Government of **Western Australia**
Department of **Health**

# The Epidemiology of Notifiable Sexually Transmitted Infections and Blood-Borne Viruses in Western Australia 2024

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**Contributors/Editors**
Kellie Mitchell, Caitlin Wilshin, and Nevada Pingault.

Communicable Disease Control Directorate
Department of Health, Western Australia
PO Box 8172
Perth Business Centre
Western Australia 6849
Telephone: (08) 9222 4222 (switchboard)
Facsimile: (08) 9222 0227
Web: ww2.health.wa.gov.au

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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

| | |
|---|---|
| AHCWA | Aboriginal Health Council of Western Australia |
| ASHM | Australasian Society for HIV Medicine |
| ASR(s) | Age-standardised notification rate(s) per 100,000 population |
| BBV(s) | Blood-borne virus(es) |
| DAA | Direct acting antiviral |
| GDHR | Growing and Developing Healthy Relationships |
| GtF | Get the Facts |
| HIV | Human immunodeficiency virus |
| MSM | Men who have sex with men |
| 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 |
| RACGP | Royal Australian College of General Practitioners |
| 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 2024, and trends over the ten-year period from 2015 to 2024. 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 2024

## Chlamydia

- Notifications remained stable from 12,943 in 2023 to 12,874 in 2024.
- Testing and positivity rates were highest in people aged 15 to 24 years.
- The WA notification rate was 13% higher than the national rate.

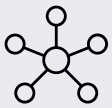
## Gonorrhoea

- Notifications reached a 10-year high of 5,239 in 2024.
- Testing data suggested this resulted from a combination of increased testing and increased disease transmission.
- The WA notification rate was 6% higher than the national rate.

## Infectious syphilis

- Notifications reached a 10-year high of 843 in 2021 and decreased by 28% to 606 in 2024.
- Testing data suggested the decrease resulted from decreased disease transmission, despite increased testing.
- The notification rate was 11-times higher among Aboriginal, compared to non-Aboriginal people.
- From 2015 to 2023, there were 18 congenital syphilis notifications; 0 reported in 2024.

## HIV



- In 2024, there were 77 HIV cases newly diagnosed in WA, a 13% increase compared to 2023.
- The number of newly acquired HIV notifications among MSM decreased by 36% between the 2015 to 2019 and 2020 to 2024 periods, reflecting a likely decrease in HIV transmission among MSM.
- 96% of HIV cases diagnosed in 2024 were on treatment.

## Hepatitis B

- Total hepatitis B notifications increased by 12% from 479 in 2023 to 535 in 2024.
- Testing data suggested this resulted from a combination of increased testing and disease transmission.
- 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 1,186 in 2016 and decreased by 21% to 934 in 2024.
- Testing data suggested this resulted primarily from decreased disease transmission.

# 3 Chlamydia

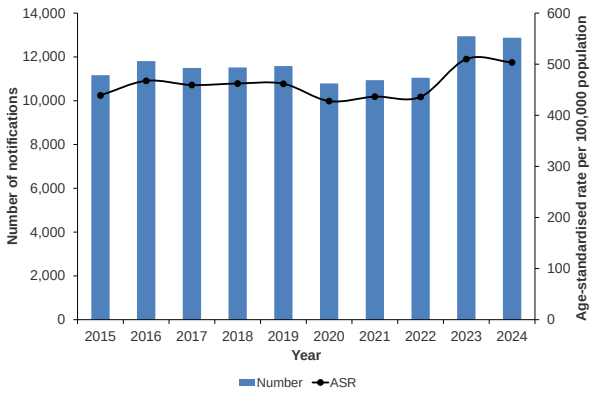
**Key points**

- Chlamydia was the most notified STI in WA.
- The testing and positivity 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 13% higher than the national crude rate.

## 3.1 Trends over time

The number of chlamydia notifications in 2024 was comparable to the number in 2023 (n=12,874 vs 12,943, respectively) and 12% higher than the 2019 to 2023 five-year average of 11,459 notifications per year (Figure 3.1).

**Figure 3.1 Number and ASR of chlamydia notifications, WA, 2015 to 2024**




Between 2015 and 2020, the testing rate increased by 16% (61 to 70/1,000 population), the notification rate decreased by 10% (443 to 400/100,000 population and the test positivity rate decreased by 7% (4.2% to 3.9%). The increase in testing rate together with the decrease in test positivity rate suggests the decrease in notifications over this period resulted primarily from reduced disease transmission, influenced by the beginning of the COVID-19 border shutdown. Between 2020 and 2023, the testing rate fluctuated with an overall increase of 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 suggests that the increase in notifications over this period resulted from a combination of increased testing and disease transmission, influenced by the end of the COVID-19 border shutdown in 2022 (Figure 3.4)

In 2024, the testing rate (81/1,000 population) was similar to 2023, and while the test positivity rate decreased marginally (to 4.0%), the notification rate (451/100,000 population) was similar to 2023 (Figure 3.4).

## 3.2 Distribution by age and sex

As in previous years, 67% of chlamydia notifications in 2024 were in people aged between 15 and 29 years and the highest notification rate was in those aged 20 to 24 years (2,318/100,000 population) (Figure 3.2). In 2024, the highest testing and test positivity rates were in people aged 15 to 24 years (157/1,000 population and 8.0%, respectively) and the test positivity rate in this age group increased by 9% from 2015 (Figure 3.3).

From 2015 to 2024, more females than males were notified each year (Appendix Figure 1[1]). A higher proportion of females was observed in people aged 29 years or younger, while the opposite trend was observed in people aged 30 years or older (Figure 3.2 and Appendix Table 2[1]).

In 2024, the testing rate among females was 67% higher than the rate among males (101 vs. 61/1,000 population), while the test positivity rate among males was 52% higher than the rate among females (5.1 vs. 3.4%) (Figure 3.4 3.4).

**Figure 3.2 Number of chlamydia notifications by sex and overall age-specific rate, WA, 2024**

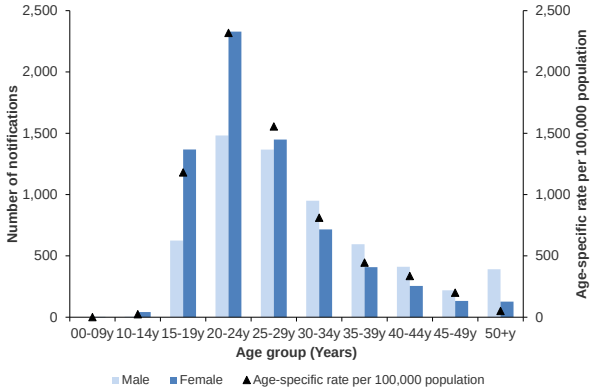



**Figure 3.3 Chlamydia testing rate, notification rate and test positivity rate by age group, WA, 2015 to 2024**

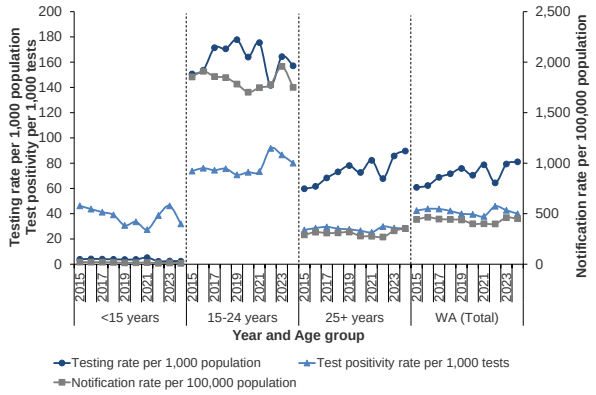
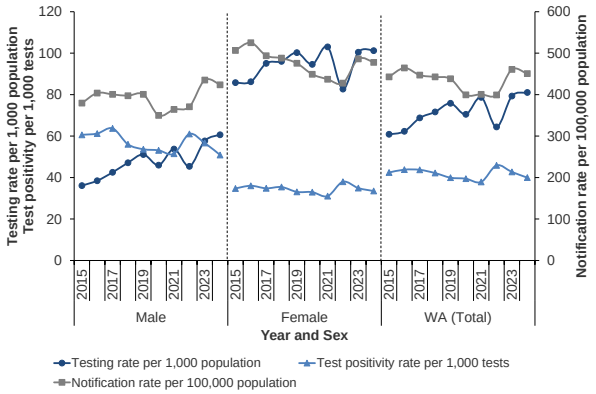



**Figure 3.4 Chlamydia testing rate, notification rate and test positivity rate by sex, WA, 2015 to 2024**

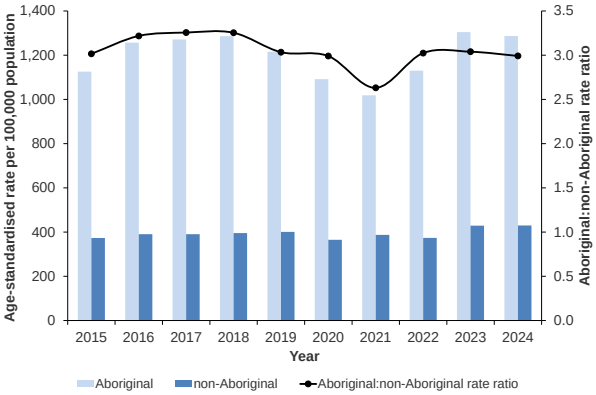



## 3.3 Notifications by Aboriginality

In 2024, 81% of chlamydia notifications were reported in non-Aboriginal people, 15% in Aboriginal people and 4% of notifications were of unknown Aboriginal status.

Between 2015 and 2021, the notification rate decreased by 10% among Aboriginal people, remained stable among non-Aboriginal people, and the Aboriginal to non-Aboriginal rate ratio decreased from 3.0:1 to 2.6:1. From 2021 to 2024, the notification rate increased by 26% 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 2024, the highest notification rate among both Aboriginal and non-Aboriginal people was reported from the Kimberley region (2,271 and 603/100,000 population, respectively) (Appendix Table 5[1]).

**Figure 3.5 ASR of chlamydia notifications by Aboriginality, WA, 2015 to 2024**



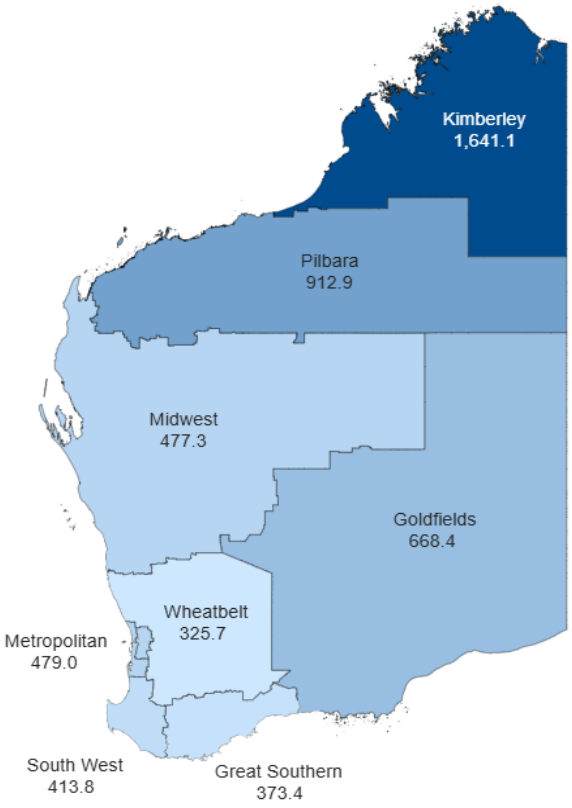

## 3.4 Regional distribution

The highest chlamydia notification rate in 2024 was reported from the Kimberley region, where the rate was more than three-times the overall WA rate (1,641 vs. 503/100,000 population) (Map 3.1 and Appendix Table 4[1]).

From 2015 to 2024, the notification rate in the Kimberley region decreased by 6% (1,737 to 1,641/100,000 population).

In contrast, the notification rate increased by 45% in the Pilbara region over the same time period (628 to 913/100,000 population) (Appendix Table 4[1]).

**Map 3.1 ASR of chlamydia notifications by health region, WA, 2024**



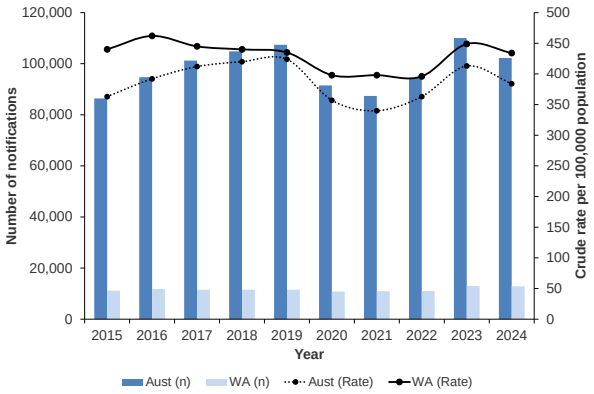

## 3.5 Place of acquisition

Of the 7,784 (60%) chlamydia notifications in 2024 that had place of acquisition recorded, 95% were reported as having been acquired in WA. This trend was comparable in males and females, although a larger proportion of males (6%) acquired their infections overseas than females (2%) (Appendix Table 7[1]).

## 3.6 Interstate comparisons

In 2024, the crude chlamydia notification rate in WA (434/100,000 population) was the second highest in Australia after the Northern Territory (NT) (1,169/100,000 population) and was 13% higher than that reported nationally (384/100,000 population) (Figure 3.6 and Appendix Table 8[1]).

**Figure 3.6 Number and crude rate of chlamydia notifications, WA and Australia, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

## 3.7 Outbreaks and other investigations

No significant outbreaks or clusters of chlamydia infections were reported in 2024, 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).

There were a total of 47 LGV notifications in WA between 2015 and 2024, with an average of 6 notifications per year. Notifications reached a peak of 14 in 2015 and there were 5 notifications in 2024. The majority of cases (70%; n=33/47) were acquired in WA.

# 4 Gonorrhoea

**Key points**

- Gonorrhoea was the second most notified STI in WA.
- The testing and positivity 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 6% 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

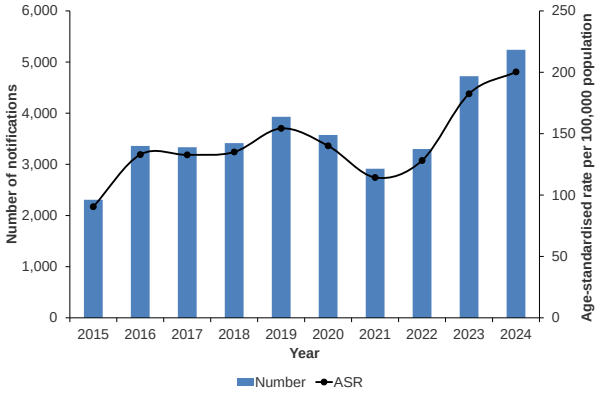
The number of gonorrhoea notifications reported to the Department of Health reached a ten-year high in 2024 (n=5,239) (Figure 4.1).

