 68% of infectious syphilis notifications occurred in people aged 20 to 39 years and the highest notification rate occurred in people aged 25 to 29 years (71/100,000 population). A higher proportion of females was observed in people aged 24 years or younger, while the opposite trend was observed in people aged 25 years or older (Figure 5.2).

Figure 5.2 Number of infectious syphilis notifications by sex and overall age-specific rate, WA, 2023



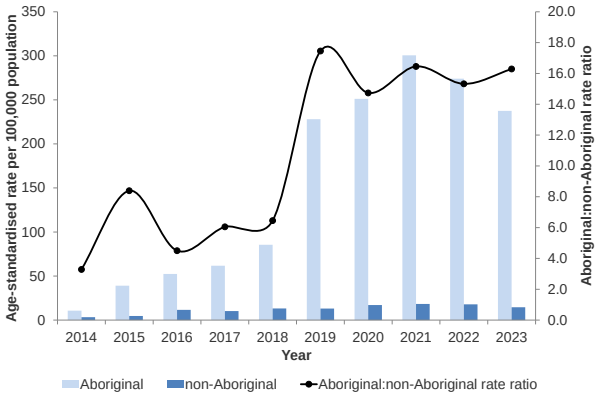
5.2.3 Notifications by Aboriginality

In 2023, 45% of infectious syphilis notifications were reported in Aboriginal people, 54% in non-Aboriginal people and 1% had an unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio reached a peak of 17.5:1 in 2019 before decreasing to 16.3:1 in 2023 (Figure 5.3). The highest notification rates were reported from the Pilbara region among Aboriginal people, and from the Kimberley region among non-Aboriginal people (744/100,000 and 40/100,000 population, respectively). (Appendix Tables 26[1] and 28[1]).

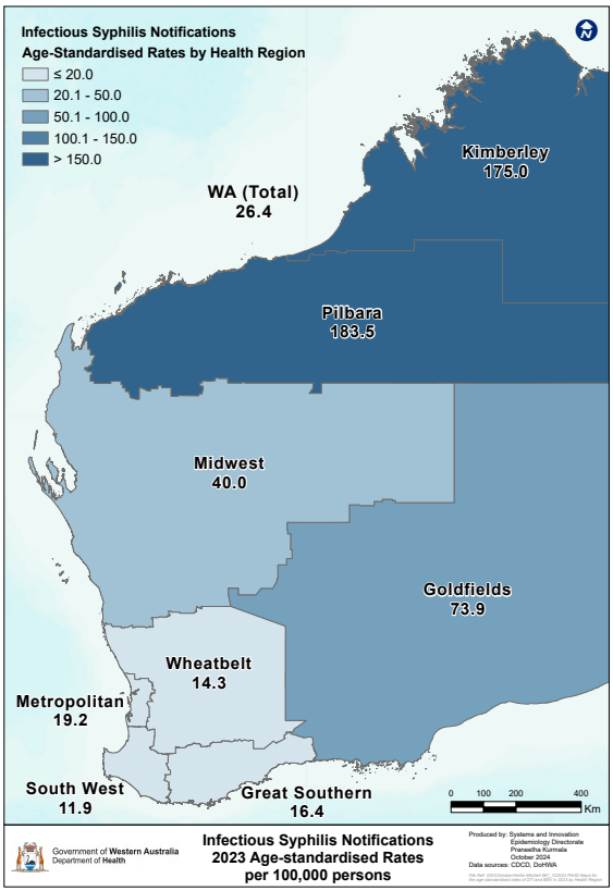
5.2.4 Regional distribution

The highest infectious syphilis notification rate in 2023 was observed in the Pilbara region, where the rate was seven-times the overall WA rate (184 vs. 26/100,000 population). There was also a notable increase in the Midwest region in comparison to 2021 (22 to 40/100,000 population) (Map 5.1, Appendix Table 19[1]).

Figure 5.3 ASR of infectious syphilis notifications by Aboriginality, WA, 2014 to 2023



Map 5.1 ASR of infectious syphilis notifications by health region, WA, 2023



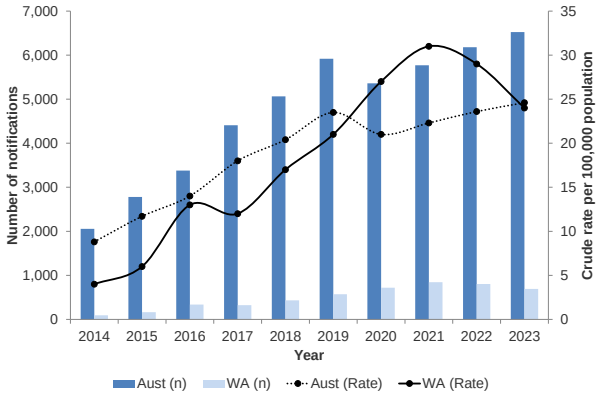
5.2.5 Place of acquisition

Of the 599 (86%) infectious syphilis notifications in 2023 that had place of acquisition recorded, 92% were reported as having been acquired in WA. A larger proportion of females (96%) acquired their infection in WA than males (88%), while a larger proportion of males (8%) acquired their infection overseas than females (2%) (Appendix Table 30[1]).

5.2.6 Interstate comparisons

In 2023, the crude infectious syphilis rate in WA (24/100,000 population) was the fourth lowest in Australia and was comparable to the national crude rate (24/100,000 population) (Figure 5.4 and Appendix Table 31[1]).

Figure 5.4 Number and crude rate of infectious syphilis notifications, WA and Australia, 2014 to 2023



Note: Data sourced from NNDSS 11 June 2024

5.2.7 Enhanced infectious syphilis surveillance

In 2023, complete enhanced surveillance data were available for 62% (n=429/693) of all infectious syphilis notifications, representing 63% (n=197/315) of notifications among Aboriginal people and 62% (n=232/372) of notifications among non-Aboriginal people.

The majority of completed infectious syphilis enhanced surveillance forms among Aboriginal people were for females. The majority were diagnosed at an Aboriginal medical service or a public health/community health clinic, as part of a sexual health screen or because of presenting with relevant symptoms. Most reported acquiring infectious syphilis through vaginal sex with a casual partner of the opposite sex (

Table 5.1).

In contrast, the majority of non-Aboriginal cases were male and diagnosed at a general practice as a result of presenting with relevant symptoms or as part of a sexual health screen. Most reported having acquired infectious syphilis through oral and/or vaginal sex with a casual partner. Approximately equal proportions of cases reported acquiring the infection from a person of the opposite or same sex (

Table 5.1).

In 2023, 25% (n=106/429) of completed infectious syphilis enhanced surveillance forms had an exposure category identified as MSM. Of these, 53% (n=56/106) were born in Australia and 75% (n=80/106) reported acquiring the infection in WA. The majority of MSM were non-Aboriginal and were diagnosed at a sexual health clinic or general practice as a result of presenting with relevant symptoms or as part of a sexual health screen. Most reported acquiring infectious syphilis through anal and/or oral sex with a casual partner of the same sex (Table 5.2). Twenty-four percent of MSM (n=25/106) had at least one previous infectious syphilis notification, with a median of three years between notifications (range: five months to seven years).

In 2023, 10% (n=17/164) of females of reproductive age were diagnosed with infectious syphilis during pregnancy. The majority of cases (75%; n=12/17) were among Aboriginal females who were diagnosed as a result of routine antenatal screening (n=12/17) at an Aboriginal medical service (n=6/17). The median gestation at diagnosis was 14 weeks (range: 5 to 28 weeks). Two females who were pregnant at the time of diagnosis had a previous infectious syphilis notification, with a median of nine months between notifications. Neither case were pregnant at the time of the previous infection.

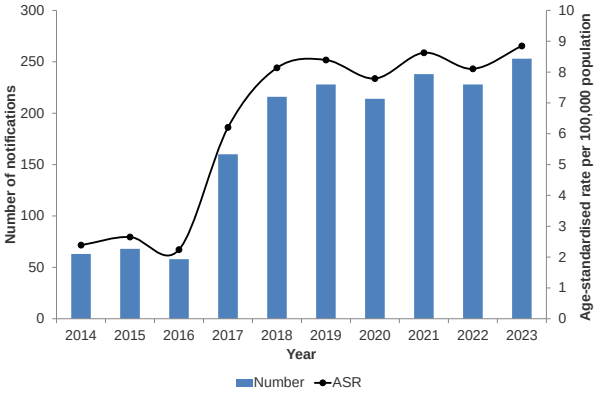
5.3 Non-infectious syphilis

5.3.1 Trends over time

The number of non-infectious syphilis notifications reached a ten-year high in 2023 (n=253) (

Figure 5.5).

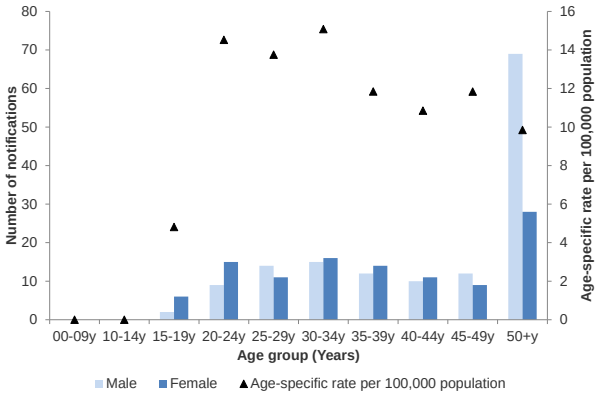
Figure 5.5 Number and ASR of non-infectious syphilis notifications, WA, 2014 to 2023



5.3.2 Distribution by age and sex

In 2023, the highest number of non-infectious syphilis notifications occurred in people aged 50 years or older while the highest notification rate occurred in those aged 30 to 34 years (15/100,000 population) (Figure 5.6). From 2014 to 2023, more males than females were notified with non-infectious syphilis each year (Appendix Figure 7[1]).

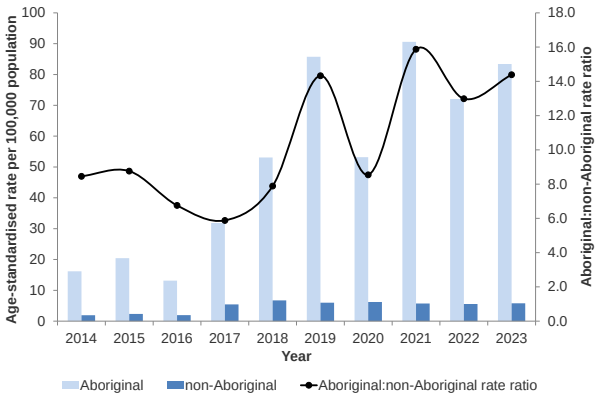
Figure 5.6 Number of non-infectious syphilis notifications by sex and overall age-specific rate, WA, 2023



5.3.3 Notifications by Aboriginality

In 2023, 35% of non-infectious syphilis notifications were reported in Aboriginal people, 62% in non-Aboriginal people and 2% of notifications had an unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio reached a peak of 15.9:1 in 2021 before decreasing to 14.4:1 in 2023 (Figure 5.7). In 2023, the highest non-infectious syphilis rate among Aboriginal people was reported from the Midwest region and among non-Aboriginal people the highest rate was reported from the Pilbara region (217/100,000 and 39/100,000 population, respectively) (Appendix Table 28[1]).