Between 2015 and 2019, the testing, notification and test positivity rates increased by 25% (59 to 74/1,000 population), 63% (92 to 149/100,000 population and 32% (1.1% to 1.4%), respectively. The increase in testing and positivity rates suggest the increase in notifications over this period resulted from increased testing and disease transmission (Figure 4.4).

Between 2019 and 2021, the testing rate remained stable (to 77/1,000 population) while the notification and test positivity rates decreased by 28% (to 107/100,000 population) and 21% (to 1.1%), respectively. The stability in testing rate together with the decrease in test positivity rate suggests the decrease in notifications over this period resulted primarily from reduced disease transmission, influenced by the beginning of the COVID-19 border shutdown (Figure 4.4).

Between 2021 and 2024, the testing rate remained stable (to 80/1,000 population) while the notification and test positivity rates increased by 72% (to 184/100,000 population) and 58% (to 1.8%), respectively. This suggests the increase in notifications over this period resulted from increased disease transmission, influenced by the end of the COVID-19 border shutdown in 2022 (Figure 4.4).

**Figure 4.1 Number and ASR of gonorrhoea notifications, WA, 2015 to 2024**




## 4.2 Distribution by age and sex

As in previous years, 56% of gonorrhoea notifications in 2024 were in people aged between 20 and 34 years and the highest notification rate was in those aged 20 to 24 years (592/100,000 population) (Figure 4.2). In 2024, the highest testing and test positivity rates were in people aged 15 to 24 years (155/1,000 population and 2.4%, respectively) (Figure 4.3).

From 2015 to 2024, more males than females were notified each year (Appendix Figure 3[1]).

A higher proportion of females was observed in people aged 19 years or younger, while the opposite trend was observed in people aged 20 years or older (Figure 4.2 and Appendix Table 2[1]).

In 2024, the testing rate among females was 65% higher than the rate among males (99 vs. 60/1,000 population), while the test positivity rate among males was almost three-times higher than the rate among females (2.9 vs. 1.1%) (Figure 4.4).

## 4.3 Notifications by Aboriginality

In 2024, 71% of gonorrhoea notifications were reported in non-Aboriginal people, 27% in Aboriginal people, and 2% 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) and remained stable in 2024 (6.7:1) (Figure 4.5). In 2024, 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 Perth metropolitan region (2,167 and 158/100,000 population, respectively) (Appendix Table 13[1]).

**Figure 4.2 Number of gonorrhoea notifications by sex and overall age-specific rate, WA, 2024**

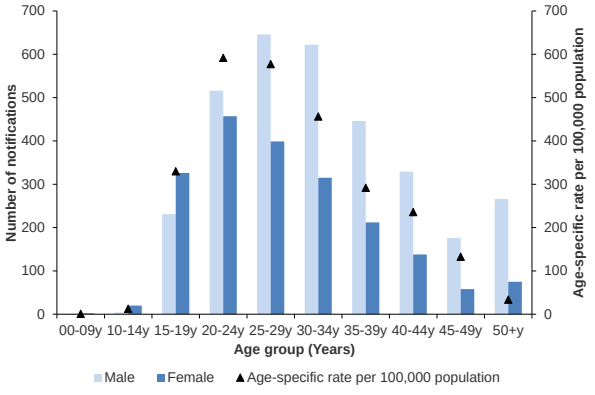



**Figure 4.3 Gonorrhoea testing rate, notification rate and test positivity rate by age group, WA, 2015 to 2024**

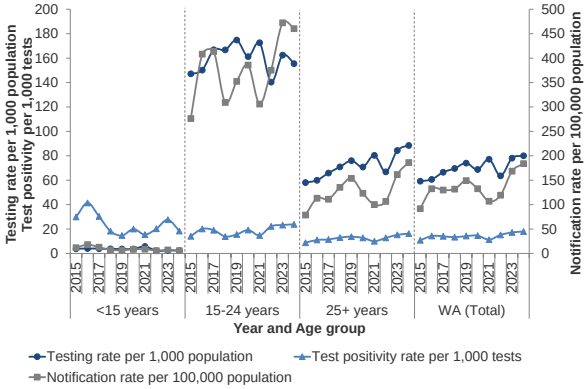



**Figure 4.4 Gonorrhoea testing rate, notification rate and test positivity rate by sex, WA, 2015 to 2024**

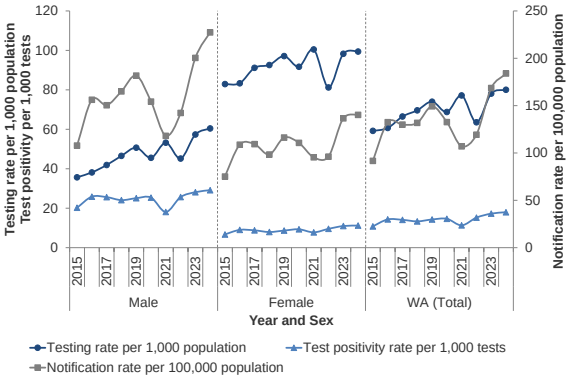
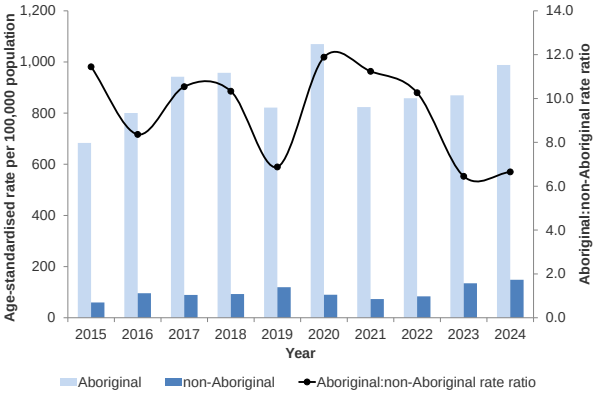



**Figure 4.5 ASR of gonorrhoea notifications by Aboriginality, WA, 2015 to 2024**

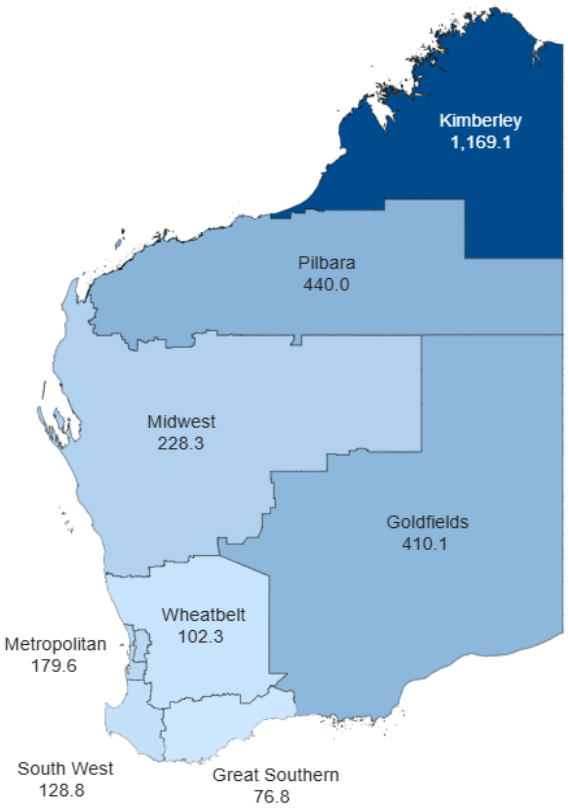



## 4.4 Regional distribution

The highest gonorrhoea notification rate in 2024 was reported from the Kimberley region, where the rate was almost six-times the overall WA rate (1,169 vs. 200/100,000 population) (Map 4.1).

The notification rate in the Kimberley region increased by almost 15-fold from 2015 to 2024 (89 to 1,327/100,000 population) (Appendix Table 12[1]).

**Map 4.1 ASR of gonorrhoea notifications by health region, WA, 2024**



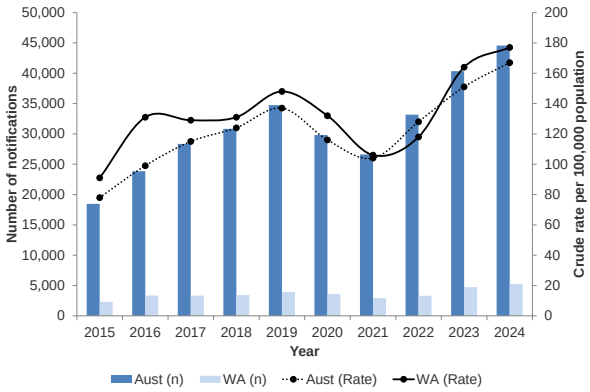

## 4.5 Place of acquisition

Of the 3,920 (75%) gonorrhoea notifications in 2024 that had place of acquisition recorded, 93% were reported as having been acquired in WA. This trend was comparable in males and females, although a larger proportion of males (7%) acquired their infections overseas than females (2%) (Appendix Table 15[1]).

## 4.6 Interstate comparisons

In 2024, the crude gonorrhoea notification rate in WA (177/100,000 population) was the second highest in Australia after the NT (907/100,000 population) and was 6% higher than the national crude rate (167/100,000 population) (Figure 4.6 and Appendix Table 16[1]).

**Figure 4.6 Number and crude rate of gonorrhoea notifications, WA and Australia, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

## 4.7 Enhanced gonorrhoea surveillance

In 2024, complete enhanced surveillance data were available for 57% (n=3,010/5,239) of all gonorrhoea notifications, representing 57% of notifications among Aboriginal people (n=810/1,413) and 59% of non-Aboriginal people (n=2,179/3,718).

### 4.7.1 Aboriginality

Among Aboriginal people, complete enhanced surveillance data was available for a slightly higher proportion of females than males. Most cases were diagnosed at an Aboriginal medical service or public hospital/community health clinic on the basis of a urine sample. The majority of cases were treated with ceftriaxone and azithromycin, or a combination of amoxycillin/probenecid and azithromycin (30%; n=240/810). The vast majority reported acquiring the infection from a person of the opposite sex and only one case reported being a current sex worker (Table 4.1). Forty-three percent of notifications among Aboriginal people (n=605/1,413) had at least one previous gonorrhoea notification.

In contrast to notifications among Aboriginal people, the majority of completed enhanced surveillance forms among non-Aboriginal people were for males. Most were diagnosed at a general practice or sexual health clinic and were treated with ceftriaxone and azithromycin.

While 47% of completed enhanced surveillance forms among non-Aboriginal people reported acquiring gonorrhoea from a person of the opposite sex, 36% reported acquiring the infection from a person of the same sex, and almost all these cases were male. Eighteen cases were current sex workers (Table 4.1). Twenty-seven percent of gonorrhoea notifications among non-Aboriginal people (n=1,013/3,718) had at least one previous gonorrhoea notification.

### 4.7.2 Exposure category

In 2024, completed gonorrhoea enhanced surveillance forms were available for 80% of notifications among MSM (n=929/1,156), 97% of notifications among heterosexual males (n=779/799) and 52% of notifications among females (n=1,050/2,002).

The majority of completed enhanced surveillance forms among MSM were among non-Aboriginal people who lived in the Perth metropolitan region and acquired the infection in WA. Most were diagnosed at a sexual health clinic on the basis of a urine sample or a throat or rectal swab. The majority were treated with ceftriaxone and azithromycin and reported acquiring gonorrhoea from a person of the same sex. Five cases reported being a current sex worker (Table 4.2). Forty-five percent of notifications among MSM (n=1,629/5,239) had at least one previous gonorrhoea notification.

In contrast to notifications among MSM, the majority of completed enhanced surveillance forms among heterosexual males were diagnosed at a general practice. Completed enhanced surveillance forms among females were equally distributed by Aboriginality and area of residence. Fourteen cases among females reported being a current sex worker (Table 4.2). Twenty-four percent of notifications among heterosexual males (n=189/799) and 27% of females (n=543/2,002) had at least one previous gonorrhoea notification.

## 4.8 Outbreaks and other investigations

No significant outbreaks or clusters of gonorrhoea infections were reported in 2024.

**Table 4.1 Behavioural and demographic characteristics of people notified with gonorrhoea by Aboriginality, WA, 2024**

| Behavioural and demographic characteristics | | Aboriginality | | | | | |
|---|---|---|---|---|---|---|---|
| | | Aboriginal (n=810) | | non-Aboriginal (n=2,179) | | Total (n=3,010) | |
| | | Number | Percent | Number | Percent | Number | Percent |
| Sex | Male | 364 | 44.9% | 1,579 | 72.5% | **1,960** | **65.1%** |
| | Female | 446 | 55.1% | 600 | 27.5% | **1,050** | **34.9%** |
| Clinical setting | Public hospital/community health clinic | 241 | 29.8% | 215 | 9.9% | **457** | **15.2%** |
| | Sexual health clinic/family planning clinic | 16 | 2.0% | 824 | 37.8% | **846** | **28.1%** |
| | Aboriginal medical service | 295 | 36.4% | 6 | 0.3% | **301** | **10.0%** |
| | General practice | 136 | 16.8% | 1,015 | 46.6% | **1,162** | **38.6%** |
| | Prison/detention centre | 112 | 13.8% | 25 | 1.1% | **137** | **4.6%** |
| | Other | 7 | 0.9% | 90 | 4.1% | **100** | **3.3%** |
| | Unknown | 1 | 0.1% | 0 | 0.0% | **1** | **0.0%** |
| Specimen site | Urine (PCR/LCR) | 795 | 98.1% | 2,028 | 93.1% | **2,844** | **94.5%** |
| | Urethral swab | 55 | 6.8% | 359 | 16.5% | **418** | **13.9%** |
| | Cervical/vaginal swab | 138 | 17.0% | 326 | 15.0% | **467** | **15.5%** |
| | Throat swab | 16 | 2.0% | 558 | 25.6% | **576** | **19.1%** |
| | Rectal swab | 8 | 1.0% | 449 | 20.6% | **461** | **15.3%** |
| | Other | 2 | 0.2% | 13 | 0.6% | **15** | **0.5%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| Treatment | Ceftriaxone and Azithromycin | 500 | 61.7% | 1,645 | 75.5% | **2,160** | **71.8%** |
| | Amoxycillin/Probenecid | 269 | 33.2% | 22 | 1.0% | **291** | **9.7%** |
| | Ciprofloxacin | 3 | 0.4% | 82 | 3.8% | **86** | **2.9%** |
| | Other drugs | 56 | 6.9% | 444 | 20.4% | **506** | **16.8%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| Sexual exposure | Person(s) of opposite sex only | 585 | 72.2% | 1,016 | 46.6% | **1,608** | **53.4%** |
| | Person(s) of same sex only | 54 | 6.7% | 784 | 36.0% | **846** | **28.1%** |
| | Person(s) of either sex | 3 | 0.4% | 86 | 3.9% | **90** | **3.0%** |
| | No sexual contact | 0 | 0.0% | 1 | 0.0% | **1** | **0.0%** |
| | Unknown | 168 | 20.7% | 292 | 13.4% | **465** | **15.4%** |
| Current sex worker | Yes | 1 | 0.1% | 18 | 0.8% | **19** | **0.6%** |
| | No | 809 | 99.9% | 2,161 | 99.2% | **2,991** | **99.4%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |