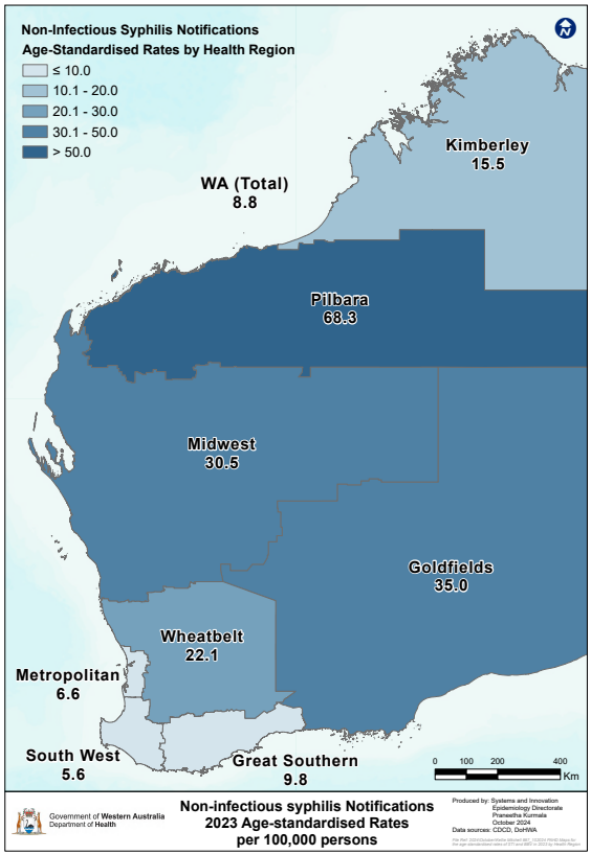
Figure 5.7 ASR of non-infectious syphilis notifications by Aboriginality, WA, 2014 to 2023



5.3.4 Regional distribution

The highest notification rate of non-infectious syphilis in 2023 was reported from the Pilbara region where the rate was almost eight-times the overall WA rate (68 vs. 9/100,000 population) (Map 5.2 and Appendix Table 21[1]).

Map 5.2 ASR of non-infectious syphilis notifications by health region, WA, 2023



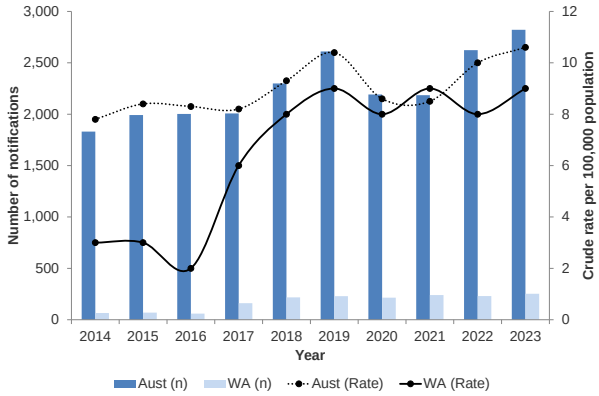
5.3.5 Place of acquisition

Of the 119 (47%) non-infectious syphilis notifications in 2023 that had place of acquisition recorded, 74% were reported as having been acquired in WA (Appendix Table 30[1]).

5.3.6 Interstate comparisons

In 2023, the crude non-infectious syphilis rate in WA (9/100,000 population) was the fourth highest in Australia and was 18% lower than the national crude rate (11/100,000 population) (Figure 5.8 and Appendix Table 32[1]).

Figure 5.8 Number and crude rate of non-infectious notifications, WA and Australia, 2014 to 2023



Note: Data sourced from NNDSS 11 June 2024

5.4 Syphilis testing

Between 2014 and 2021, the syphilis testing, notification and test positivity rates increased by 51% (35 to 52/1,000 population), more than six-fold (6 to 40/100,000 population) and more than four-fold (0.14% to 0.62%). The marked increase in test positivity rate indicates that the increase in notifications over this period may have resulted primarily from increased disease transmission (

Figure 5.10).

Between 2021 and 2023, the syphilis testing rate increased by 13% (to 59/1,000 population) while the notification and test positivity rates decreased by 15% (to 34/100,000 population) and 24% (to 0.48%) respectively. The increase in testing rate together with the decrease in test positivity rate indicates that the decrease in notifications over this period may have resulted primarily from reduced disease transmission (

Figure 5.10).

In 2023, the highest testing rate was observed in people aged 15 to 24 years (93/1,000 population) and increased by 43% from 2014 (65/1,000 population). The

highest test positivity rate was among people aged younger than 15 years (0.68%) and increased from 2014 (0%) (Figure 5.9).

The testing rate among females was double than the rate among males (79 vs. 39/1,000 population), while the test positivity rate among males was almost three-times higher than the rate among females (0.85 vs. 0.29%) (

Figure 5.10). From 2020 to 2023, the syphilis testing and notification rates among females increased by 50% (53 to 79/1,000 population) and 23% (23 to 28/100,000 population), respectively, while the test positivity rate decreased by 12% (0.33% to 0.29%) (

Figure 5.10). The increase in notifications among females over this period is therefore likely to be the result of increased testing, reflecting the introduction in March 2021, of syphilis screening for all antenatal women at initial booking, 28 weeks and 36 weeks.

Figure 5.9 Syphilis testing rate, notification rate and test positivity rate by age group, WA, 2014 to 2023

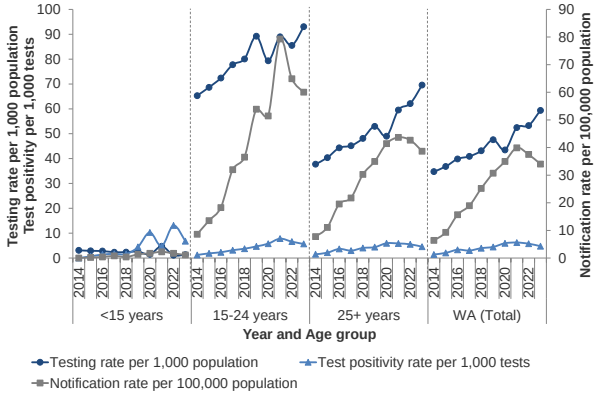
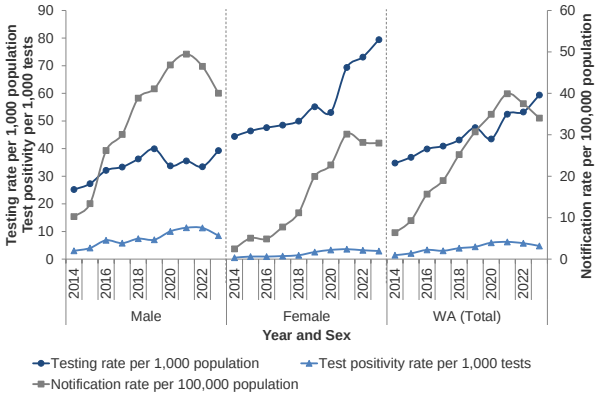


Figure 5.10 Syphilis testing rate, notification rate and test positivity rate by sex, WA, 2014 to 2023



5.5 Outbreaks and other investigations

The high infectious syphilis notification rate in the Kimberley and Pilbara regions reflects an ongoing outbreak among Aboriginal people that commenced in northern QLD in 2011, then appeared in nearby areas in the NT in 2013, the Kimberley region in 2014 and the Pilbara region in 2018. The outbreak spread to the Goldfields region in 2019.

A total of 689 cases among Aboriginal people (303 male, 386 female) were notified in the Kimberley region since the first case was identified in June 2014, to the end of 2023. Prior to 2014, there had been no infectious syphilis notifications in the Kimberley region for two years. In the Pilbara region, a total of 536 cases among Aboriginal people (233 male, 302 female, 1 transgender) were notified since the first outbreak case was identified in February 2018. A total of 134 cases among Aboriginal people (55 male, 79 female) were notified in the Goldfields region since the first case was identified in January 2019. Almost all cases across these three regions reported heterosexual exposure. Further information about the infectious syphilis outbreak affecting Aboriginal people living in northern Australia is available elsewhere[2].

Separate outbreaks were declared in the Perth metropolitan region in August 2020 and the South West region in October 2020. The demographics and epidemiology in these outbreaks have been different to those in the outbreak in the remote regions of WA, with ongoing high numbers of notifications in the Perth metropolitan region among MSM and an increase in the number of notifications among people with heterosexual exposure and females who were pregnant at the time of diagnosis.

Table 5.1 Behavioural and demographic characteristics of people notified with infectious syphilis by Aboriginality, WA, 2023

Behavioural and demographic characteristics		Aboriginality					
		Aboriginal (n=197)		non-Aboriginal (n=232)		Total (n=429)	
		Number	Percent	Number	Percent	Number	Percent
Sex	Male	76	38.6%	174	75.0%	**250**	**58.3%**
	Female	121	61.4%	58	25.0%	**179**	**41.7%**
Clinical setting	Public hospital/community health clinic	58	29.4%	23	9.9%	**81**	**18.9%**
	Sexual health clinic/family planning clinic	4	2.0%	66	28.4%	**70**	**16.3%**
	Aboriginal medical service	84	42.6%	0	0.0%	**85**	**19.8%**
	General practice	25	12.7%	124	53.4%	**149**	**34.7%**
	Prison/Detention centre	24	12.2%	5	2.2%	**29**	**6.8%**
	Other	2	1.0%	13	5.6%	**15**	**3.5%**
	Unknown	0	0.0%	0	0.0%	**0**	**0.0%**
Reason for presentation	Symptomatic	67	34.0%	113	48.7%	**180**	**42.0%**
	Opportunistic testing - Sexual health	76	38.6%	74	31.9%	**150**	**35.0%**
	- Antenatal/pap smear	10	5.1%	4	1.7%	**14**	**3.3%**
	Named as contact (i.e. Asymptomatic)	29	14.7%	28	12.1%	**57**	**13.3%**
	Other	12	6.1%	9	3.9%	**21**	**4.9%**
Sex of partner for this episode	Person(s) of opposite sex	160	81.2%	112	48.3%	**272**	**63.4%**
	Person(s) of same sex	6	3.0%	91	39.2%	**97**	**22.6%**
	Person(s) of either sex	1	0.5%	11	4.7%	**12**	**2.8%**
	No sexual contact	0	0.0%	0	0.0%	**0**	**0.0%**
	Unknown	30	15.2%	18	7.8%	**48**	**11.2%**
Infection acquired from	Casual partner	74	37.6%	116	50.0%	**190**	**44.3%**
	Regular partner	51	25.9%	58	25.0%	**109**	**25.4%**
	Sex worker	0	0.0%	7	3.0%	**7**	**1.6%**
	Client (i.e. patient is a sex worker)	0	0.0%	2	0.9%	**2**	**0.5%**
	Other	21	10.7%	20	8.6%	**41**	**9.6%**
	Unknown	51	25.9%	29	12.5%	**80**	**18.6%**
Partner meeting place	Brothel	0	0.0%	0	0.0%	**0**	**0.0%**
	Beat, e.g. public toilet	2	1.0%	2	0.9%	**4**	**0.9%**
	Internet	3	1.5%	43	18.5%	**46**	**10.7%**
	Sex on premises venue/sauna	0	0.0%	5	2.2%	**5**	**1.2%**
	Other	54	27.4%	67	28.9%	**121**	**28.2%**
	Unknown	138	70.1%	115	49.6%	**253**	**59.0%**
Language spoken at home	English only	161	81.7%	187	80.6%	**348**	**81.1%**
	Other	12	6.1%	14	6.0%	**26**	**6.1%**
	Unknown	0	0.0%	0	0.0%	**0**	**0.0%**
Mode of transmission	Vaginal intercourse	107	54.3%	88	37.9%	**195**	**45.5%**
	Anal intercourse	5	2.5%	68	29.3%	**73**	**17.0%**
	Oral sex	17	8.6%	100	43.1%	**117**	**27.3%**
	Other	0	0.0%	0	0.0%	**0**	**0.0%**
	Unknown	85	43.1%	85	36.6%	**170**	**39.6%**

Notes: Reasons for presentation and modes of transmission are not mutually exclusive
Only enhanced surveillance forms with behavioural and demographic characteristics identified were included

Table 5.2 Behavioural and demographic characteristics of people notified with infectious syphilis by exposure category, WA, 2023

Behavioural and demographic characteristics		Exposure category							
		MSM (n=106)		Heterosexual Male (n=124)		Female (n=179)		Total (n=429)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Aboriginality	Aboriginal	3	2.8%	63	50.8%	121	67.6%	**197**	**45.9%**
	non-Aboriginal	103	97.2%	61	49.2%	58	32.4%	**232**	**54.1%**
Clinical setting	Public hospital/community health clinic	5	4.7%	21	16.9%	51	28.5%	**81**	**18.9%**
	Sexual health clinic/family planning clinic	57	53.8%	4	3.2%	8	4.5%	**70**	**16.3%**
	Aboriginal medical service	1	0.9%	27	21.8%	53	29.6%	**85**	**19.8%**
	General practice	40	37.7%	47	37.9%	54	30.2%	**149**	**34.7%**
	Prison/Detention centre	0	0.0%	18	14.5%	8	4.5%	**29**	**6.8%**
	Other	3	2.8%	7	5.6%	5	2.8%	**15**	**3.5%**
	Unknown	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
Reason for presentation	Symptomatic	43	40.6%	57	46.0%	68	38.0%	**180**	**42.0%**
	Opportunistic testing - Sexual health	44	41.5%	39	31.5%	61	34.1%	**150**	**35.0%**
	- Antenatal/pap smear	0	N/A	0	N/A	16	8.9%	**16**	**3.7%**
	Named as contact	10	9.4%	20	16.1%	25	14.0%	**57**	**13.3%**
	Other	4	3.8%	6	4.8%	11	6.1%	**21**	**4.9%**
Sex of partner for this episode	Person(s) of opposite sex	0	0.0%	121	97.6%	149	83.2%	**272**	**63.4%**
	Person(s) of same sex	93	87.7%	0	0.0%	4	2.2%	**97**	**22.6%**
	Person(s) of either sex	11	10.4%	0	0.0%	1	0.6%	**12**	**2.8%**
	No sexual contact	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
	Unknown	0	0.0%	3	2.4%	25	14.0%	**48**	**11.2%**
Infection acquired from	Casual partner	68	64.2%	64	51.6%	51	28.5%	**190**	**44.3%**
	Regular partner	17	16.0%	25	20.2%	66	36.9%	**109**	**25.4%**
	Sex worker	0	0.0%	6	4.8%	1	0.6%	**7**	**1.6%**
	Client (i.e. patient is a sex worker)	0	0.0%	0	0.0%	2	1.1%	**2**	**0.5%**
	Other	17	16.0%	7	5.6%	16	8.9%	**41**	**9.6%**
	Unknown	4	3.8%	22	17.7%	43	24.0%	**80**	**18.6%**
Partner meeting place	Beat, e.g. public toilet	2	1.9%	2	1.6%	0	0.0%	**4**	**0.9%**
	Internet	32	30.2%	10	8.1%	3	1.7%	**46**	**10.7%**
	Brothel	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
	Sex on premises venue/sauna	5	4.7%	0	0.0%	0	0.0%	**5**	**1.2%**
	Other	22	20.8%	46	37.1%	50	27.9%	**121**	**28.2%**
	Unknown	45	42.5%	66	53.2%	126	70.4%	**253**	**59.0%**
Language spoken at home	English only	84	79.2%	102	82.3%	148	82.7%	**348**	**81.1%**
	Other	8	7.5%	5	4.0%	9	5.0%	**26**	**6.1%**
	Unknown	14	13.2%	17	13.7%	22	12.3%	**55**	**12.8%**
Mode of transmission	Vaginal intercourse	7	6.6%	80	64.5%	108	60.3%	**195**	**45.5%**
	Anal intercourse	56	52.8%	7	5.6%	10	5.6%	**73**	**17.0%**
	Oral sex	50	47.2%	35	28.2%	31	17.3%	**117**	**27.3%**
	Other	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
	Unknown	44	41.5%	39	31.5%	68	38.0%	**170**	**39.6%**

Notes: Reasons for presentation and modes of transmission are not mutually exclusive
Only enhanced surveillance forms with behavioural and demographic characteristics identified were included
Total includes 20 males of unknown exposure category

6 Donovanosis

Key points

- One donovanosis notification was reported in the period from 2014 to 2023.

6.1 Trends over time

There was one donovanosis notification in the period from 2014 to 2023. In 2014, there was one case of an Aboriginal female in the 30 to 35 year age group who resided in a remote area of WA. The infection was reported to have been acquired in WA and no source was able to be identified.

7 Chancroid

Key points

- No chancroid notifications were reported in the period from 2014 to 2023.

7.1 Trends over time

Chancroid infection is rare in WA, with the last case reported in 2009.

8 HIV

Key points

- In 2023, there were 68 HIV cases newly diagnosed in WA, a 15% increase compared to 2022.
- The number of newly acquired HIV notifications among MSM decreased by 44% between the 2014 to 2018 and 2019 to 2023 periods, reflecting a likely decrease in HIV transmission among MSM.
- 94% of HIV cases diagnosed in 2023 were on treatment.

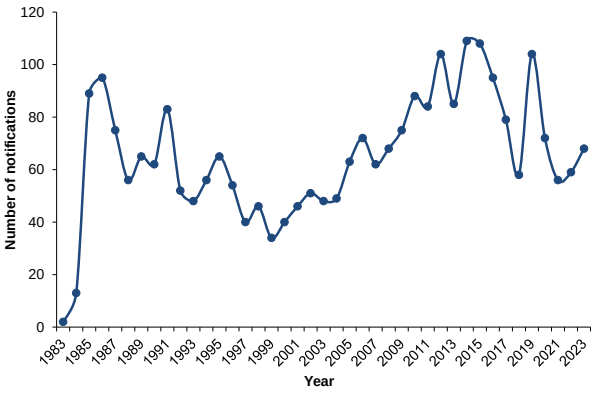
8.1 Trends over time

There were 68 newly diagnosed HIV cases in WA in 2023, a 15% increase compared to 2022 (n=59). However, this still represented a decrease in cases of 35% since 2019 (n=104) (Figure 8.1).

In 2023, there were an additional 89 HIV notifications in people who were previously diagnosed with HIV either interstate (n=2) or overseas (n=87), and subsequently moved to WA.

In 2023 the age-standardised notification rate for HIV was 2.4/100,000 population, representing a 14% increase compared to 2022 (2.1/100,000 population) (Appendix Table 34[1]).

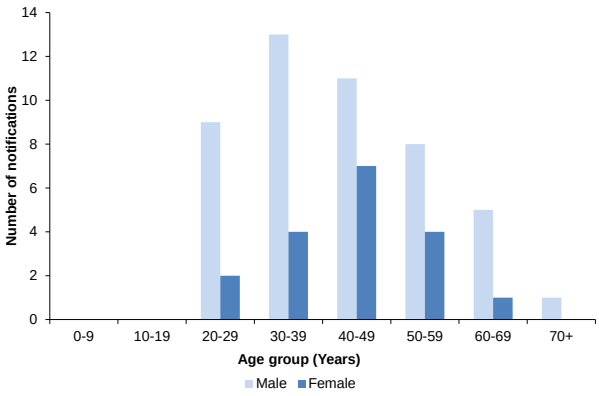
Figure 8.1 Number of HIV notifications, WA, 1983 to 2023 (excludes cases previously diagnosed outside WA)



8.2 Distribution by sex and age

Of the 68 HIV cases newly diagnosed in WA in 2023, 50 were male and 18 were female (Appendix Figure 10[1] and Appendix Table 33[1]). The age-standardised notification rate increased for both males (3.5 to 3.8/100,000 population) and females (0.7 to 1.4/100,000 population), compared to the previous year. In 2023, the median age of newly diagnosed HIV cases in WA was 41 years, ranging from 24 to 73 years. The median age for females was slightly older (43 years) than the median age for males (39.5 years) (Figure 8.2).

Figure 8.2 Number of HIV notifications by age group and sex, WA, 2023 (excludes cases previously diagnosed outside WA)



8.3 Notifications by Aboriginality

In 2023, there were three HIV cases notified in Aboriginal people. In total there were 22 Aboriginal HIV notifications between 2019 and 2023, ranging between two and nine cases per year (Appendix Figure 11[1] and Appendix Table 35[1]). Between 2019 and 2023, the male to female notification ratio was 2.7:1 for Aboriginal people and 4.2:1 for non-Aboriginal people. Over the same period, most non-Aboriginal cases (88%; n=293) were Perth metropolitan residents. While Aboriginal cases have typically resided in non-metropolitan areas (2014 to 2018 74%; n=14), in the 2019 to 2023 period, half (50%, n=11) resided in the metropolitan area.

8.4 Exposure category

Between the 2014 to 2018 and 2019 to 2023 periods, the number of newly diagnosed HIV cases reporting MSM risk exposures decreased by 44% (264 to 148 cases), while new diagnoses in cases reporting heterosexual acquisition increased by 11% (158 to 175 cases) (Table 8.1). The most commonly reported risk exposure between 2019 and 2023 was heterosexual acquisition (49%). The proportion of HIV cases reporting MSM risk exposures had decreased from 59% in the 2014 to 2018 period to just under half of all cases in the 2019 to 2023 period (41%) (Table 8.1).

8.5 Place of acquisition

Most of the recent decrease in HIV notifications was reported in Australian-acquired cases, which decreased by 37% (264 to 166 cases) between the 2014 to 2018 and 2019 to 2023 reporting periods (Table 8.2). The majority of Australian-acquired HIV cases in the 2019 to 2023 period were MSM (61%; n=101), most of whom were also born in Australia (60%; n=61).

Over the two reporting periods the number of cases who acquired HIV overseas remained stable (178 to 175 cases). The stabilisation of cases is likely due to Western Australia (and more broadly Australia's) COVID-19 lockdown measures which included restrictions on both international and interstate travel from March 2020 until March 2022. While the overall number of overseas-acquired cases remained stable over the two reporting periods, there was a 47% increase in the number of females reporting acquisition in South-East Asia (17 to 25 cases) (Table 8.2). In the 2019 to 2023 period, nearly all females who reported acquiring HIV in South-East Asia reported heterosexual acquisition (96%; n=24), of whom the majority were also born in South-East Asia (80%; n=20). There was also an increase in male cases reporting acquisition in Sub-Saharan Africa (16 to 21 cases) (Table 8.2). In the 2019 to 2023 period, the majority of males who reported acquiring HIV in Sub-Saharan Africa reported heterosexual acquisition (81%; n=17), of whom the majority were also born in Sub-Saharan Africa (76%; n=13).