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, 2024

| Behavioural and demographic characteristics | | Exposure category | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MSM | | Heterosexual Male | | Female | | Total | |
| | | (n=929) | | (n=779) | | (n=1,050) | | (n=3,010) | |
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Aboriginality | Aboriginal | 47 | 5.1% | 225 | 28.9% | 446 | 42.5% | **810** | **26.9%** |
| | non-Aboriginal | 872 | 93.9% | 550 | 70.6% | 600 | 57.1% | **2,179** | **72.4%** |
| Area | Metropolitan | 843 | 90.7% | 506 | 65.0% | 617 | 58.8% | **2,088** | **69.4%** |
| | non-Metropolitan | 74 | 8.0% | 267 | 34.3% | 430 | 41.0% | **896** | **29.8%** |
| Infection acquired | Western Australia | 820 | 88.3% | 654 | 84.0% | 940 | 89.5% | **2,590** | **86.0%** |
| | Interstate | 27 | 2.9% | 16 | 2.1% | 17 | 1.6% | **62** | **2.1%** |
| | Overseas | 36 | 3.9% | 66 | 8.5% | 17 | 1.6% | **128** | **4.3%** |
| | Unknown | 46 | 5.0% | 43 | 5.5% | 76 | 7.2% | **230** | **7.6%** |
| Clinical setting | Public hospital/community health clinic | 22 | 2.4% | 133 | 17.1% | 229 | 21.8% | **457** | **15.2%** |
| | Sexual health clinic/family planning clinic | 643 | 69.2% | 88 | 11.3% | 106 | 10.1% | **846** | **28.1%** |
| | Aboriginal medical service | 18 | 1.9% | 73 | 9.4% | 182 | 17.3% | **301** | **10.0%** |
| | General practice | 200 | 21.5% | 415 | 53.3% | 437 | 41.6% | **1,162** | **38.6%** |
| | Prison/detention centre | 8 | 0.9% | 49 | 6.3% | 62 | 5.9% | **137** | **4.6%** |
| | Other | 36 | 3.9% | 20 | 2.6% | 31 | 3.0% | **100** | **3.3%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | 1 | 0.1% | **1** | **0.0%** |
| Specimen site | Urine (PCR/LCR) | 853 | 91.8% | 776 | 99.6% | 965 | 91.9% | **2,844** | **94.5%** |
| | Urethral swab | 119 | 12.8% | 232 | 29.8% | 6 | 0.6% | **418** | **13.9%** |
| | Cervical/vaginal swab | 1 | 0.1% | 0 | 0.0% | 466 | 44.4% | **467** | **15.5%** |
| | Throat swab | 393 | 42.3% | 62 | 8.0% | 103 | 9.8% | **576** | **19.1%** |
| | Rectal swab | 434 | 46.7% | 0 | 0.0% | 27 | 2.6% | **461** | **15.3%** |
| | Other | 2 | 0.2% | 4 | 0.5% | 5 | 0.5% | **15** | **0.5%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| Treatment | Ceftriaxone and Azithromycin | 599 | 64.5% | 571 | 73.3% | 803 | 76.5% | **2,153** | **71.5%** |
| | Amoxycillin/Probenecid | 13 | 1.4% | 102 | 13.1% | 137 | 13.0% | **291** | **9.7%** |
| | Ciprofloxacin | 65 | 7.0% | 6 | 0.8% | 10 | 1.0% | **86** | **2.9%** |
| | Other drugs | 254 | 27.3% | 110 | 14.1% | 107 | 10.2% | **506** | **16.8%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| Sexual exposure | Person(s) of opposite sex only | 0 | 0.0% | 779 | 100.0% | 829 | 79.0% | **1,608** | **53.4%** |
| | Person(s) of same sex only | 821 | 88.4% | 0 | 0.0% | 25 | 2.4% | **846** | **28.1%** |
| | Person(s) of either sex | 72 | 7.8% | 0 | 0.0% | 18 | 1.7% | **90** | **3.0%** |
| | No sexual contact | 0 | 0.0% | 0 | 0.0% | 1 | 0.1% | **1** | **0.0%** |
| | Unknown | 36 | 3.9% | 0 | 0.0% | 177 | 16.9% | **465** | **15.4%** |
| Current sex worker | Yes | 5 | 0.5% | 0 | 0.0% | 14 | 1.3% | **19** | **0.6%** |
| | No | 924 | 99.5% | 779 | 100.0% | 1036 | 98.7% | **2,991** | **99.4%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |

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. The testing and positivity rates were highest in people aged 15 to 24 years.
- Notifications of infectious and non-infectious syphilis reached a ten-year peak in 2021 and 2024, respectively.
- Notification rates for infectious and non-infectious syphilis were highest in the 30 to 34 year age group and 25 to 29 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 infectious and non-infectious syphilis were highest in the Kimberley and Midwest regions, respectively.
- The Aboriginal to non-Aboriginal rate ratio was 11:1 for both infectious and non-infectious syphilis.
- In comparison to national crude rates, the WA infectious syphilis crude rate was 9% lower, 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

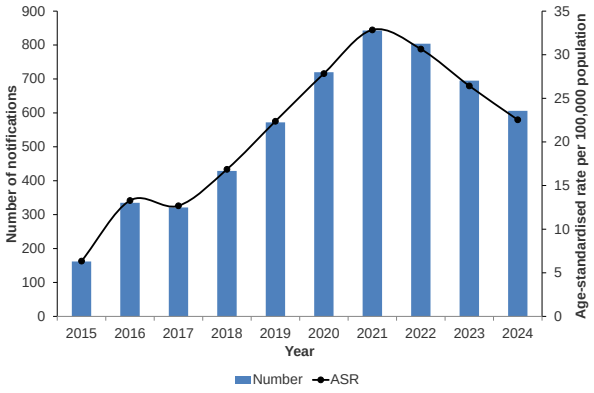
From 2015 to 2024, there were a total of 18 congenital syphilis notifications: one each in 2018 and 2019 and four each in 2020, 2021, 2022 and 2023. There were 11 notifications among Aboriginal children (three in the Perth metropolitan region and eight in the non-metropolitan area) and seven notifications among non-Aboriginal children (all in the Perth metropolitan region). Five 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=843) (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 28% to 2024 (n=606) (Figure 5.1).

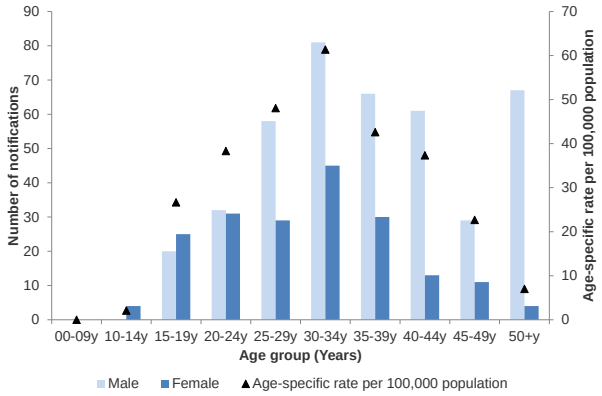
**Figure 5.1 Number and ASR of infectious syphilis notifications, WA, 2015 to 2024**



## 5.2.2 Distribution by age and sex

In 2024, 63% of infectious syphilis notifications occurred in people aged 25 to 44 years and the highest notification rate occurred in people aged 30 to 34 years (61/100,000 population). A higher proportion of females was observed in people aged 19 years or younger, while the opposite trend was observed in people aged 20 years or older (Figure 5.2).

**Figure 5.2 Number of infectious syphilis notifications by sex and overall age-specific rate, WA, 2024**



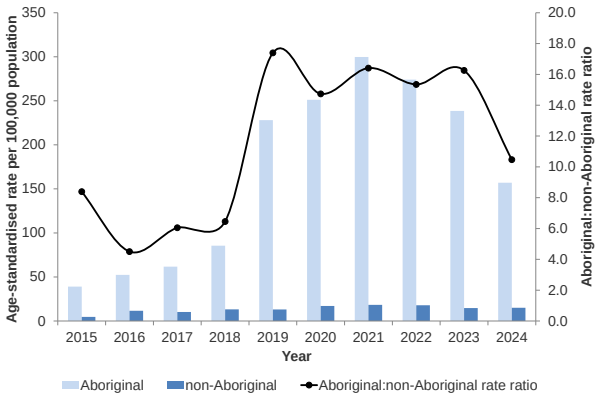

## 5.2.3 Notifications by Aboriginality

In 2024, 35% of infectious syphilis notifications were reported in Aboriginal people, 64% in non-Aboriginal people and 1% had an unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio reached a peak of 17.4:1 in 2019, remained stable to 2023, and decreased by 36% to 10.5:1 in 2024 (Figure 5..3). The highest notification rates were reported from the Pilbara region among Aboriginal people, and from the Perth metropolitan region among non-Aboriginal people (373/100,000 and 16/100,000 population, respectively). (Appendix Table 26[1]).

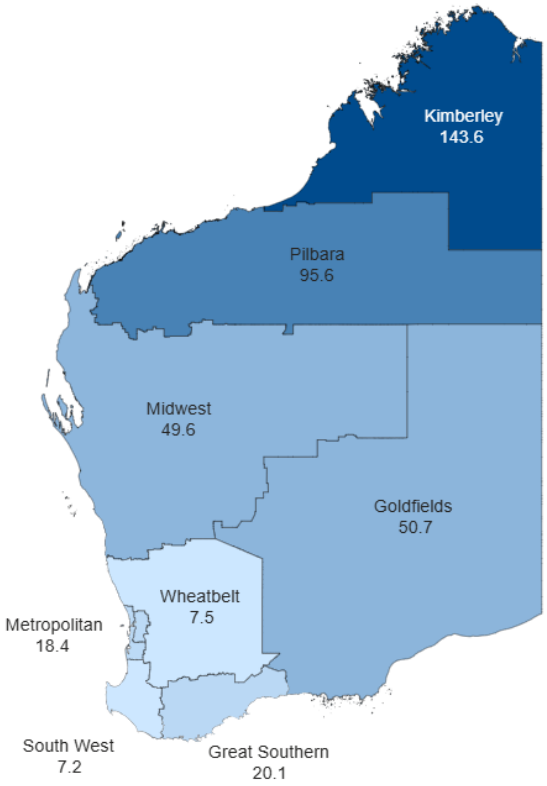
## 5.2.4 Regional distribution

The highest infectious syphilis notification rate in 2024 was observed in the Kimberley region, where the rate was more than six-times the overall WA rate (144 vs. 23/100,000 population) (Map 5.1).

**Figure 5.3 ASR of infectious syphilis notifications by Aboriginality, WA, 2015 to 2024**




**Map 5.1 ASR of infectious syphilis notifications by health region, WA, 2024**



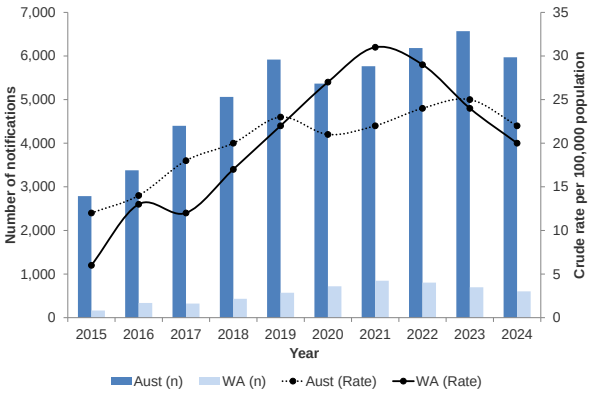

## 5.2.5 Place of acquisition

Of the 553 (91%) infectious syphilis notifications in 2024 that had place of acquisition recorded, 89% were reported as having been acquired in WA. A larger proportion of females (98%) acquired their infection in WA than males (84%), while a larger proportion of males (11%) acquired their infection overseas than females (1%) (Appendix Table 30[1]).

### 5.2.6 Interstate comparisons

In 2024, the crude infectious syphilis rate in WA (20/100,000 population) was the fourth lowest in Australia and was 9% lower than the national crude rate (22/100,000 population) (Figure 5.4 and Appendix Table 31[1]).

**Figure 5.4 Number and crude rate of infectious syphilis notifications, WA and Australia, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

### 5.2.7 Enhanced infectious syphilis surveillance

#### *5.2.7.1 Aboriginality*

In 2024, complete enhanced surveillance data were available for 67% (n=407/606) of all infectious syphilis notifications, representing 67% (n=141/211) of notifications among Aboriginal people and 68% (n=266/390) of notifications among non-Aboriginal people.

Among Aboriginal people, slightly more completed enhanced surveillance forms were for females than males. The majority were diagnosed at an Aboriginal medical service or a public health/community health clinic, as part of a sexual health screen. Most reported acquiring the infection through vaginal sex with a casual partner of the opposite sex (Table 5.1). Twelve percent of Aboriginal people (n=25/211) had at least one previous infectious syphilis notification.

In contrast to Aboriginal people, the majority of completed enhanced surveillance forms among non-Aboriginal people were for males who were diagnosed at a general practice or sexual health clinic as a result of presenting with relevant symptoms or as part of a sexual health screen. Most reported having acquired the infection through oral and/or anal sex with a casual partner of the same sex (Table 5.1). Fifteen percent of non-Aboriginal people (n=59/390) had at least one previous infectious syphilis notification.

#### *5.2.7.2 Exposure category*

In 2024, completed infectious syphilis enhanced surveillance forms were available for 77% of notifications among MSM (n=151/195), 70% of notifications among heterosexual males (n=99/142) and 68% of notifications among females (n=130/192).

The majority of completed enhanced surveillance forms among MSM were among non-Aboriginal people who were diagnosed at a sexual health clinic or general practice as a result of a sexual health screen or presenting with relevant symptoms. Most reported acquiring the infection through anal and/or oral sex with a casual partner of the same sex (Table 5.2). Twenty percent of MSM (n=39/195) had at least one previous infectious syphilis notification.