8.6 Newly acquired HIV and late diagnosis

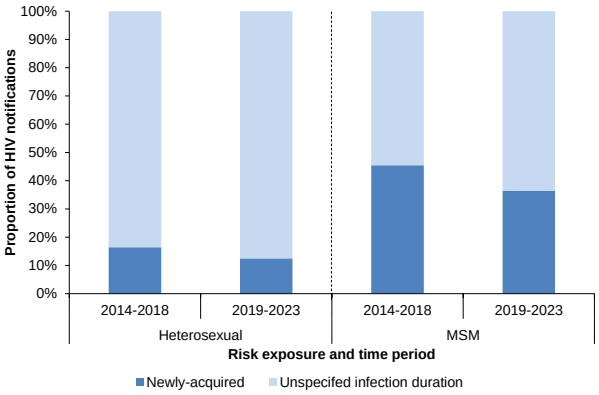
A case is classified as a newly acquired HIV infection if a negative HIV test result or symptoms consistent with HIV seroconversion illness is reported in the 12 months prior to diagnosis. A late HIV diagnosis is a case of unknown infection duration and a CD4 count, closest to the time of diagnosis, of less than 350 cells/µL.

The recent decrease in HIV notifications among MSM was largely due to a decrease in newly acquired infections. Between the 2014 to 2018 and 2019 to 2023 reporting periods, the number of MSM HIV cases diagnosed with evidence of newly acquired infection decreased by 55% (120 to 54 cases), which may reflect a decrease in HIV transmission in recent years. The number of MSM HIV cases with evidence of late diagnosis over the two reporting periods decreased (64 to 55 cases).

In the 2019 to 2023 period, there was a small decrease in the number (26 to 22 cases) and proportion (16% to 13%) of heterosexually acquired cases reporting evidence of newly acquired HIV (

Figure 8.3). However, the number of heterosexually acquired cases with a late diagnosis increased between the two reporting periods (79 to 95 cases).

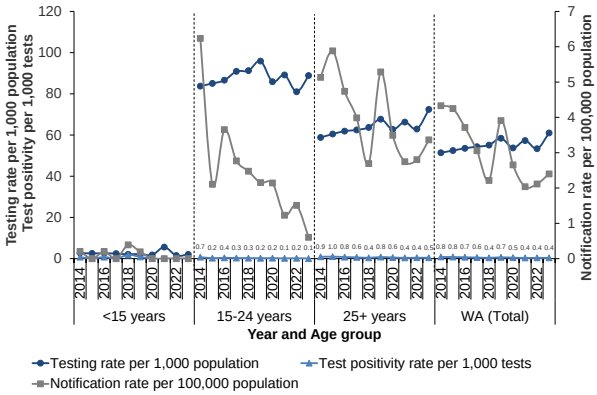
Figure 8.3 Proportion of HIV notifications with newly acquired infection by risk exposure and time period, WA, 2014 to 2023 (excludes cases previously diagnosed outside WA)



8.7 HIV testing

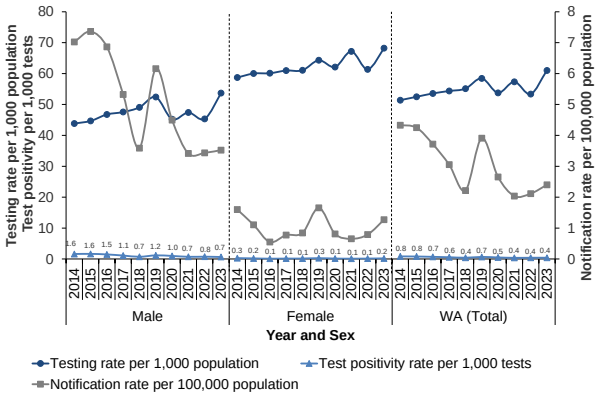
After decreased HIV testing rates over the 2020 to 2022 period, the HIV testing rate increased from 57 to 66/1,000 population in 2023. This is the first year that the HIV testing rate has increased above the rate seen prior to COVID-19 (61 to 66/1,000 population). The test positivity rate remained stable at 0.04% in 2023, suggesting that the increase in notifications may be due to the increase in testing (Figure 8.4).

Figure 8.4 HIV testing rate, notification rate and test positivity rate by age group, WA, 2014 to 2023



In 2023, the highest testing rate was observed in females aged 15 to 24 years (121/1,000 population) while the highest test positivity rate was observed in males aged 25 years or older (0.07%). Overall, the testing rate among females in 2023 was 27% higher than the rate among males (68 vs. 54/1,000 population), but the positivity rate among males (0.07%) was four-times the positivity rate for females (0.02%) (Figure 8.5).

Figure 8.5 HIV testing rate, notification rate and test positivity rate by sex, WA, 2014 to 2023



8.8 Time to treatment

Ninety-four percent (n=64) of the 68 HIV cases newly diagnosed in 2023 had commenced antiretroviral therapy for HIV by February 2024. Almost all cases on antiretroviral therapy had started treatment within two months of their diagnosis (97%; n=62).

Table 8.1 Number and proportion of persons notified with HIV infection by exposure category, sex and time period, WA, 2014 to 2023 (excludes cases previously diagnosed outside WA)

Exposure category	Year							
	2014 - 2018			2019 - 2023			2023	
	Number	Percent	Average	Number	Percent	Average	Number	Percent
Male								
MSM	264	68.9%	53	148	52.5%	30	29	61.7%
Heterosexual	100	26.1%	20	110	39.0%	22	15	31.9%
IDU	8	2.1%	2	10	3.5%	2	2	4.3%
Vertical	3	0.8%	1	0	0.0%	0	0	0.0%
Recipient of blood products	0	0.0%	0	0	0.0%	0	0	0.0%
Needlestick/splash	3	0.8%	1	1	0.4%	0	0	0.0%
Unknown/other	5	1.3%	1	13	4.6%	3	1	2.1%
Male Total	**383**	**100.0%**	**77**	**282**	**100.0%**	**56**	**47**	**100.0%**
Female								
Heterosexual	58	93.5%	12	65	91.5%	13	18	100.0%
IDU	2	3.2%	0	2	2.8%	0	0	0.0%
Vertical	1	1.6%	0	1	1.4%	0	0	0.0%
Recipient of blood products	0	0.0%	0	1	1.4%	0	0	0.0%
Needlestick/splash	0	0.0%	0	1	1.4%	0	0	0.0%
Unknown/other	1	1.6%	0	1	1.4%	0	0	0.0%
Female Total	**62**	**100.0%**	**12**	**71**	**100.0%**	**14**	**18**	**100.0%**
Total notifications								
MSM	264	58.8%	53	148	41.2%	30	29	42.6%
Heterosexual	158	35.2%	32	175	48.7%	35	33	48.5%
IDU	10	2.2%	2	12	3.3%	2	2	2.9%
Vertical	4	0.9%	1	1	0.3%	0	0	0.0%
Recipient of blood products	0	0.0%	0	1	0.3%	0	0	0.0%
Needlestick/splash	3	0.7%	1	2	0.6%	0	0	0.0%
Unknown/other	6	1.3%	1	14	3.9%	3	1	1.5%
Grand Total*	**449**	**100.0%**	**90**	**359**	**100.0%**	**72**	**68**	**100.0%**

Notes: MSM includes homosexual and bisexual men who also injected drugs
Average = the average number of cases notified each year in that period and subgroup
* Includes four notifications in the 2014-2018 period and six cases in the 2019-2023 period among transgender people.

Table 8.2 Number and proportion of persons notified with HIV infection by country/region acquired, sex and time period, WA, 2014 to 2023 (excludes cases previously diagnosed outside WA)

Country/region HIV acquired	Year							
	2014 - 2018			2019 - 2023			2023	
	Number	Percent	Average	Number	Percent	Average	Number	Percent
Male								
Australia	238	62.1%	48	136	48.2%	27	17	36.2%
Overseas	138	36.0%	28	130	46.1%	26	27	57.4%
South-East Asia	88	23.0%	18	80	28.4%	16	16	34.0%
Europe	3	0.8%	1	6	2.1%	1	0	0.0%
Sub-Saharan Africa	16	4.2%	3	21	7.4%	4	4	8.5%
Other	31	8.1%	6	23	8.2%	5	7	14.9%
Not stated	7	1.8%	1	16	5.7%	3	3	6.4%
Male Total	**383**	**100.0%**	**77**	**282**	**100.0%**	**56**	**47**	**100.0%**
Female								
Australia	23	37.1%	5	27	38.0%	5	6	33.3%
Overseas	39	62.9%	8	43	60.6%	9	12	66.7%
South-East Asia	17	27.4%	3	25	35.2%	5	8	44.4%
Europe	2	3.2%	0	0	0.0%	0	0	0.0%
Sub-Saharan Africa	17	27.4%	3	14	19.7%	3	3	16.7%
Other	3	4.8%	1	4	5.6%	1	1	5.6%
Not stated	0	0.0%	0	1	1.4%	0	0	0.0%
Female Total	**62**	**100.0%**	**12**	**71**	**100.0%**	**14**	**18**	**100.0%**
Total notifications*								
Australia	264	58.8%	53	166	46.2%	33	24	35.3%
Overseas	178	39.6%	36	175	48.7%	35	40	58.8%
South-East Asia	106	23.6%	21	106	29.5%	21	24	35.3%
Europe	5	1.1%	1	6	1.7%	1	0	0.0%
Sub-Saharan Africa	33	7.3%	7	35	9.7%	7	7	10.3%
Other	34	7.6%	7	28	7.8%	6	9	13.2%
Not stated	7	1.6%	1	18	5.0%	4	4	5.9%
Grand Total*	**449**	**100.0%**	**90**	**359**	**100.0%**	**72**	**68**	**100.0%**

Notes: Average = the average number of cases notified each year in that period and subgroup
* Includes four notifications in the 2014-2018 period and six cases in the 2019-2023 period among transgender people.

9 Hepatitis B

Key points

- The number of newly acquired and unspecified hepatitis B notifications were higher in comparison to the previous five-year average.
- Notification rates for newly acquired and unspecified hepatitis B were highest in the 45 to 49 year and 30 to 34 year age groups, respectively. The testing rate was highest in the 15 to 24 year age group.
- In comparison to other parts of the state, notification rates for newly acquired and unspecified hepatitis B were highest in the Goldfields and Kimberley regions, respectively.
- Aboriginal to non-Aboriginal rate ratios for both newly acquired and unspecified hepatitis B were 2.0:1.
- The majority of newly acquired infections were acquired in WA and the majority of unspecified hepatitis B infections were acquired overseas.
- In comparison to the national crude rates, the WA newly acquired hepatitis B crude rate was higher and the unspecified hepatitis B crude rate was lower.

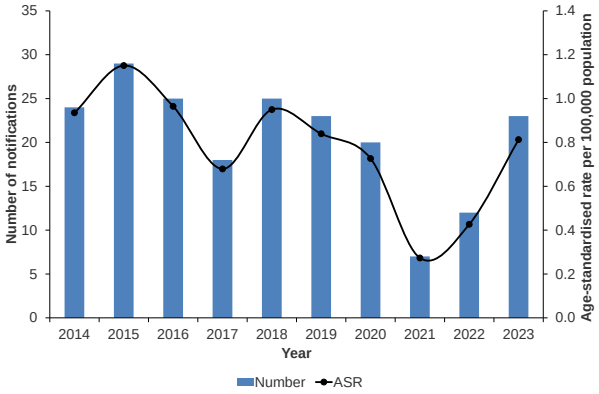
Hepatitis B notifications are classified as 'newly acquired' (evidence of infection having been acquired in the 24 months prior to diagnosis) or 'unspecified' (infections of unknown duration).

9.1 Newly acquired hepatitis B

9.1.1 Trends over time

The number of newly acquired hepatitis B notifications in the last ten years peaked in 2015 (n=29). The number of notifications in 2023 (n=23) was 92% higher than the number of notifications in 2022 (n=12) and 32% higher than the 2018 to 2022 five-year average of 17 notifications per year (Figure 9.1). Newly acquired hepatitis B notifications represented 4% of total hepatitis B notifications in 2023 (Appendix Figure 12[1]).

Figure 9.1 Number and ASR of newly acquired hepatitis B notifications, WA, 2014 to 2023



9.1.2 Distribution by age and sex

In 2023, 57% of newly acquired hepatitis B notifications were recorded among people aged 45 years or older and the highest notification rate occurred in people aged 45 to 49 years (2/100,000 population) (Figure 9.2). From 2014 to 2023, more males than females were notified with newly acquired hepatitis B each year (Appendix Figure 13[1]).

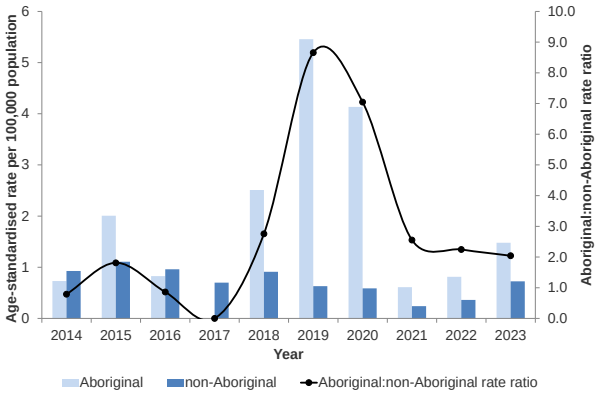
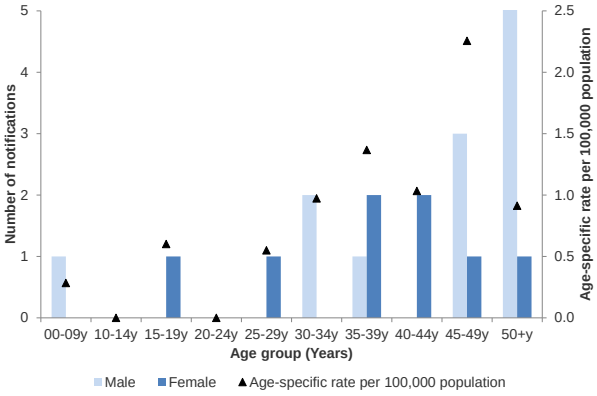


Figure 9.2 Number of newly acquired hepatitis B notifications by sex and overall age-specific rate, WA, 2023



9.1.3 Notifications by Aboriginality

In 2023, two newly acquired hepatitis B notifications were reported in Aboriginal people, 20 notifications were reported in non-Aboriginal people and one notification had an unknown Aboriginal status (Appendix Figure 15[1]). Since 2014, the rates of newly acquired hepatitis B have generally been higher among Aboriginal people compared to non-Aboriginal people. The Aboriginal to non-Aboriginal rate ratio reached a peak of 8.7:1 in 2019 before decreasing to 2.0:1 in 2023 (Figure 9.3 and Appendix Table 40[1]).

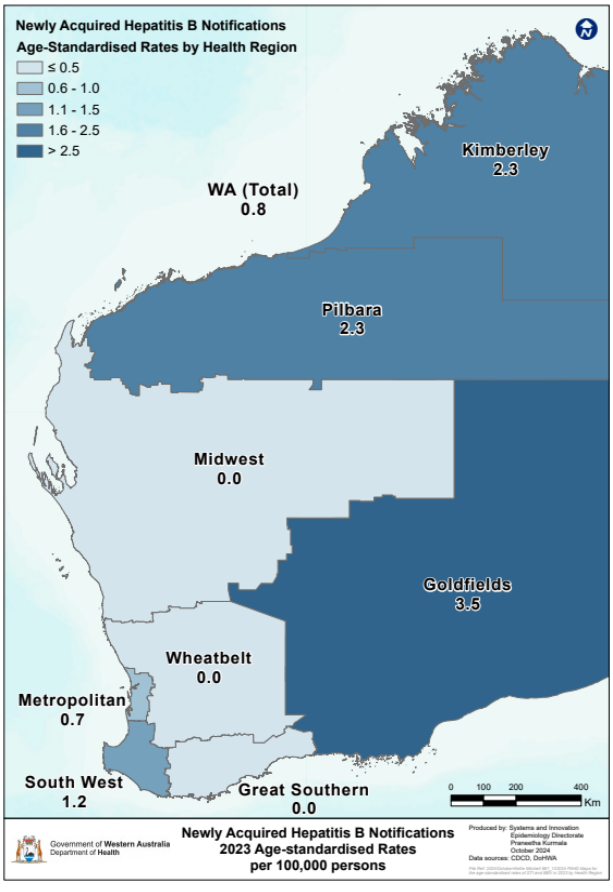
Figure 9.3 ASR of newly acquired hepatitis B notifications by Aboriginality, WA, 2014 to 2023

9.1.4 Regional distribution

The highest newly acquired hepatitis B notification rate in 2023 was observed in the Goldfields region (3/100,000 population), although this was based on only two notifications.

No notifications were reported from the Great Southern, Midwest or Wheatbelt regions (Map 9.1 and Appendix Table 37[1]).

Map 9.1 ASR of newly acquired hepatitis B notifications by health region, WA, 2023



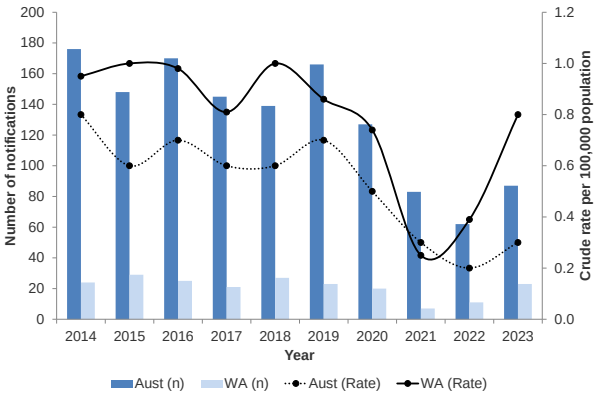
9.1.5 Place of acquisition

Of the 11 (48%) newly acquired hepatitis B notifications in 2023 that had place of acquisition recorded, 73% were reported as having been acquired in WA (Appendix Table 42[1]).

9.1.6 Interstate comparisons

In 2023, crude newly acquired hepatitis B notification rates ranged from 0.0/100,000 population to 2.0/100,000 population. The crude rate for WA in 2023 was higher than the national crude rate (0.8 vs. 0.3/100,000 population) (Figure 9.4 and Appendix Table 43[1]).

Figure 9.4 Number and crude rate of newly acquired hepatitis B notifications, WA and Australia, 2014 to 2023



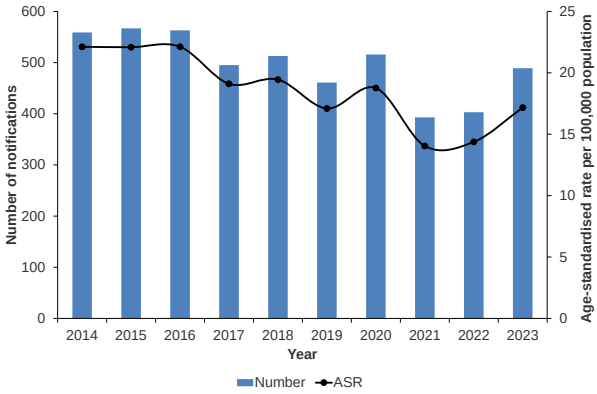
Note: Data sourced from NNDSS 11 June 2024

9.2 Unspecified hepatitis B

9.2.1 Trends over time

Unspecified hepatitis B notifications in WA reached a peak of 567 in 2015. The number of notifications in 2023 (n=489) was 21% higher than in 2022 (n=403) and was 7% higher than the 2018 to 2022 five-year average of 457 notifications per year (Figure 9.5 and Appendix Figure 12[1]).

Figure 9.5 Number and ASR of unspecified hepatitis B notifications, WA, 2014 to 2023

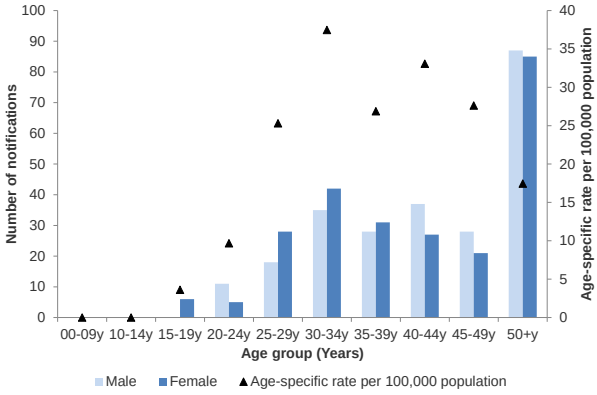


9.2.2 Distribution by age and sex

While the highest number of unspecified hepatitis B notifications in 2023 occurred in people aged 50 years or over, the highest rate was observed in people aged 30 to 34 years (37/100,000 population). More males than females were notified each year except for 2016 and 2020, when more females than males were notified (

Figure 9.6 and Appendix Figure 14[1]).

Figure 9.6 Number of unspecified hepatitis B notifications by sex and overall age-specific rate, WA, 2023

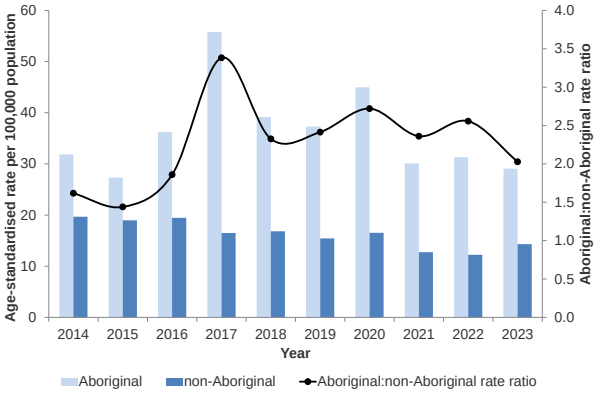


9.2.3 Notifications by Aboriginality

In 2023, 6% of unspecified hepatitis B notifications were reported in Aboriginal people, 80% in non-Aboriginal people and 14% were of unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio reached a peak of 3.4:1 in 2017 and fluctuated to 2.0:1 in 2023 (Figure 9.7). In 2023, the highest unspecified hepatitis B notification rates were reported from the Midwest region among Aboriginal people, and from the Perth metropolitan region among non-Aboriginal people (82/100,000

and 16/100,000 population, respectively) (Appendix Table 40[1]).