In contrast to notifications among MSM, completed enhanced surveillance forms among heterosexual males were equally distributed by Aboriginality and most reported acquiring the infection through vaginal sex. The majority of completed enhanced surveillance forms among females were among Aboriginal people who reported acquiring the infection from a casual or regular partner of the opposite sex (Table 5.2).

Seven percent of heterosexual males (n=10/142) and 11% of females (n=21/192) had at least one previous infectious syphilis notification.

#### *5.2.7.3 Females of reproductive age*

In 2024, 14% (n=25/173) of females of reproductive age were diagnosed with infectious syphilis during pregnancy. Notifications were equally distributed by Aboriginality and most cases were diagnosed as a result of routine sexual health screening (n=10/25) at a general practice (n=11/25) or public hospital/community health clinic (n=11/25). The median gestation at diagnosis was 13 weeks (range: 2 to 37 weeks). Four females who were pregnant at the time of diagnosis had a previous infectious syphilis notification and one of these cases was also 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 2024 (n=272) (Figure 5.5).

### 5.3.2 Distribution by age and sex

In 2024, the highest number of non-infectious syphilis notifications were in people aged 50 years or older while the highest notification rate was in those aged 25 to 29 years (23/100,000 population) (Figure 5.6). From 2015 to 2024, more males than females were notified each year (Appendix Figure 7[1]).

**Figure 5.5 Number and ASR of non-infectious syphilis notifications, WA, 2015 to 2024**

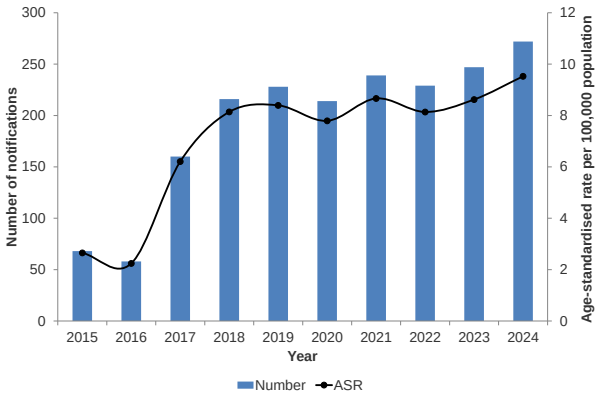
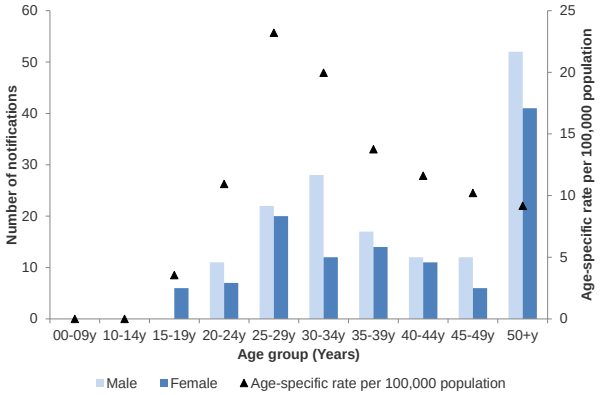


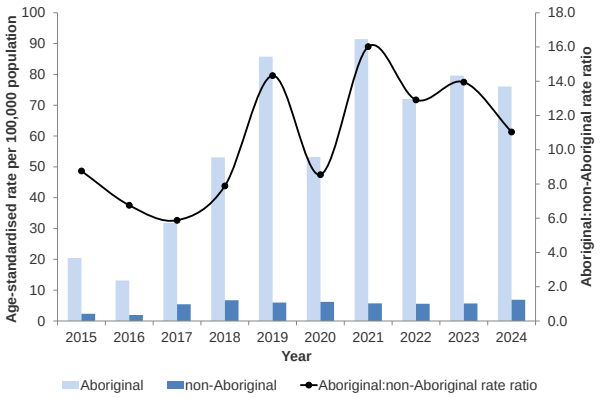

**Figure 5.6 Number of non-infectious syphilis notifications by sex and overall age-specific rate, WA, 2024**




### 5.3.3 Notifications by Aboriginality

In 2024, 69% of non-infectious syphilis notification were reported in non-Aboriginal people, 28% in Aboriginal people and 3% of notifications had an unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio reached a peak of 16.0:1 in 2021 before decreasing to 11.0:1 in 2024 (Figure 5.7). In 2024, the highest rate among Aboriginal people was reported from the Goldfields region and among non-Aboriginal people the highest rate was reported from the Midwest region (221 and 23/100,000 population, respectively) (Appendix Table 27[1]).

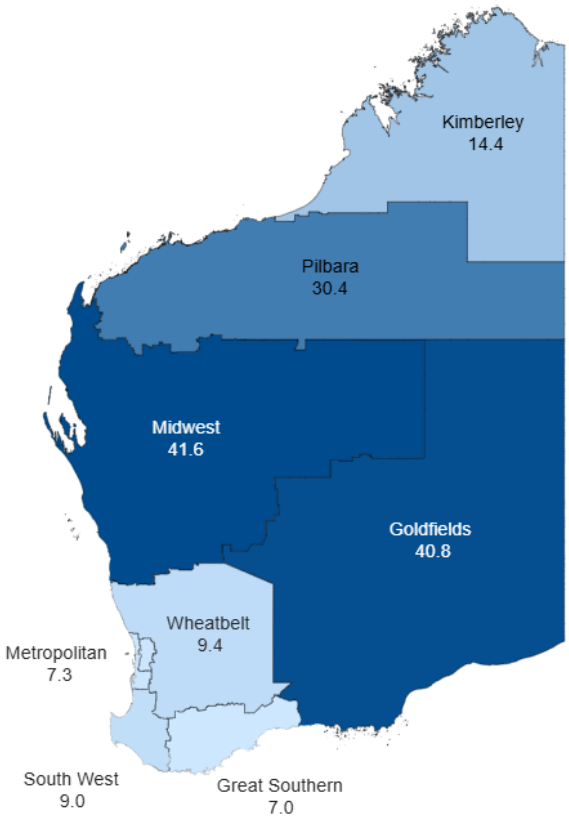
**Figure 5.7 ASR of non-infectious syphilis notifications by Aboriginality, WA, 2015 to 2024**




## 5.3.4 Regional distribution

The highest notification rate of non-infectious syphilis in 2024 was reported from the Midwest region where the rate was almost four-times the overall WA rate (42 vs. 10/100,000 population) (Map 5.2 and Appendix Table 21[1]).

**Map 5.2 ASR of non-infectious syphilis notifications by health region, WA, 2024**



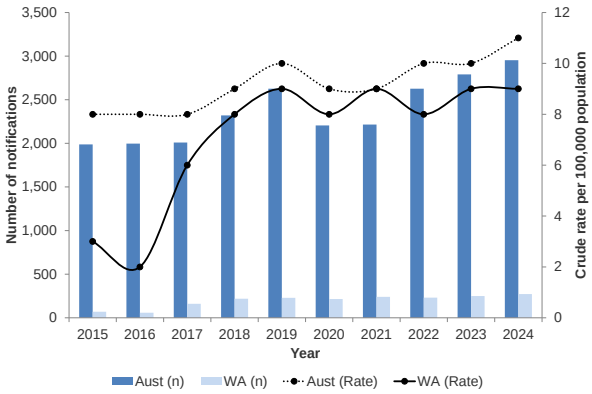

## 5.3.5 Place of acquisition

Of the 143 (53%) non-infectious syphilis notifications in 2024 that had place of acquisition recorded, 75% were reported as having been acquired in WA (Appendix Table 30[1]).

## 5.3.6 Interstate comparisons

In 2024, 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, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

# 5.4 Syphilis testing

Between 2015 and 2021, the syphilis testing, notification and test positivity rates increased by 42% (37 to 52/1,000 population), more than four-fold (9 to 40/100,000 population) and three-fold (0.21% to 0.62%), respectively. 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 2024, the testing rate increased by 18% (to 62/1,000 population) while the notification and test positivity rates decreased by 22% (to 31/100,000 population) and 37% (to 0.39%), 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 2024, the highest testing rate was observed in people aged 15 to 24 years (91/1,000 population) and remained stable in comparison to 2021 (89/1,000 population). The highest test positivity rate was among people aged younger than 15 years (0.48%) and remained stable from 2021 (0.48%) (Figure 5.9).

The testing rate among females was double than the rate among males (82 vs. 41/1,000 population), while the test positivity rate among males was almost four-times higher than the rate among females (0.77 vs. 0.20%) (Figure 5.10).

**Figure 5.9 Syphilis testing rate, notification rate and test positivity rate by age group, WA, 2015 to 2024**

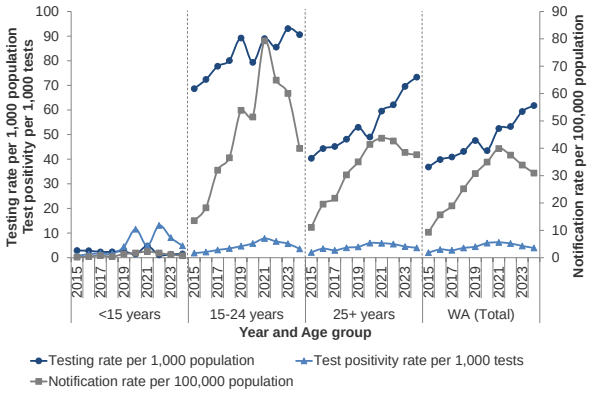
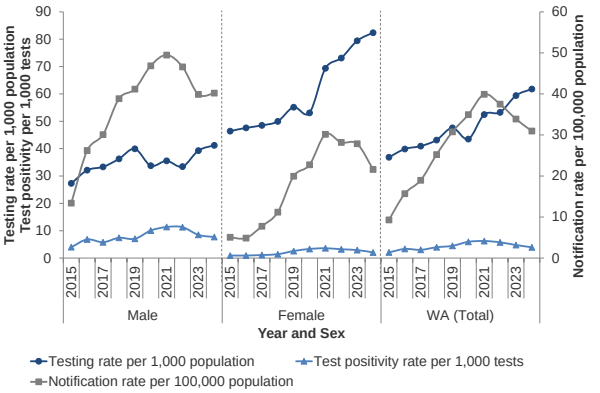



**Figure 5.10 Syphilis testing rate, notification rate and test positivity rate by sex, WA, 2015 to 2024**




## 5.4.1 Antenatal syphilis testing

From 2020 to 2021, the syphilis testing, notification and test positivity rates among females increased by 31% (53 to 69/1,000 population), 33% (23 to 30/100,000 population) and 8% (0.33 to 0.36%), 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 females at initial booking, 28 weeks and 36 weeks.

**Figure 5.11 Proportion of antenatal females who had a total of 0, 1, 2, or 3 syphilis tests during pregnancy by Aboriginality, WA, 2024**

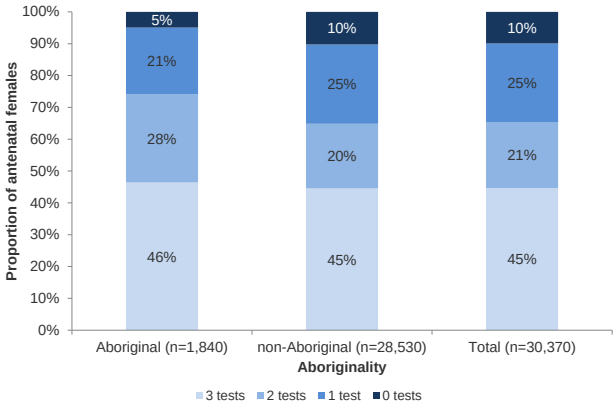
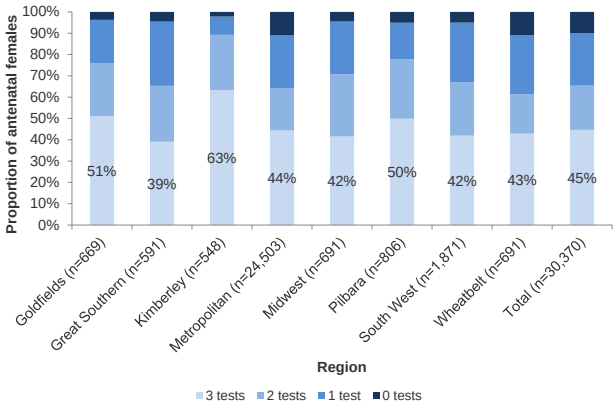



**Figure 5.12 Proportion of antenatal females who had a total of 0, 1, 2, or 3 syphilis tests during pregnancy by region, WA, 2024**




In 2024, the proportion of antenatal females who had a total of three syphilis tests during pregnancy was comparable by Aboriginality.

While a higher proportion of Aboriginal females had a total of two syphilis tests, a higher proportion of non-Aboriginal females had a no syphilis tests during pregnancy (Figure 5.11). More than half of antenatal females in the Goldfields and Kimberley regions had a total of three syphilis tests during pregnancy (Figure 5.12).

## 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 Queensland (QLD) in 2011, then appeared in nearby areas in the NT in 2013, the Kimberley region in 2014, the Pilbara region in 2018, and the Goldfields region in 2019.

A total of 749 cases among Aboriginal people (332 male, 417 female) were notified in the Kimberley region since the first case was identified in June 2014, to the end of 2024. Prior to 2014, there had been no infectious syphilis notifications in the Kimberley region for two years. In the Pilbara region, a total of 585 cases among Aboriginal people (258 male, 326 female, 1 transgender) were notified since the first outbreak case was identified in February 2018. A total of 156 cases among Aboriginal people (62 male, 94 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. As a result, the Chief Health Officer authorised a statewide public health response to infectious syphilis in 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, 2024

| Behavioural and demographic characteristics | | Aboriginality | | | | | |
|---|---|---|---|---|---|---|---|
| | | Aboriginal (n=141) | | non-Aboriginal (n=266) | | Total (n=407) | |
| | | Number | Percent | Number | Percent | Number | Percent |
| Sex | Male | 62 | 44.0% | 215 | 80.8% | **277** | **68.1%** |
| | Female | 79 | 56.0% | 51 | 19.2% | **130** | **31.9%** |
| Clinical setting | Public hospital/community health clinic | 41 | 29.1% | 15 | 5.6% | **56** | **13.8%** |
| | Sexual health clinic/family planning clinic | 1 | 0.7% | 92 | 34.6% | **93** | **22.9%** |
| | Aboriginal medical service | 48 | 34.0% | 1 | 0.4% | **49** | **12.0%** |
| | General practice | 16 | 11.3% | 145 | 54.5% | **161** | **39.6%** |
| | Prison/Detention centre | 29 | 20.6% | 8 | 3.0% | **37** | **9.1%** |
| | Other | 5 | 3.5% | 5 | 1.9% | **10** | **2.5%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| Reason for presentation | Symptomatic | 28 | 19.9% | 121 | 45.5% | **149** | **36.6%** |
| | Opportunistic testing - Sexual health | 82 | 58.2% | 115 | 43.2% | **197** | **48.4%** |
| | - Antenatal/pap smear | 2 | 1.4% | 4 | 1.5% | **6** | **1.5%** |
| | Named as contact (i.e. Asymptomatic) | 25 | 17.7% | 29 | 10.9% | **54** | **13.3%** |
| | Other | 2 | 1.4% | 8 | 3.0% | **10** | **2.5%** |
| Sex of partner for this episode | Person(s) of opposite sex | 103 | 73.0% | 101 | 38.0% | **204** | **50.1%** |
| | Person(s) of same sex | 7 | 5.0% | 133 | 50.0% | **140** | **34.4%** |
| | Person(s) of either sex | 0 | 0.0% | 13 | 4.9% | **13** | **3.2%** |
| | No sexual contact | 1 | 0.7% | 0 | 0.0% | **1** | **0.2%** |
| | Unknown | 30 | 21.3% | 19 | 7.1% | **49** | **12.0%** |
| Infection acquired from | Casual partner | 44 | 31.2% | 155 | 58.3% | **199** | **48.9%** |
| | Regular partner | 34 | 24.1% | 53 | 19.9% | **87** | **21.4%** |
| | Sex worker | 0 | 0.0% | 5 | 1.9% | **5** | **1.2%** |
| | Client (i.e. patient is a sex worker) | 0 | 0.0% | 2 | 0.8% | **2** | **0.5%** |
| | Other | 5 | 3.5% | 12 | 4.5% | **17** | **4.2%** |
| | Unknown | 58 | 41.1% | 39 | 14.7% | **97** | **23.8%** |
| Partner meeting place | Brothel | 0 | 0.0% | 1 | 0.4% | **1** | **0.2%** |
| | Beat, e.g. public toilet | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| | Internet | 4 | 2.8% | 37 | 13.9% | **41** | **10.1%** |
| | Sex on premises venue/sauna | 0 | 0.0% | 11 | 4.1% | **11** | **2.7%** |
| | Other | 52 | 36.9% | 79 | 29.7% | **131** | **32.2%** |
| | Unknown | 85 | 60.3% | 138 | 51.9% | **223** | **54.8%** |
| Language spoken at home | English only | 119 | 84.4% | 180 | 67.7% | **299** | **73.5%** |
| | Other | 6 | 4.3% | 15 | 5.6% | **21** | **5.2%** |
| | Unknown | 16 | 11.3% | 71 | 26.7% | **87** | **21.4%** |
| Mode of transmission | Vaginal intercourse | 39 | 27.7% | 73 | 27.4% | **112** | **27.5%** |
| | Anal intercourse | 4 | 2.8% | 73 | 27.4% | **77** | **18.9%** |
| | Oral sex | 2 | 1.4% | 90 | 33.8% | **92** | **22.6%** |
| | Other | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| | Unknown | 97 | 68.8% | 121 | 45.5% | **218** | **53.6%** |

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, 2024

| Behavioural and demographic characteristics | | Exposure category | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MSM (n=151) | | Heterosexual Male (n=99) | | Female (n=130) | | Total (n=407) | |
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Aboriginality | Aboriginal | 6 | 4.0% | 43 | 43.4% | 79 | 60.8% | **141** | **34.6%** |
| | non-Aboriginal | 145 | 96.0% | 56 | 56.6% | 51 | 39.2% | **266** | **65.4%** |
| Clinical setting | Public hospital/community health clinic | 6 | 4.0% | 14 | 14.1% | 31 | 23.8% | **56** | **13.8%** |
| | Sexual health clinic/family planning clinic | 78 | 51.7% | 8 | 8.1% | 6 | 4.6% | **93** | **22.9%** |
| | Aboriginal medical service | 2 | 1.3% | 15 | 15.2% | 28 | 21.5% | **49** | **12.0%** |
| | General practice | 61 | 40.4% | 41 | 41.4% | 49 | 37.7% | **161** | **39.6%** |
| | Prison/Detention centre | 1 | 0.7% | 18 | 18.2% | 12 | 9.2% | **37** | **9.1%** |
| | Other | 3 | 2.0% | 3 | 3.0% | 4 | 3.1% | **10** | **2.5%** |
| | Unknown | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| Reason for presentation | Symptomatic | 67 | 44.4% | 37 | 37.4% | 33 | 25.4% | **149** | **36.6%** |
| | Opportunistic testing - Sexual health | 73 | 48.3% | 43 | 43.4% | 69 | 53.1% | **197** | **48.4%** |
| | - Antenatal/pap smear | 0 | N/A | 0 | N/A | 6 | 4.6% | **6** | **1.5%** |
| | Named as contact | 10 | 6.6% | 21 | 21.2% | 20 | 15.4% | **54** | **13.3%** |
| | Other | 6 | 4.0% | 0 | 0.0% | 4 | 3.1% | **10** | **2.5%** |
| Sex of partner for this episode | Person(s) of opposite sex | 1 | 0.7% | 99 | 100.0% | 104 | 80.0% | **204** | **50.1%** |
| | Person(s) of same sex | 139 | 92.1% | 0 | 0.0% | 1 | 0.8% | **140** | **34.4%** |
| | Person(s) of either sex | 10 | 6.6% | 0 | 0.0% | 3 | 2.3% | **13** | **3.2%** |
| | No sexual contact | 0 | 0.0% | 0 | 0.0% | 1 | 0.8% | **1** | **0.2%** |
| | Unknown | 1 | 0.7% | 0 | 0.0% | 21 | 16.2% | **49** | **12.0%** |
| Infection acquired from | Casual partner | 105 | 69.5% | 49 | 49.5% | 39 | 30.0% | **199** | **48.9%** |
| | Regular partner | 27 | 17.9% | 21 | 21.2% | 38 | 29.2% | **87** | **21.4%** |
| | Sex worker | 0 | 0.0% | 5 | 5.1% | 0 | 0.0% | **5** | **1.2%** |
| | Client (i.e. patient is a sex worker) | 0 | 0.0% | 0 | 0.0% | 2 | 1.5% | **2** | **0.5%** |
| | Other | 3 | 2.0% | 9 | 9.1% | 5 | 3.8% | **17** | **4.2%** |
| | Unknown | 16 | 10.6% | 15 | 15.2% | 46 | 35.4% | **97** | **23.8%** |
| Partner meeting place | Beat, e.g. public toilet | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| | Internet | 31 | 20.5% | 7 | 7.1% | 3 | 2.3% | **41** | **10.1%** |
| | Brothel | 0 | 0.0% | 1 | 1.0% | 0 | 0.0% | **1** | **0.2%** |
| | Sex on premises venue/sauna | 10 | 6.6% | 0 | 0.0% | 0 | 0.0% | **11** | **2.7%** |
| | Other | 29 | 19.2% | 45 | 45.5% | 56 | 43.1% | **131** | **32.2%** |
| | Unknown | 81 | 53.6% | 46 | 46.5% | 71 | 54.6% | **223** | **54.8%** |
| Language spoken at home | English only | 91 | 60.3% | 78 | 78.8% | 110 | 84.6% | **299** | **73.5%** |
| | Other | 9 | 6.0% | 6 | 6.1% | 4 | 3.1% | **21** | **5.2%** |
| | Unknown | 51 | 33.8% | 15 | 15.2% | 16 | 12.3% | **87** | **21.4%** |
| Mode of transmission | Vaginal intercourse | 10 | 6.6% | 45 | 45.5% | 57 | 43.8% | **112** | **27.5%** |
| | Anal intercourse | 68 | 45.0% | 6 | 6.1% | 3 | 2.3% | **77** | **18.9%** |
| | Oral sex | 57 | 37.7% | 17 | 17.2% | 16 | 12.3% | **92** | **22.6%** |
| | Other | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | **0** | **0.0%** |
| | Unknown | 75 | 49.7% | 49 | 49.5% | 69 | 53.1% | **218** | **53.6%** |

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 43 males of unknown exposure category

# 6 Donovanosis

**Key points**

- No donovanosis notifications were reported in the period from 2015 to 2024.

## 6.1 Trends over time

Donovanosis infection is rare in WA, with the last case reported in 2014.

# 7 Chancroid

**Key points**

- No chancroid notifications were reported in the period from 2015 to 2024.

## 7.1 Trends over time

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

# 8 HIV

**Key points**

- In 2024, there were 77 HIV cases newly diagnosed in WA, a 13% increase compared to 2023.
- The number of newly acquired HIV notifications among MSM decreased by 36% between the 2015 to 2019 and 2020 to 2024 periods, reflecting a likely decrease in HIV transmission among MSM.
- 96% of HIV cases diagnosed in 2024 were on treatment.

## 8.1 Trends over time

There were 77 newly diagnosed HIV cases in WA in 2024, a 13% increase compared to 2023 (n=68). This is the second consecutive year of increases and the highest number of cases since 2020 (n=72) (Figure 8.1).

In 2024, there were an additional 58 HIV notifications in people who were previously diagnosed with HIV either interstate (n=5) or overseas (n=53), and subsequently moved to WA.

In 2024 the age-standardised notification rate for HIV was 2.8/100,000 population, representing a 12% increase compared to 2023 (2.4/100,000 population) (Appendix Table 34[1]).

## 8.2 Distribution by sex and age

Of the 77 HIV cases newly diagnosed in WA in 2024, 59 were male and 18 were female (Appendix Figure 10[1] and Appendix Table 33[1]). The age-standardised notification rate increased for males (3.8 to 4.2/100,000 population) while for females it remained stable (1.4 to 1.3/100,000 population), when compared to the previous year. In 2024, the median age of newly diagnosed HIV cases in WA was 38 years, ranging from 19 to 74 years. The median age for females was older (42 years) than the median age for males (36 years) (Figure 8.2).

**Figure 8.1 Number of HIV notifications, WA, 1983 to 2024 (**excludes cases previously diagnosed outside WA)

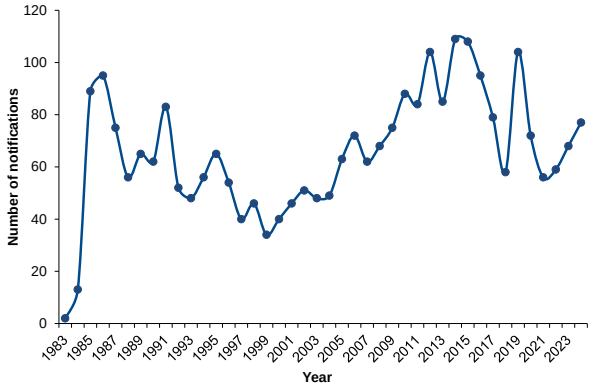
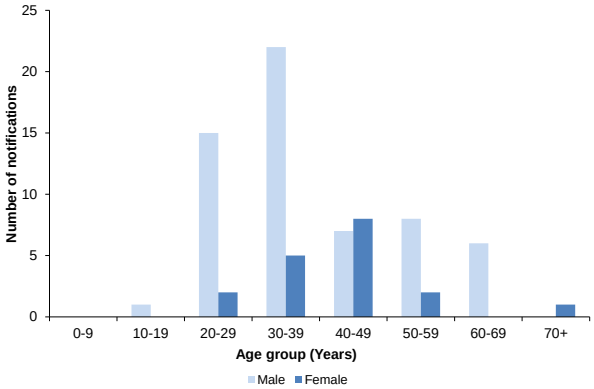



**Figure 8.2 Number of HIV notifications by age group and sex, WA, 2024** (excludes cases previously diagnosed outside WA)




## 8.3 Notifications by Aboriginality

In 2024, there were three HIV cases notified in Aboriginal people. In total there were 22 Aboriginal HIV notifications between 2020 and 2024, ranging between two and nine cases per year (Appendix Figure 11[1] and Appendix Table 35[1]). Between 2020 and 2024, the male to female notification ratio was 4.3:1 for Aboriginal people and 3.9:1 for non-Aboriginal people. Over the same period, most non-Aboriginal cases (85%; n=260) were Perth metropolitan residents.

While Aboriginal cases have previously typically resided in non-metropolitan areas (2015 to 2019 79%; n=15), in the 2020 to 2024 period, just over half (55%, n=12) resided in the metropolitan area.

## 8.4 Exposure category

Between the 2015 to 2019 and 2020 to 2024 periods the number of newly diagnosed HIV cases reporting MSM risk exposures decreased by 37% (232 to 146 cases). Between the same time periods the number of new diagnoses in cases reporting heterosexual acquisition also decreased by 19% (183 to 149 cases) (Table 8.1). The most commonly reported risk exposure between 2020 and 2024 was heterosexual acquisition (45%). The proportion of HIV cases reporting MSM risk exposures decreased from 52% in the 2015 to 2019 period to 44% in the 2019 to 2023 period (Table 8.1).

## 8.5 Place of acquisition

A 25% decrease in HIV notifications between the 2015 to 2019 and 2020 to 2024 reporting periods was predominantly due to the decrease in Australian-acquired cases (239 to 158 cases) (Table 8.2). The majority of Australian-acquired HIV cases in the 2020 to 2024 period were MSM (64%; 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 also decreased by 22% (191 to 149 cases). The reason for this decrease is likely due to the WA (and more broadly Australian) COVID-19 lockdown measures which restricted international travel from March 2020 until March 2022. While the overall number of overseas-acquired cases decreased over the two reporting periods, there was a 33% increase in the number of females reporting Sub-Saharan Africa acquisition (12 to 16 cases) (Table 8.2). In the 2020 to 2024 period, nearly all females who reported acquiring HIV in Sub-Saharan Africa reported heterosexual acquisition (94%; n=15), and all were also born in Sub-Saharan Africa (100%; n=16).

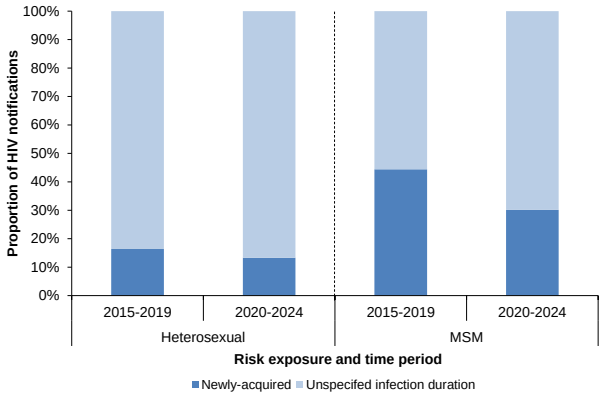
## 8.6 Newly acquired HIV and late diagnosis

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 2015 to 2019 and 2020 to 2024 reporting periods, the number of MSM HIV cases diagnosed with evidence of newly acquired infection decreased by 57% (103 to 44 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 remained stable (61 to 58 cases).