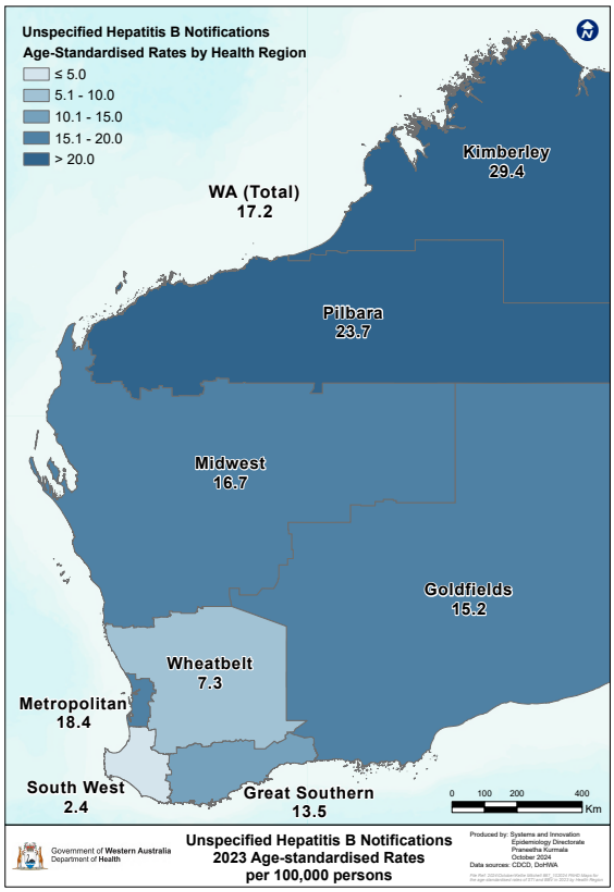
Figure 9.7 ASR of unspecified hepatitis B notifications by Aboriginality, WA, 2014 to 2023



9.2.4 Regional distribution

The highest unspecified hepatitis B notification rate in 2023 was reported from the Kimberley region, where the rate was 71% higher than the overall WA rate (29 vs. 17/100,000 population) (Map 9.2).

Map 9.2 ASR of unspecified hepatitis B notifications by health region, WA, 2023



9.2.5 Place of acquisition

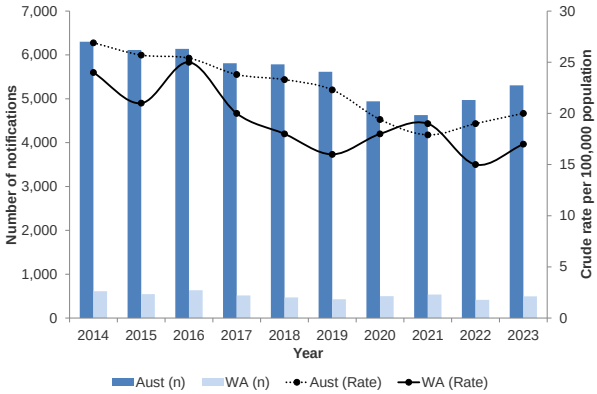
Of the 159 (33%) unspecified hepatitis B notifications in 2023 that had place of acquisition recorded, 83% were reported as having been acquired overseas, predominately in South-East Asia and North-East Asia and, and 14% in WA (Appendix Table 42[1]).

9.2.6 Interstate comparisons

In 2023, the crude unspecified hepatitis B notification rate in WA (17/100,000 population) was the third lowest in Australia and was 15% lower than the national crude rate (20/100,000 population) (

Figure 9.8 and Appendix Table 44[1]).

Figure 9.8 Number and crude rate of unspecified hepatitis B notifications, WA and Australia, 2014 to 2023



Note: Data sourced from NNDSS 11 June 2024

9.3 Enhanced hepatitis B surveillance

In 2023, enhanced surveillance forms were sent to the diagnosing doctors of all newly acquired hepatitis B infections in WA. As only 15 forms were completed for the 23 newly acquired hepatitis B notifications, no additional detail will be reported.

9.4 Hepatitis B testing

Between 2014 and 2023, the hepatitis B testing rate increased by 51% (41 to 62/1,000 population) while the notification and test positivity rates decreased by 27% (25 to 18/100,000 population) and 29% (0.31% to 0.22%). The increase in testing rate together with the decrease in test positivity rate indicates that the decrease in notifications over this period may have resulted primarily from reduced disease transmission (Figure 9.10).

In 2023, the highest testing rate was observed in people aged 15 to 24 years (87/1,000 population) and increased by 51% from 2014 (58/1,000 population). The highest test positivity rate was in people aged 25 years or older (0.26%) and decreased by 24% from 2014 (0.34%) (Figure 9.9).

In 2023, the testing rate among females was 43% higher than the rate among males (73 vs. 51/1,000 population), while the test positivity rate among males was 55% higher than the rate among females (0.28 vs. 0.18%) (Figure 9.10).

Figure 9.9 Hepatitis B testing rate, notification rate and test positivity rate by age group, WA, 2014 to 2023

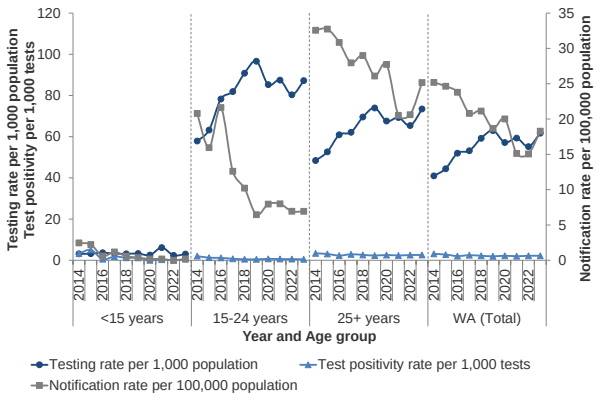
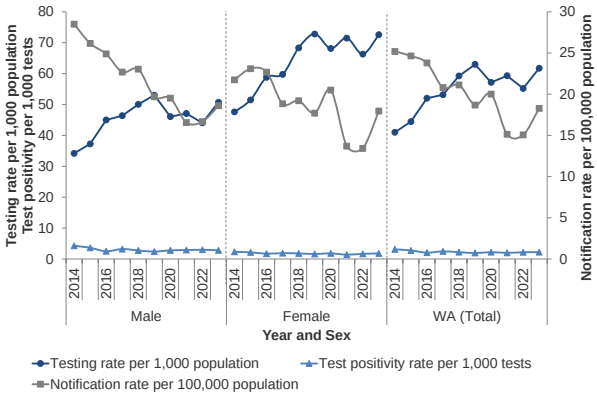


Figure 9.10 Hepatitis B testing rate, notification rate and test positivity rate by sex, WA, 2014 to 2023



9.5 Outbreaks and other investigations

No significant outbreaks or clusters of hepatitis B infections were reported in 2023.

10 Hepatitis C

Key points

- The number of newly acquired and unspecified hepatitis C notifications both reached a ten-year low in 2022 before increasing in 2023.
- Notification rates for newly acquired and unspecified hepatitis C were highest in the 30 to 34 year and 20 to 24 year age groups, respectively. The testing rate was highest in the 15 to 24 year age group.
- In comparison to other parts of the state, notification rates for both newly acquired and unspecified hepatitis C were higher in the Great Southern region.
- Aboriginal to non-Aboriginal rate ratios for newly acquired and unspecified infections were 19:1 and 12:1, respectively.
- The majority of newly acquired and unspecified hepatitis C infections were acquired in WA.
- In comparison to the national crude rates, the WA newly acquired and unspecified hepatitis C crude rates were 21% and 8% higher, respectively.
- There were marked differences

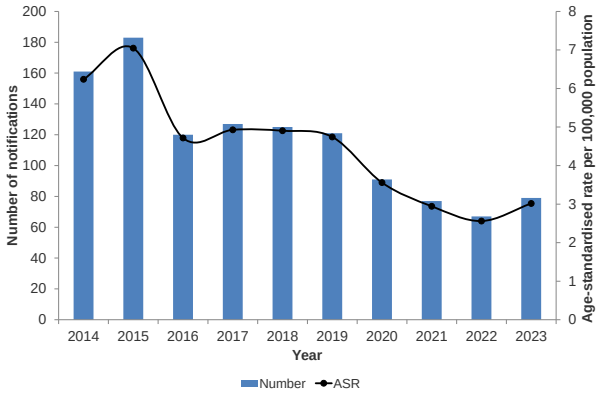
Hepatitis C notifications are classified as 'newly acquired' (evidence of infection having been acquired in the 24 months prior to diagnosis) or 'unspecified' (infections of unknown duration).

10.1 Newly acquired hepatitis C

10.1.1 Trends over time

The number of newly acquired hepatitis C notifications peaked at 182 in 2015, decreased to a ten-year low of 67 in 2022 and increased to 79 in 2023 (Figure 10.1). Newly acquired hepatitis C notifications represented 9% of total hepatitis C notifications in 2023 (Appendix Figure 17[1]).

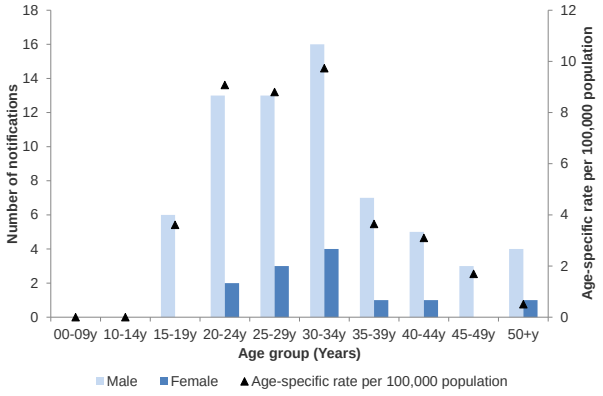
Figure 10.1 Number and ASR of newly acquired hepatitis C notifications, WA, 2014 to 2023



10.1.2 Distribution by age and sex

In 2023, the highest rate of newly acquired hepatitis C notifications occurred in people aged 30 to 34 years (Figure 10.2). From 2014 to 2023, more males than females were notified with newly acquired hepatitis C each year (Appendix Figure 18[1]).