In the 2019 to 2023 period, there was a small decrease in the number (30 to 20 cases) and proportion (16% to 13%) of heterosexually acquired cases reporting evidence of newly acquired HIV (Figure 8.3). The number of heterosexually acquired cases with a late diagnosis decreased slightly between the two reporting periods (92 to 85 cases).

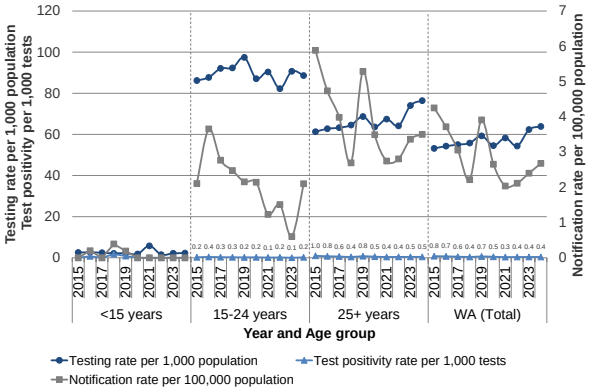
**Figure 8.3 Proportion of HIV notifications with newly acquired infection by risk exposure and time period, WA, 2015 to 2024** (excludes cases previously diagnosed outside WA)




## 8.7 HIV testing

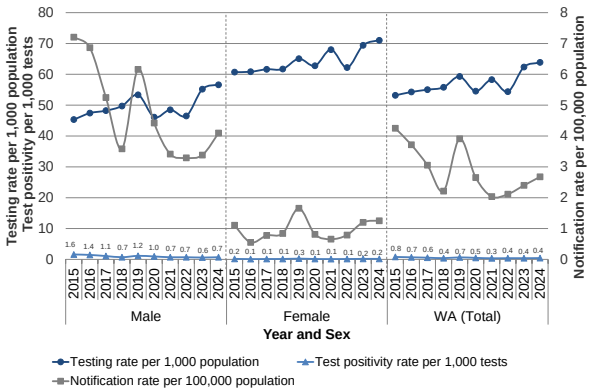
Between 2023 and 2024, the HIV testing rate increased marginally from 62 to 64/1,000 population. HIV testing rates increased in all age groups except for those aged 15 to 24 years which decreased marginally from 91 to 88/1,000 population. During the same time period, the test positivity rate remained stable at 0.04% suggesting that the increase in notifications may have been 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, 2015 to 2024**




In 2024, the highest testing rate was observed in females aged 15 to 24 years (119/1,000 population) while the highest test positivity rate was observed in both males aged 15-24 years (0.07%) and males aged 25 years or older (0.07%). Overall, the testing rate among females in 2024 was 25% higher than the rate among males (71 vs. 57/1,000 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, 2015 to 2024**




## 8.8 Time to treatment

Of the 77 cases newly diagnosed in 2024 one was deceased, and another had transferred care interstate at the time of reporting. Of the 75 cases who remained in WA, 96% of cases (n=72) had commenced treatment by February 2025. Almost all cases on antiretroviral therapy had started treatment within two months of their diagnosis (96%; n=69).

**Table 8.1 Number and proportion of persons notified with HIV infection by exposure category, sex and time period, WA, 2015 to 2024** (excludes cases previously diagnosed outside WA)

| Exposure category | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2015 - 2019 | | | 2020 - 2024 | | | 2024 | |
| | Number | Percent | Average | Number | Percent | Average | Number | Percent |
| **Male** | | | | | | | | |
| MSM | 232 | 61.5% | 46 | 146 | 56.2% | 29 | 34 | 57.6% |
| Heterosexual | 126 | 33.4% | 25 | 88 | 33.8% | 18 | 20 | 33.9% |
| IDU | 7 | 1.9% | 1 | 11 | 4.2% | 2 | 1 | 1.7% |
| Vertical | 2 | 0.5% | 0 | 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 | 7 | 1.9% | 1 | 14 | 5.4% | 3 | 4 | 6.8% |
| **Male Total** | **377** | **100.0%** | **75** | **260** | **100.0%** | **52** | **59** | **100.0%** |
| **Female** | | | | | | | | |
| Heterosexual | 57 | 89.1% | 11 | 61 | 92.4% | 12 | 15 | 83.3% |
| IDU | 2 | 3.1% | 0 | 2 | 3.0% | 0 | 1 | 5.6% |
| Vertical | 2 | 3.1% | 0 | 0 | 0.0% | 0 | 0 | 0.0% |
| Recipient of blood products | 1 | 1.6% | 0 | 0 | 0.0% | 0 | 0 | 0.0% |
| Needlestick/splash | 0 | 0.0% | 0 | 1 | 1.5% | 0 | 0 | 0.0% |
| Unknown/other | 2 | 3.1% | 0 | 2 | 3.0% | 0 | 2 | 11.1% |
| **Female Total** | **64** | **100.0%** | **13** | **66** | **100.0%** | **13** | **18** | **100.0%** |
| **Total notifications** | | | | | | | | |
| MSM | 232 | 52.3% | 46 | 146 | 44.0% | 29 | 34 | 44.2% |
| Heterosexual | 183 | 41.2% | 37 | 149 | 44.9% | 30 | 35 | 45.5% |
| IDU | 9 | 2.0% | 2 | 13 | 3.9% | 3 | 2 | 2.6% |
| Vertical | 4 | 0.9% | 1 | 0 | 0.0% | 0 | 0 | 0.0% |
| Recipient of blood products | 1 | 0.2% | 0 | 0 | 0.0% | 0 | 0 | 0.0% |
| Needlestick/splash | 3 | 0.7% | 1 | 2 | 0.6% | 0 | 0 | 0.0% |
| Unknown/other | 9 | 2.0% | 2 | 16 | 4.8% | 3 | 6 | 7.8% |
| **Grand Total*** | **444** | **100.0%** | **89** | **332** | **100.0%** | **66** | **77** | **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 three notifications in the 2015-2019 period and six cases in the 2020-2024 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, 2015 to 2024** (excludes cases previously diagnosed outside WA)

| Country/region HIV acquired | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2015 - 2019 | | | 2020 - 2024 | | | 2024 | |
| | Number | Percent | Average | Number | Percent | Average | Number | Percent |
| **Male** | | | | | | | | |
| Australia | 212 | 56.2% | 42 | 129 | 49.6% | 26 | 28 | 47.5% |
| Overseas | 151 | 40.1% | 30 | 111 | 42.7% | 22 | 25 | 42.4% |
| South-East Asia | 101 | 26.8% | 20 | 69 | 26.5% | 14 | 16 | 27.1% |
| Europe | 5 | 1.3% | 1 | 4 | 1.5% | 1 | 1 | 1.7% |
| Sub-Saharan Africa | 20 | 5.3% | 4 | 19 | 7.3% | 4 | 4 | 6.8% |
| Other | 25 | 6.6% | 5 | 19 | 7.3% | 4 | 4 | 6.8% |
| Not stated | 14 | 3.7% | 3 | 20 | 7.7% | 4 | 6 | 10.2% |
| **Male Total** | **377** | **100.0%** | **75** | **260** | **100.0%** | **52** | **59** | **100.0%** |
| **Female** | | | | | | | | |
| Australia | 25 | 39.1% | 5 | 26 | 39.4% | 5 | 7 | 38.9% |
| Overseas | 39 | 60.9% | 8 | 36 | 54.5% | 7 | 8 | 44.4% |
| South-East Asia | 21 | 32.8% | 4 | 19 | 28.8% | 4 | 3 | 16.7% |
| Europe | 1 | 1.6% | 0 | 0 | 0.0% | 0 | 0 | 0.0% |
| Sub-Saharan Africa | 12 | 18.8% | 2 | 16 | 24.2% | 3 | 5 | 27.8% |
| Other | 5 | 7.8% | 1 | 1 | 1.5% | 0 | 0 | 0.0% |
| Not stated | 0 | 0.0% | 0 | 4 | 6.1% | 1 | 3 | 16.7% |
| **Female Total** | **64** | **100.0%** | **13** | **66** | **100.0%** | **13** | **18** | **100.0%** |
| **Total notifications*** | | | | | | | | |
| Australia | 239 | 53.8% | 48 | 158 | 47.6% | 32 | 35 | 45.5% |
| Overseas | 191 | 43.0% | 38 | 149 | 44.9% | 30 | 33 | 42.9% |
| South-East Asia | 123 | 27.7% | 25 | 89 | 26.8% | 18 | 19 | 24.7% |
| Europe | 6 | 1.4% | 1 | 4 | 1.2% | 1 | 1 | 1.3% |
| Sub-Saharan Africa | 32 | 7.2% | 6 | 35 | 10.5% | 7 | 9 | 11.7% |
| Other | 30 | 6.8% | 6 | 21 | 6.3% | 4 | 4 | 5.2% |
| Not stated | 14 | 3.2% | 3 | 25 | 7.5% | 5 | 9 | 11.7% |
| **Grand Total*** | **444** | **100.0%** | **89** | **332** | **100.0%** | **66** | **77** | **100.0%** |

Notes: Average = the average number of cases notified each year in that period and subgroup
* Includes three notifications in the 2015-2019 period and six cases in the 2020-2024 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.
- The notification rate for both newly acquired and unspecified hepatitis B were highest in the 30 to 34 year age group. 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 Great Southern and Pilbara regions, respectively.
- Aboriginal to non-Aboriginal rate ratios for newly acquired and unspecified hepatitis B were 9:1 and 2:1, respectively.
- 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.

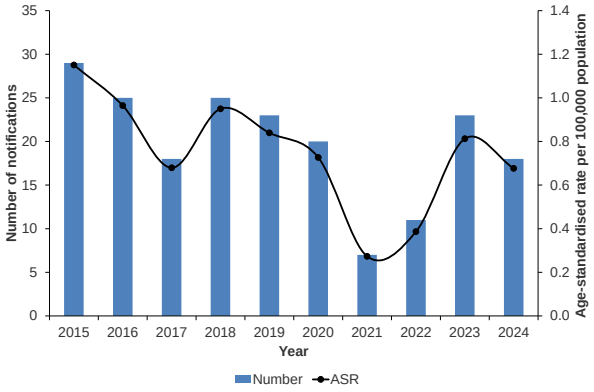
Hepatitis B notifications are classified as 'newly acquired' (evidence of infection having been acquired in the 24 months prior to diagnosis) or 'unspecified' (infections of unknown duration).

## 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 2024 (n=18) was 22% lower than the number of notifications in 2023 (n=23) but 7% higher than the 2019 to 2023 five-year average of 17 notifications per year (Figure 9.1). Newly acquired hepatitis B notifications represented 3% of total hepatitis B notifications in 2024 (Appendix Figure 12[1]).

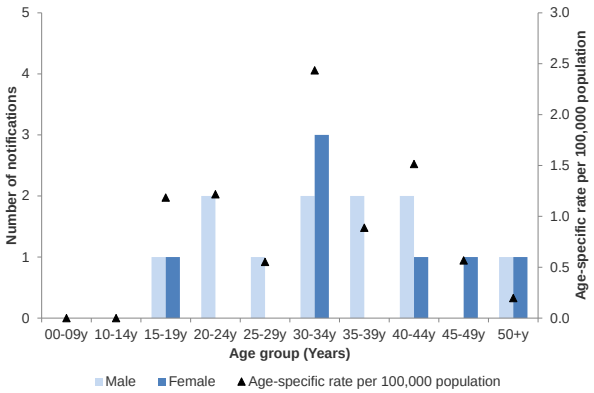
**Figure 9.1 Number and ASR of newly acquired hepatitis B notifications, WA, 2015 to 2024**




### 9.1.2 Distribution by age and sex

In 2024, 56% of newly acquired hepatitis B notifications were recorded among people aged 30 to 44 years and the highest notification rate occurred in people aged 30 to 34 years (2/100,000 population) (Figure 9.2). From 2015 to 2024, more males than females were notified each year (Appendix Figure 13[1]).

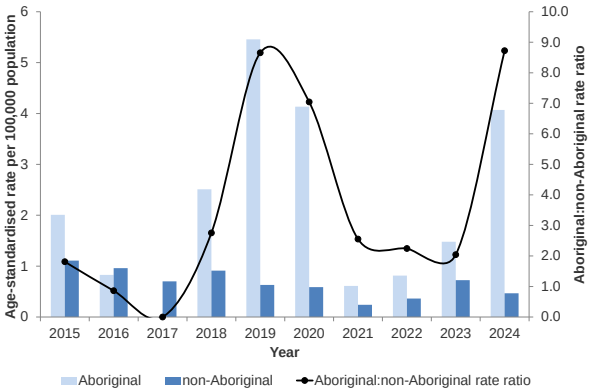
**Figure 9.2 Number of newly acquired hepatitis B notifications by sex and overall age-specific rate, WA, 2024**



## 9.1.3 Notifications by Aboriginality

In 2024, 12 newly acquired hepatitis B notifications were reported in non-Aboriginal people and six notifications were reported in non-Aboriginal people (Appendix Figure 15[1]). Since 2014, notification rates have generally been higher among Aboriginal people compared to non-Aboriginal people. The Aboriginal to non-Aboriginal rate ratio peaked at 8.7:1 in 2019 and 2024 (Figure 9.3 and Appendix Table 40[1]).

**Figure 9.3 ASR of newly acquired hepatitis B notifications by Aboriginality, WA, 2015 to 2024**




## 9.1.4 Regional distribution

The highest number of newly acquired hepatitis B notifications in 2024 was observed in the Perth metropolitan area (n=14). No notifications were reported from the Kimberley, Midwest, Pilbara or Wheatbelt regions (Map 9.1 and Appendix Table 37[1]).

## 9.1.5 Place of acquisition

Of the 14 (78%) newly acquired hepatitis B notifications in 2024 that had place of acquisition recorded, 71% were reported as having been acquired in WA, and 29% overseas (Appendix Table 42[1]).

## 9.1.6 Interstate comparisons

In 2024, crude newly acquired hepatitis B notification rates ranged from 0.0/100,000 population to 1.0/100,000 population. The crude rate for WA in 2024 was higher than the national crude rate (0.6 vs. 0.3/100,000 population) (Figure 9.4 and Appendix Table 43[1]).

**Map 9.1 ASR of newly acquired hepatitis B notifications by health region, WA, 2024**

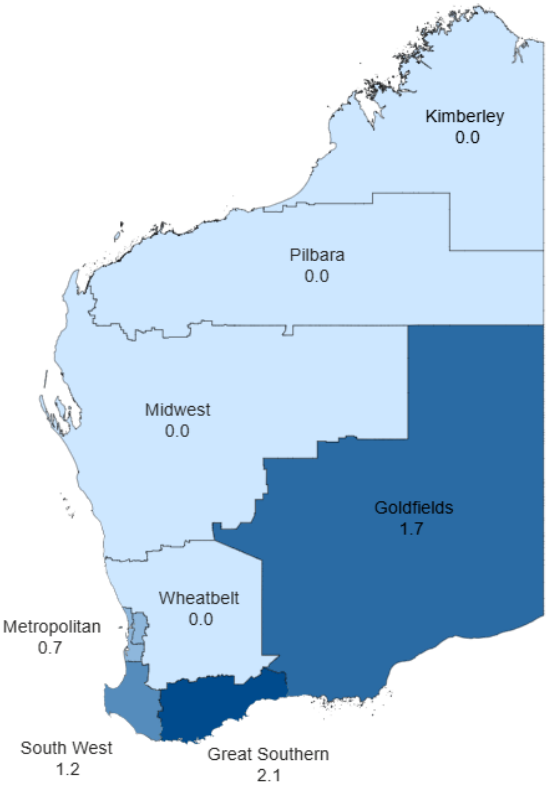
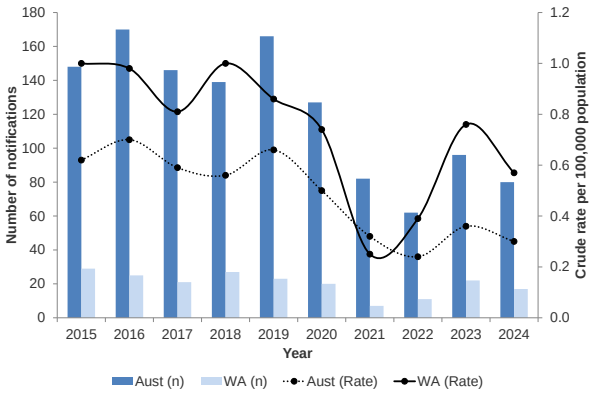



**Figure 9.4 Number and crude rate of newly acquired hepatitis B notifications, WA and Australia, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

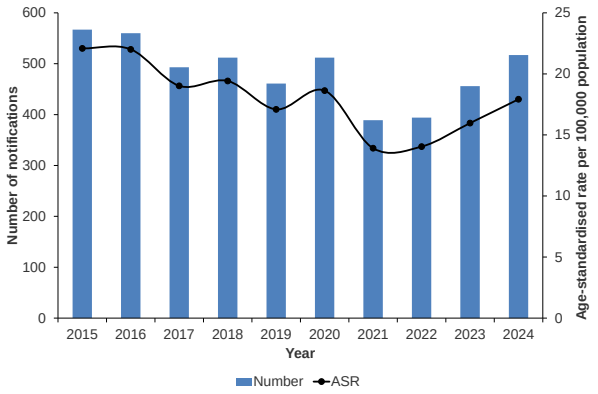
## 9.2 Unspecified hepatitis B

### 9.2.1 Trends over time

Unspecified hepatitis B notifications in WA reached a peak of 567 in 2015.

The number of notifications in 2024 (n=517) was 13% higher than in 2023 (n=456) and was 17% higher than the 2019 to 2023 five-year average of 442 notifications per year (Figure 9.5 and Appendix Figure 12[1]).

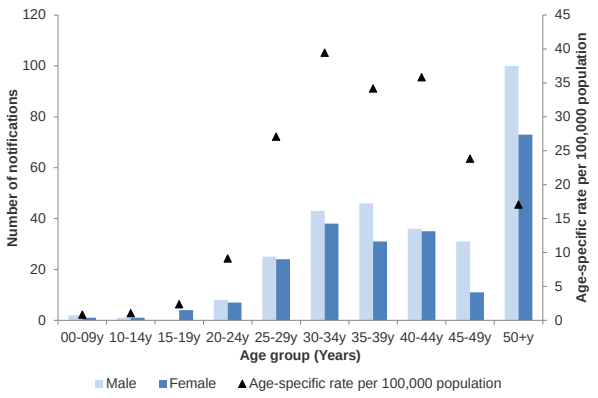
**Figure 9.5 Number and ASR of unspecified hepatitis B notifications, WA, 2015 to 2024**




### 9.2.2 Distribution by age and sex

While the highest number of unspecified hepatitis B notifications in 2024 occurred in people aged 50 years or over, the highest rate was observed in people aged 30 to 34 years (39/100,000 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]).

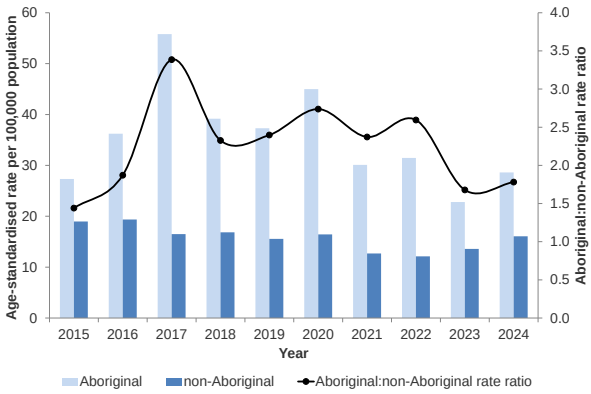
**Figure 9.6 Number of unspecified hepatitis B notifications by sex and overall age-specific rate, WA, 2024**




### 9.2.3 Notifications by Aboriginality

In 2024, 85% of unspecified hepatitis B notifications were reported in non-Aboriginal people, 6% in Aboriginal people and 9% were of unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio reached a peak of 3.4:1 in 2017 and fluctuated to 1.8:1 in 2024 (Figure 9.7). In 2024, the highest notification rates were reported from the Midwest region among Aboriginal people, and from the Pilbara region among non-Aboriginal people (76/100,000 and 28/100,000 population, respectively) (Appendix Table 40[1]).

**Figure 9.7 ASR of unspecified hepatitis B notifications by Aboriginality, WA, 2015 to 2024**



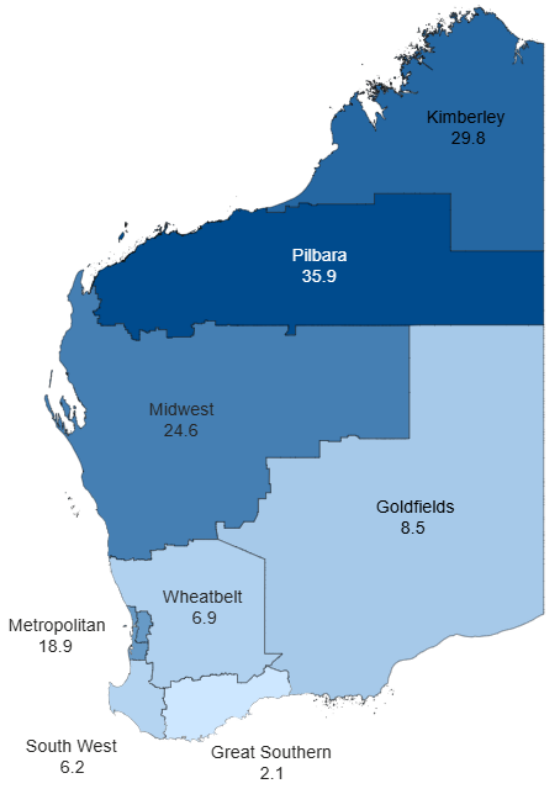

### 9.2.4 Regional distribution

The highest unspecified hepatitis B notification rate in 2024 was reported from the Pilbara region, where the rate was double the overall WA rate (36 vs. 18/100,000 population) (Map 9.2).

### 9.2.5 Place of acquisition

Of the 223 (43%) unspecified hepatitis B notifications in 2024 that had place of acquisition recorded, 84% were reported as having been acquired overseas. Almost all of these (95%) were acquired in the country of birth of the case, predominately in South-East Asia and North-East Asia (Appendix Table 42[1]).

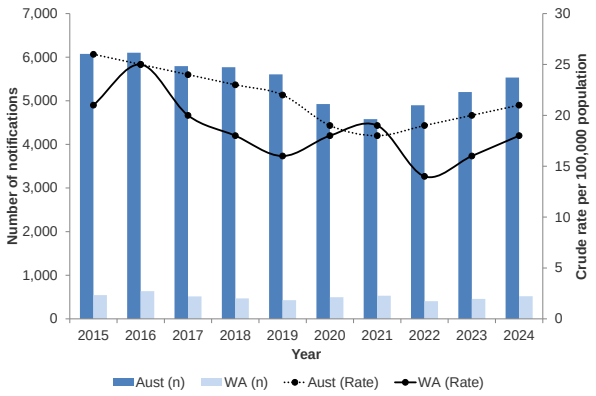
**Map 9.2 ASR of unspecified hepatitis B notifications by health region, WA, 2024**




### 9.2.6 Interstate comparisons

In 2024, the crude unspecified hepatitis B notification rate in WA (18/100,000 population) was the fourth lowest in Australia and was 14% lower than the national crude rate (21/100,000 population) (Figure 9.8 and Appendix Table 44[1]).

**Figure 9.8 Number and crude rate of unspecified hepatitis B notifications, WA and Australia, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

## 9.3 Enhanced hepatitis B surveillance

In 2024, enhanced surveillance forms were sent to the diagnosing doctors of all newly acquired hepatitis B infections in WA. Forms were completed for 61% (n=11/18) of notifications: 83% (n=5/6) of Aboriginal, and 50% (n=6/12) of non-Aboriginal notifications (Table 9.1).

Overall, having abnormal liver function test results was the most common reason for hepatitis B testing. Only 27% of cases reported injecting drug use in the previous two years. Unprotected casual sex with a person of the opposite sex was reported among 82% of cases and tattoos were reported among 46% of cases (Table 9.1). Forty-five percent of cases were born in Australia and acquired the infection in Australia.

## 9.4 Hepatitis B testing

Between 2015 and 2024, the hepatitis B testing rate increased by 46% (44 to 65/1,000 population) while the notification and test positivity rates decreased by 23% (25 to 19/100,000 population) and 20% (0.27% 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 2024, the highest testing rate was observed in people aged 15 to 24 years (87/1,000 population) and increased by 37% from 2015 (63/1,000 population). The highest test positivity rate was in people aged 25 years or older (0.25%) and decreased by 18% from 2015 (0.30%) (Figure 9.9).

The testing rate among females in 2024 was 39% higher than the rate among males (75 vs. 54/1,000 population), while the test positivity rate among males was double the rate among females (0.32 vs. 0.15%) (Figure 9.10).

**Figure 9.9 Hepatitis B testing rate, notification rate and test positivity rate by age group, WA, 2015 to 2024**

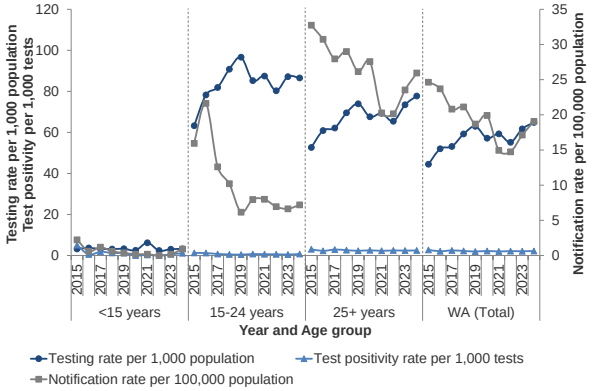
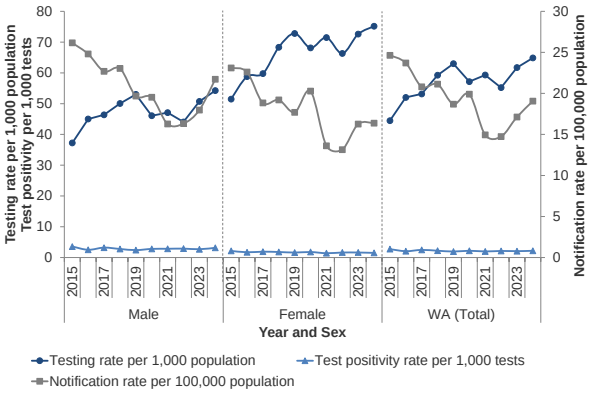



**Figure 9.10 Hepatitis B testing rate, notification rate and test positivity rate by sex, WA, 2015 to 2024**




## 9.5 Outbreaks and other investigations

No significant outbreaks or clusters of hepatitis B infections were reported in 2024.

**Table 9.1 Behavioural and demographic characteristics of people notified with hepatitis B, WA, 2024**

| Behavioural and demographic characteristics | | Total (n=11) | |
|---|---|---|---|
| | | Number | Percent |
| Reason for testing | Signs/symptoms of hepatitis | 1 | 9.1% |
| | Prison screen | 2 | 18.2% |
| | Sexual health screen | 2 | 18.2% |
| | Blood or organ donor | 0 | 0.0% |
| | Drug/alcohol program screen | 0 | 0.0% |
| | Healthcare worker screen | 0 | 0.0% |
| | Antenatal screen | 1 | 9.1% |
| | Pre-operative screen | 0 | 0.0% |
| | Abnormal LFT | 4 | 36.4% |
| | Occupational exposure | 0 | 0.0% |
| | Patient request | 0 | 0.0% |
| | Research or study | 0 | 0.0% |
| | Other reason | 1 | 9.1% |
| Risk factors | Injecting drug use | 3 | 27.3% |
| | Unprotected casual sex with person of same sex | 3 | 27.3% |
| | Unprotected casual sex with person of opposite sex | 9 | 81.8% |
| | Same sex partner with HBV | 0 | 0.0% |
| | Opposite sex partner with HBV | 1 | 9.1% |
| | Household contact with HBV | 0 | 0.0% |
| | Occupational needlestick/biohazardous injury | 0 | 0.0% |
| | Health care worker with no documented exposure | 0 | 0.0% |
| | Non-occupational needlestick/biohazardous injury | 0 | 0.0% |
| | Blood products/tissues in Australia | 0 | 0.0% |
| | Blood products/tissues overseas | 0 | 0.0% |
| | Organ transplant | 0 | 0.0% |
| | Haemodialysis | 0 | 0.0% |
| | Major dental work | 1 | 9.1% |
| | Acupuncture | 0 | 0.0% |
| | Perinatal transmission | 0 | 0.0% |
| | Surgical work | 0 | 0.0% |
| | Tattoo | 5 | 45.5% |
| | Ear or body piercing | 1 | 9.1% |
| | Imprisonment | 1 | 9.1% |
| | Other reason | 5 | 45.5% |
| | None identified | 0 | 0.0% |

Note: Enhanced surveillance forms were sent to the diagnosing doctors of all newly acquired hepatitis B 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

# 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 2024.
- Notification rates for newly acquired and unspecified hepatitis C were highest in the 20 to 34 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 C were higher in the Great Southern region and Midwest region, respectively.
- Aboriginal to non-Aboriginal rate ratios for newly acquired and unspecified infections were 25:1 and 11:1, respectively.
- The majority of both 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 67% and 8% higher, respectively.