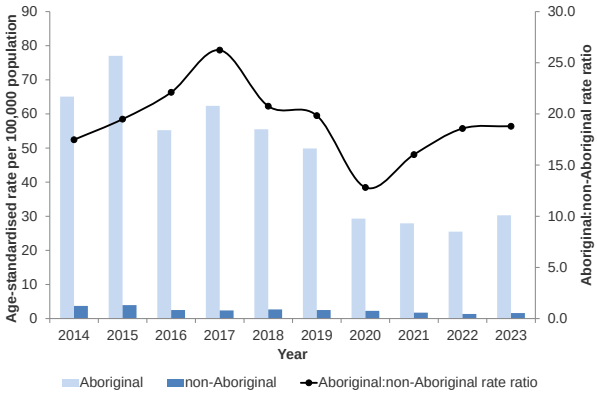
Figure 10.2 Number of newly acquired hepatitis C notifications by sex and overall age-specific rate, WA, 2023



10.1.3 Notifications by Aboriginality

The Aboriginality of all newly acquired hepatitis C notifications has been known since 2014 (Appendix Figure 20[1]). The Aboriginal to non-Aboriginal rate ratio reached a ten-year high of 26.0:1 in 2017 before halving to 12.9:1 in 2020 and increasing again to 18.8:1 in 2023 (Figure 10.3). In 2023, the highest notification rate among both Aboriginal and non-Aboriginal people was observed in the Great Southern region (118 and 8/100,000 population), although this was based on a very small number of notifications (Appendix Table 49[1]).

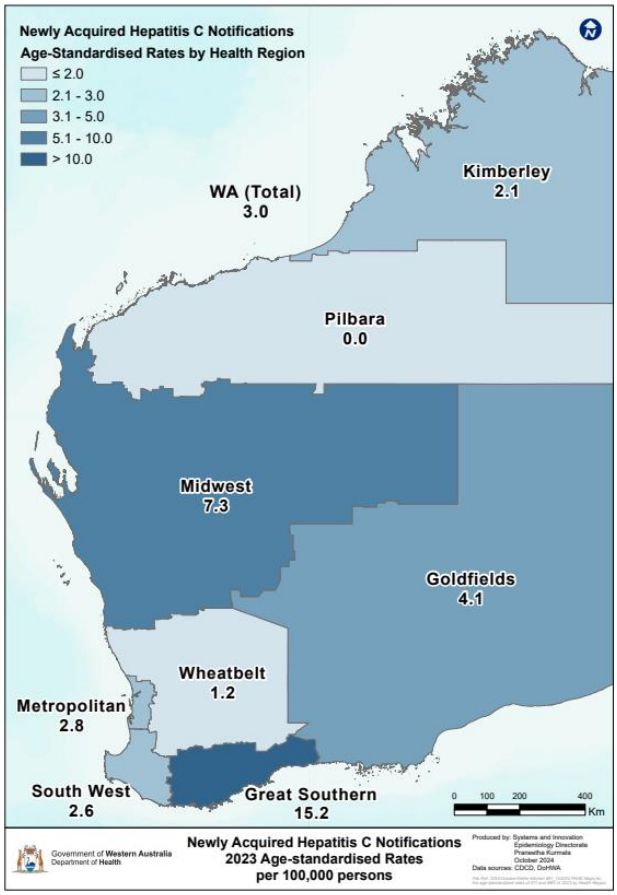
Figure 10.3 ASR of newly acquired hepatitis C notifications by Aboriginality, WA, 2014 to 2023



10.1.4 Regional distribution

The highest rate of newly acquired hepatitis C notifications in 2023 was reported from the Great Southern region (15/100,0000 population), although this was based on only seven notifications. No notifications were reported from the Pilbara region (Map 10.1 and Appendix Table 46[1]).

Map 10.1 ASR of newly acquired hepatitis C notifications by health region, WA, 2023



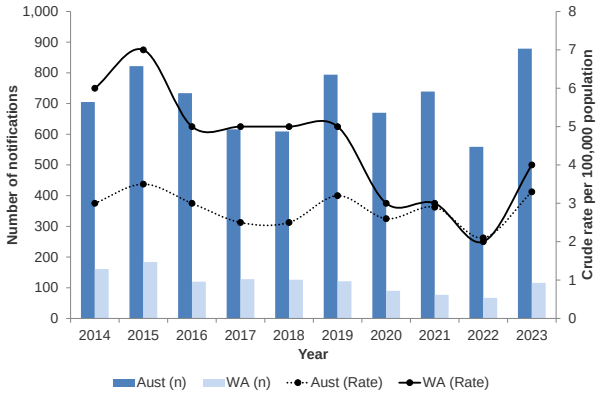
10.1.5 Place of acquisition

Of the 58 (73%) newly acquired hepatitis C notifications in 2023 that had place of acquisition recorded, 95% were reported as having been acquired in WA (Appendix Table 51[1]).

10.1.6 Interstate comparisons

In 2023, the crude newly acquired hepatitis C notification rate in WA was 21% higher than the national crude rate (4.0 vs. 3.3/100,000 population) (Figure 10.4 and Appendix Table 52[1]).

Figure 10.4 Number and crude rate of newly acquired hepatitis C notifications, WA and Australia, 2014 to 2023



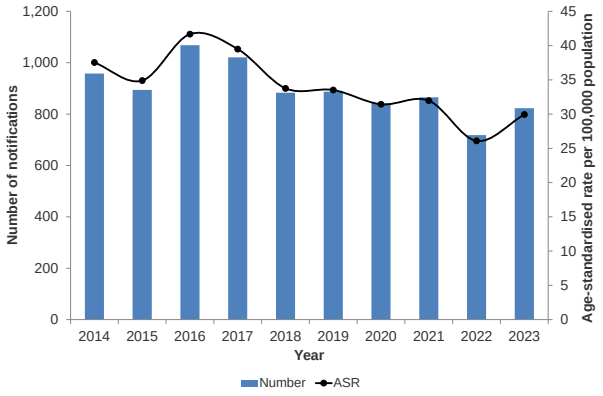
Note: Data sourced from NNDSS 11 June 2024

10.2 Unspecified hepatitis C

10.2.1 Trends over time

The number of unspecified hepatitis C notifications peaked at 1,068 in 2016, reached a ten-year low of 718 in 2022 and increased to 823 in 2023 (Figure 10.5).

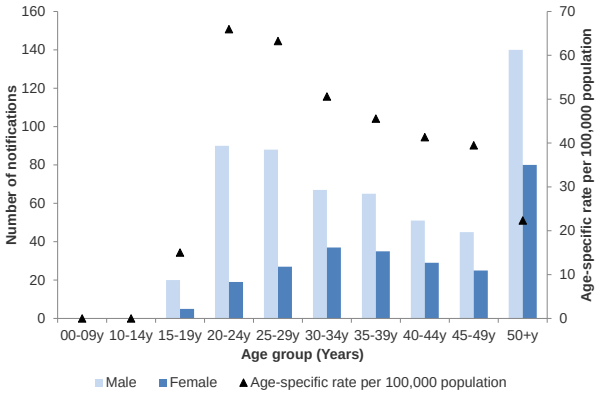
Figure 10.5 Number and ASR of unspecified hepatitis C notifications, WA, 2014 to 2023



10.2.2 Distribution by sex and age

While the highest number of unspecified hepatitis C notifications in 2023 occurred in people aged 50 years or over, the highest rate was observed in people aged 20 to 24 years (Figure 10.6). From 2014 to 2023, more males than females were notified each year (Appendix Figure 19[1]).

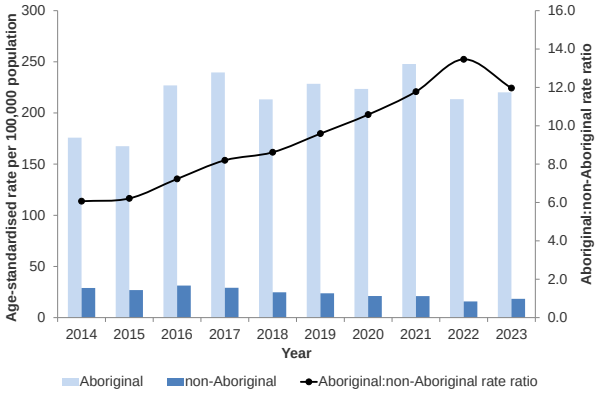
Figure 10.6 Number of unspecified hepatitis C notifications by sex and overall age-specific rate, WA, 2023



10.2.3 Notifications by Aboriginality

In 2023, 33% of unspecified hepatitis C notifications were reported in Aboriginal people, 61% in non-Aboriginal people and 6% of notifications were of unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio increased from 6.1:1 in 2014 to a ten-year high of 13.5 in 2022, and decreased to 12.0:1 in 2023 (Figure 10.7). In 2023, the highest unspecified hepatitis C rate among Aboriginal people was reported from the Great Southern region, and among non-Aboriginal people the highest rate was reported from the Kimberley region (659/100,000 and 32/100,000 population, respectively) (Appendix Table 49[1]).

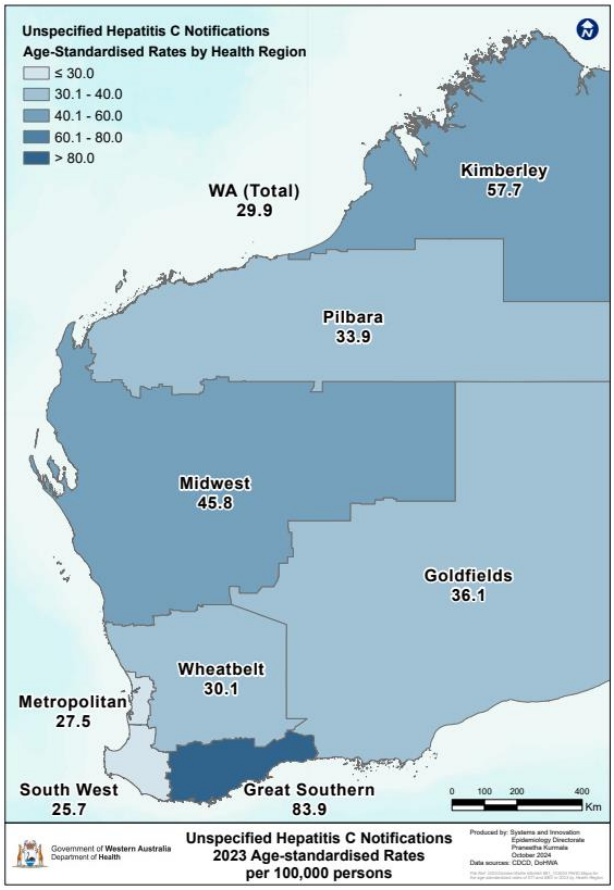
Figure 10.7 ASR of unspecified hepatitis C notifications by Aboriginality, WA, 2014 to 2023



10.2.4 Regional distribution

The highest unspecified hepatitis C notification rate in 2023 was reported from the Great Southern region, where 57% (n=24/42) notified by Corrective Services (Map 10.2 and Appendix Table 47[1]).

Map 10.2 ASR of unspecified hepatitis C notifications by health region, WA, 2023



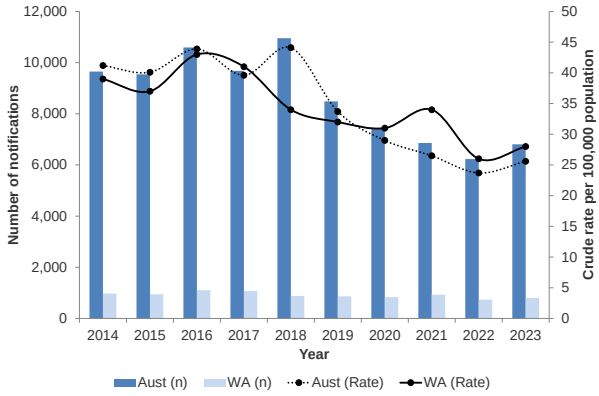
10.2.5 Place of acquisition

Of the 190 (23%) unspecified hepatitis C notifications in 2023 that had place of acquisition recorded, 86% were reported as having been acquired in WA, 9% overseas and 5% interstate (Appendix Table 51[1]).

10.2.6 Interstate comparisons

In 2023, the crude unspecified hepatitis C notification rate in WA was 8% higher than the national crude rate (28 vs. 26/100,000 population) (Figure 10.8 and Appendix Table 53[1]).

Figure 10.8 Number and crude rate of unspecified hepatitis C notifications, WA and Australia, 2014 to 2023



Note: Data sourced from NNDSS 11 June 2024

10.3 Enhanced hepatitis C surveillance

In 2023, enhanced surveillance forms were sent to the diagnosing doctors of all newly acquired hepatitis C infections and a randomly selected one-third of unspecified hepatitis C infections in WA. Forms were completed for 53% (n=42/79) of newly acquired infections and 46% (n=101/219) of applicable unspecified infections. A completed form was received for 55% (n=64/117) of applicable Aboriginal and 44% (n=78/176) of applicable non-Aboriginal notifications (Table 10.1).

Overall, having a history of risk factors was the most common reason for hepatitis C testing among both Aboriginal and non-Aboriginal people. A greater proportion of Aboriginal people were diagnosed with hepatitis C as part of voluntary prison entry testing while a greater proportion of non-Aboriginal people were diagnosed as a result of an abnormal liver test. Injecting drug use was the most common hepatitis C risk factor for both Aboriginal and non-Aboriginal people. Overall, when the data were analysed for those people with at least one risk factor identified, 69% reported injecting drug use. However, when the data were limited to only those with ‘yes’ and ‘no’ responses to that question, 88% of cases reported a history of injecting drug use. A greater proportion of Aboriginal people had a history of imprisonment as a risk factor for hepatitis C (Table 10.1).

10.4 Hepatitis C testing

Between 2014 and 2021, the hepatitis C testing rate increased by 10% (49 to 54/1,000 population) while the notification and test positivity rates decreased by 25% (46 to 35/100,000 population) and 7% (0.59% to 0.55%). The increase in testing rate together with the decrease in test positivity rate indicates that the decrease in notifications over this period may have resulted primarily from reduced disease transmission (Figure 10.10).

Between 2021 and 2023, the hepatitis C testing rate remained stable (to 56/1,000 population) while the notification and test positivity rates decreased by 6% (to 32/1,000 population) and 7% (to 0.51%) respectively. The stable testing rate together with the decrease in test positivity rate indicates that the decrease in notifications over this period may have resulted primarily from reduced disease transmission (Figure 10.10).

In 2023, the highest testing rate was observed in people aged 15 to 24 years (73/1,000 population) and remained stable in comparison to 2014 (72/1,000 population). The highest test positivity rate was also in people aged 15 to 24 years (0.58%) and increased by 7% from 2014 (0.55%) (

Figure 10.9).

In 2023, the testing rate among females was 36% higher than the rate among males (64 vs. 47/1,000 population), while the test positivity rate among males was more than three-times higher than the rate among females (0.87 vs. 0.25%) (Figure 10.10).

Figure 10.9 Hepatitis C testing rate, notification rate and test positivity rate by age group, WA, 2014 to 2023

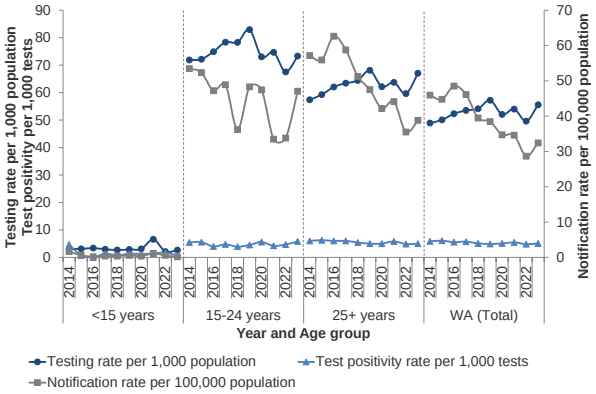
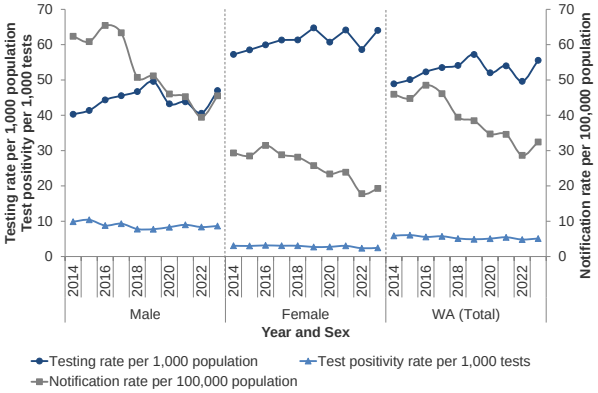


Figure 10.10 Hepatitis C testing rate, notification rate and test positivity rate by sex, WA, 2014 to 2023



10.5 Outbreaks and other investigations

No significant outbreaks or clusters of hepatitis C infections were reported in 2023.

Table 10.1 Behavioural and demographic characteristics of people notified with hepatitis C by Aboriginality, WA, 2023

Behavioural and demographic characteristics		Aboriginality					
		Aboriginal (n=64)		non-Aboriginal (n=78)		Total (n=143)	
		Number	Percent	Number	Percent	Number	Percent
Sex	Male	52	81.3%	55	70.5%	**107**	**74.8%**
	Female	12	18.8%	23	29.5%	**36**	**25.2%**
Reason for testing	History of risk factors	50	78.1%	49	62.8%	**99**	**69.2%**
	Signs/symptoms of hepatitis	1	1.6%	6	7.7%	**7**	**4.9%**
	Abnormal liver test	5	7.8%	20	25.6%	**25**	**17.5%**
	Prison screen	39	60.9%	30	38.5%	**69**	**48.3%**
	Antenatal screen	2	3.1%	2	2.6%	**1**	**0.7%**
	Sexual health screen	6	9.4%	7	9.0%	**13**	**9.1%**
	Employment screen	0	0.0%	0	0.0%	**0**	**0.0%**
	Blood or organ donor	0	0.0%	0	0.0%	**0**	**0.0%**
	Drug/alcohol program screen	1	1.6%	0	0.0%	**1**	**0.7%**
	Migrant/refugee screen	0	0.0%	1	1.3%	**1**	**0.7%**
	Occupational exposure - exposed	0	0.0%	0	0.0%	**0**	**0.0%**
	Occupational exposure - source	0	0.0%	0	0.0%	**0**	**0.0%**
	Patient request	3	4.7%	10	12.8%	**13**	**9.1%**
	Other	3	4.7%	8	10.3%	**11**	**7.7%**
Risk factors	Injecting drug use	52	81.3%	46	59.0%	**98**	**68.5%**
	Blood products/tissues in Australia	0	0.0%	0	0.0%	**0**	**0.0%**
	Blood products/tissues overseas	0	0.0%	1	1.3%	**1**	**0.7%**
	Organ transplant	0	0.0%	0	0.0%	**0**	**0.0%**
	Dialysis	0	0.0%	0	0.0%	**0**	**0.0%**
	Needlestick/biohazardous injury in healthcare worker	1	1.6%	0	0.0%	**0**	**0.0%**
	Needlestick/biohazardous injury in non-healthcare worker	0	0.0%	0	0.0%	**0**	**0.0%**
	Surgical/endoscopy procedure	3	4.7%	8	10.3%	**11**	**7.7%**
	Major dental work	0	0.0%	3	3.8%	**3**	**2.1%**
	Tattoos	9	14.1%	13	16.7%	**22**	**15.4%**
	Acupuncture	0	0.0%	1	1.3%	**1**	**0.7%**
	Ear piercing	6	9.4%	5	6.4%	**11**	**7.7%**
	Body piercing	1	1.6%	2	2.6%	**3**	**2.1%**
	Perinatal transmission	22	34.4%	27	34.6%	**49**	**34.3%**
	Same sex partner with HCV	0	0.0%	0	0.0%	**0**	**0.0%**
	Opposite sex partner with HCV	13	20.3%	14	17.9%	**27**	**18.9%**
	Imprisonment	44	68.8%	35	44.9%	**79**	**55.2%**
	Health care worker with no documented exposure	0	0.0%	1	1.3%	**1**	**0.7%**
	Household contact with HCV	6	9.4%	2	2.6%	**8**	**5.6%**
	Other risk factor	3	4.7%	2	2.6%	**5**	**3.5%**

Notes: Enhanced surveillance forms were sent to the diagnosing doctors of all newly acquired hepatitis C infections and a randomly selected one-third of unspecified hepatitis C infections in WA
Reasons for testing and risk factors are not mutually exclusive
Only enhanced surveillance forms with behavioural and demographic characteristics identified were included

Government of Western Australia
Department of Health

2023 Sexual Health & BBV prevention and control highlights

Strategic documents

- The new WA Syphilis Outbreak Response Action Plan 2023-2025[3] was published and informed by a consultation with over 100 health professionals

Prevention and education

- The average WA users per month of our prevention and education websites included:
  - Growing and Developing Healthy Relationships[4] (GDHR) website for schools – 2,000 WA users/month
  - Get the Facts[5] (GtF) website for teens – 2,632 WA users/month
  - Let's Yarn website[6] for people working with young Aboriginal people – 309 WA users/month
  - Talk Soon. Talk Often. website[7] for parents – 456 WA users/month.
- Pre-exposure prophylaxis (PrEP) was accessed by 3,036 individuals.
- A total of 6,608,383 needle and syringes were distributed in WA, a substantial (24%) increase on the number distributed in 2022.
- A total of 46 condom dispensers were provided to 13 locations in the Great Southern, Pilbara, Midwest, Peel Gascoyne and Perth Metropolitan regions.

Testing and diagnosis / disease management and clinical care

- There were 57 authorised hepatitis B community prescribers in WA, with around one -third of these in regional WA, and 29 authorised HIV community prescribers in WA including 4 in regional WA.
- An estimated 96% of people living with HIV in WA were dispensed HIV treatment.
- A total of 10,098 individuals have initiated direct acting antiviral (DAA) therapy for chronic hepatitis C virus infection in WA through the Pharmaceutical Benefits Scheme (PBS) from 2016 to 2023[8].
- At the end of December 2023, there were 48 testing sites offering syphilis point of care (PoC) testing and a total of 5,117 syphilis PoC tests were performed, with 239 (4.7%) returning a reactive result.

Workforce development

- The Sexual Health Teams Workshop was attended by 63 participants from 34 organisations across WA.
- The Needle and Syringe Program (NSP) Online Orientation and Training was completed by 113 participants, while 46 pharmacist and pharmacy staff completed the pharmacy NSP online training.
- Curtin University provided training to 33 undergraduates and 66 school staff (funded by the SHBBVP).

Data collection, research and evaluation

- Antenatal syphilis testing data for public patients in WA was made accessible on the Maternity Dashboard.
- Syphilis REDCap was updated to include a dashboard which reports on syphilis indicators.
- The WA Syphilis Outbreak Response Progress Report 2018-2022[9] was published.

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