Hepatitis C notifications are classified as 'newly acquired' (evidence of hepatitis C acquisition within two years before diagnosis) or 'unspecified' (cases that do not meet any of the criteria for a newly acquired case, acquired hepatitis C more than 24 months before diagnosis or for cases of unknown duration).

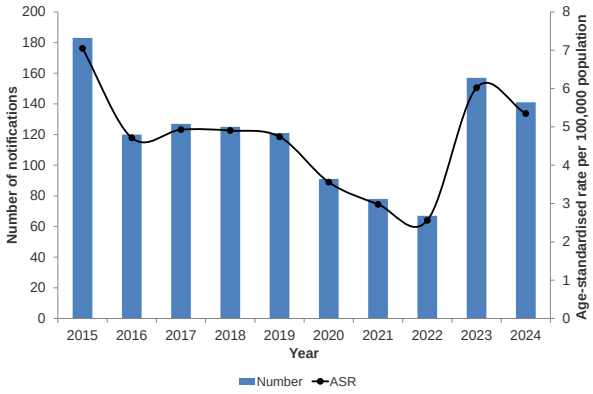
## 10.1 Newly acquired hepatitis C

### 10.1.1 Trends over time

In January 2023, the surveillance case definition for newly acquired hepatitis C was changed to include re-infections. A number of unspecified hepatitis C notifications in 2023 were subsequently reclassified as newly acquired hepatitis C notifications.

The number of newly acquired hepatitis C notifications peaked at 183 in 2015, decreased to a ten-year low of 67 in 2022 and increased to 141 in 2024 (Figure 10.1). Newly acquired hepatitis C notifications represented 16% of total hepatitis C notifications in 2024 (Appendix Figure 17[1]).

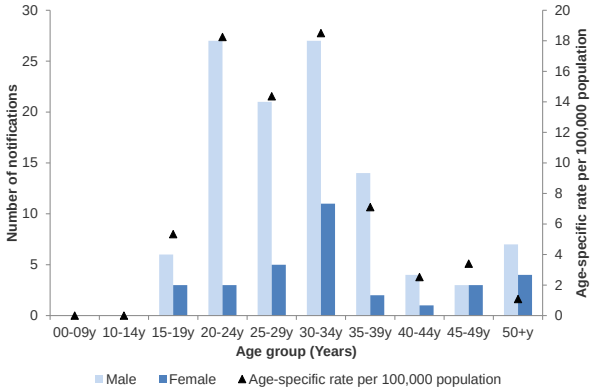
**Figure 10.1 Number and ASR of newly acquired hepatitis C notifications, WA, 2015 to 2024**




### 10.1.2 Distribution by age and sex

In 2024, the highest rate of newly acquired hepatitis C notifications occurred in people aged 20 to 34 years (Figure 10.2). From 2015 to 2024, more males than females were notified each year (Appendix Figure 18[1]).

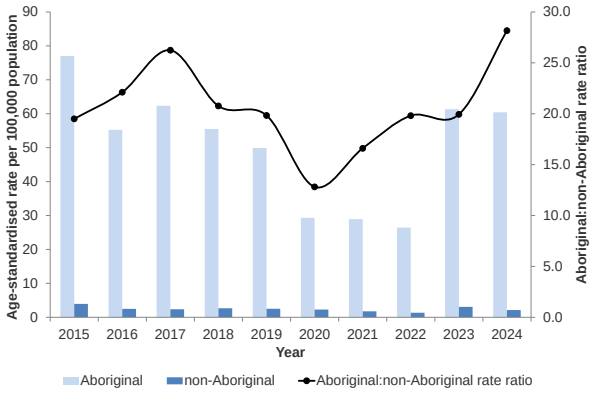
**Figure 10.2 Number of newly acquired hepatitis C notifications by sex and overall age-specific rate, WA, 2024**



## 10.1.3 Notifications by Aboriginality

In 2024, 60% of newly acquired hepatitis C notifications were reported in Aboriginal people, 39% in non-Aboriginal people and 1% of notifications were of unknown Aboriginal status (Appendix Figure 20[1]). The Aboriginal to non-Aboriginal rate ratio reached a ten-year high of 26.2:1 in 2017 before halving to 12.8:1 in 2020 and increasing again to 24.7:1 in 2024 (Figure 10.3). In 2024, the highest notification rate among both Aboriginal and non-Aboriginal people was reported from the Great Southern region (183/100,000 and 4/100,000 population, respectively), although this was based on a very small number of notifications (Appendix Table 49[1]).

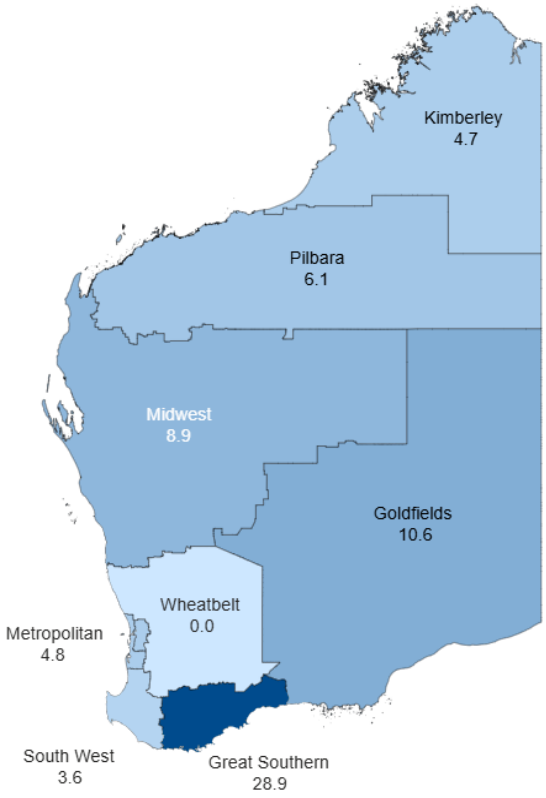
**Figure 10.3 ASR of newly acquired hepatitis C notifications by Aboriginality, WA, 2015 to 2024**




## 10.1.4 Regional distribution

The highest rate of newly acquired hepatitis C notifications in 2024 was reported from the Great Southern region (29/100,0000 population), although this was based on only 14 notifications. No notifications were reported from the Wheatbelt region (Map 10.1 and Appendix Table 46[1]).

**Map 10.1 ASR of newly acquired hepatitis C notifications by health region, WA, 2024**



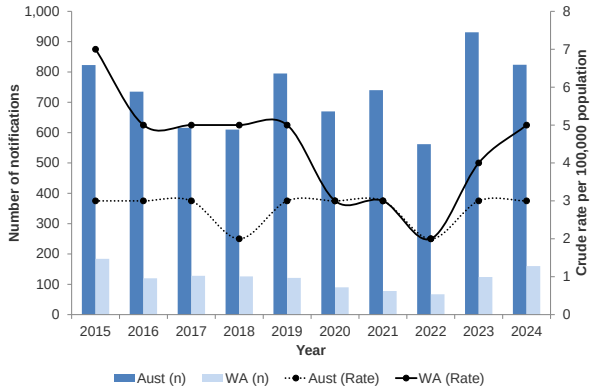

## 10.1.5 Place of acquisition

Of the 124 (88%) newly acquired hepatitis C notifications in 2024 that had place of acquisition recorded, 98% were reported as having been acquired in WA (Appendix Table 51[1]).

## 10.1.6 Interstate comparisons

In 2024, the crude newly acquired hepatitis C notification rate in WA was 67% higher than the national crude rate (5.0 vs. 3.0/100,000 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, 2015 to 2024**



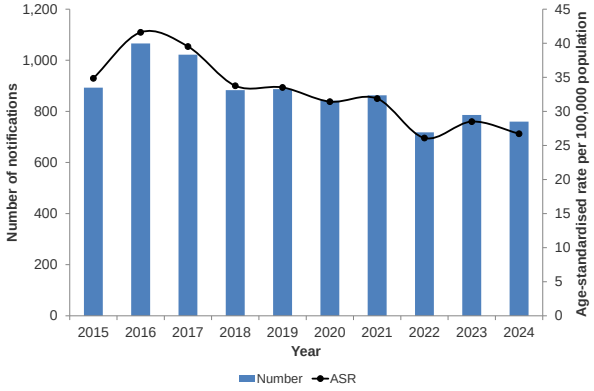

Note: Data sourced from NNDSS 21 March 2025

## 10.2 Unspecified hepatitis C

### 10.2.1 Trends over time

The number of unspecified hepatitis C notifications peaked at 1,066 in 2016, reached a ten-year low of 718 in 2022 and increased to 760 in 2024 (Figure 10.5).

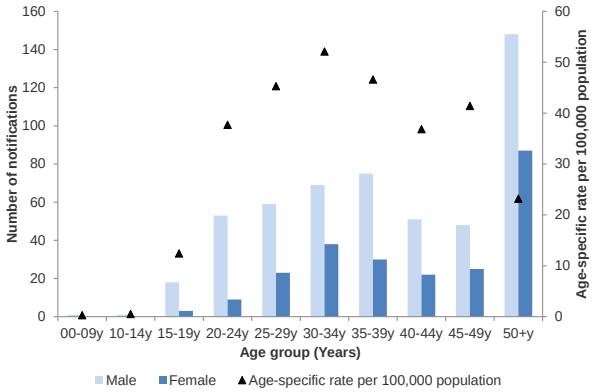
**Figure 10.5 Number and ASR of unspecified hepatitis C notifications, WA, 2015 to 2024**




### 10.2.2 Distribution by sex and age

While the highest number of unspecified hepatitis C notifications in 2024 occurred in people aged 50 years or over, the highest rate was observed in people aged 30 to 34 years (Figure 10.6). From 2015 to 2024, more males than females were notified each year (Appendix Figure 19[1]).

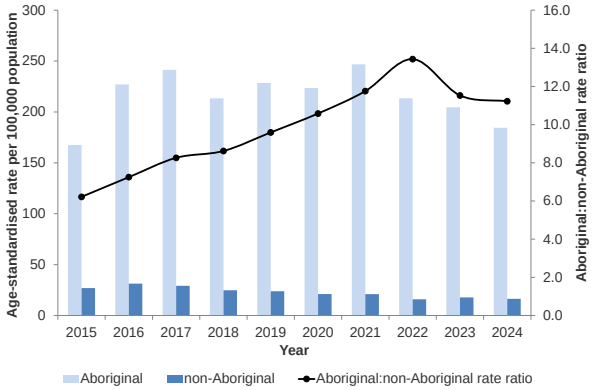
**Figure 10.6 Number of unspecified hepatitis C notifications by sex and overall age-specific rate, WA, 2024**




### 10.2.3 Notifications by Aboriginality

In 2024, 31% of unspecified hepatitis C notifications were reported in Aboriginal people, 61% in non-Aboriginal people and 8% of notifications were of unknown Aboriginal status. The Aboriginal to non-Aboriginal rate ratio increased from 6.2:1 in 2015 to a ten-year high of 13.4:1 in 2022, and decreased to 11.2:1 in 2024 (Figure 10.7). In 2024, the highest notification rate among Aboriginal people was reported from the Great Southern region, and among non-Aboriginal people the highest rate was reported from the Pilbara region (492/100,000 and 28/100,000 population, respectively) (Appendix Table 49[1]).

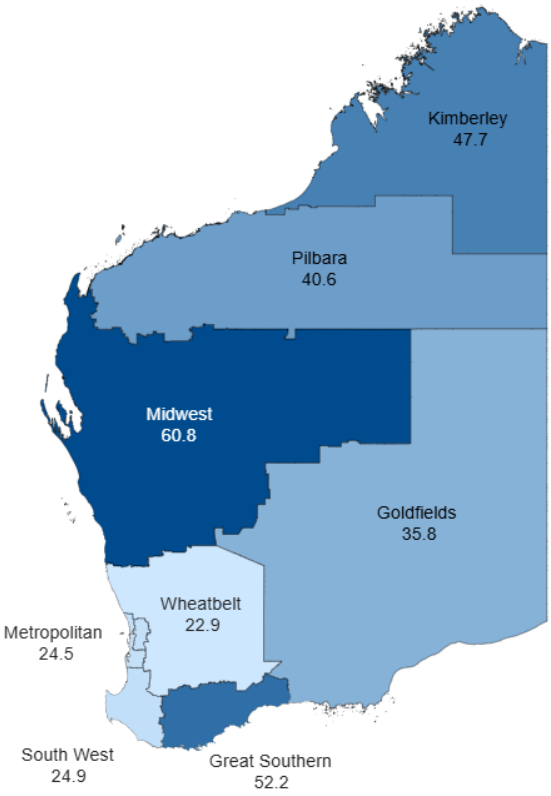
**Figure 10.7 ASR of unspecified hepatitis C notifications by Aboriginality, WA, 2015 to 2024**



## 10.2.4 Regional distribution

The highest unspecified hepatitis C notification rate in 2024 was reported from the Midwest region, where the rate was more than double the overall WA rate (61 vs. 27/100,000 population) (Map 10.2 and Appendix Table 47[1]).

**Map 10.2 ASR of unspecified hepatitis C notifications by health region, WA, 2024**



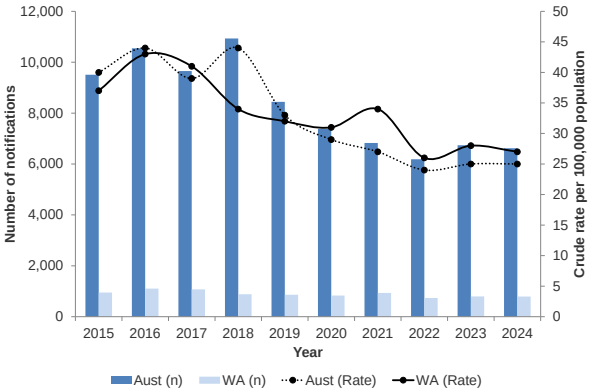

## 10.2.5 Place of acquisition

Of the 161 (21%) unspecified hepatitis C notifications in 2024 that had place of acquisition recorded, 82% were reported as having been acquired in WA, 14% overseas and 4% interstate (Appendix Table 51[1]).

## 10.2.6 Interstate comparisons

In 2024, the crude unspecified hepatitis C notification rate in WA was 8% higher than the national crude rate (27 vs. 25/100,000 population) (Figure 10.8 and Appendix Table 53[1]).

**Figure 10.8 Number and crude rate of unspecified hepatitis C notifications, WA and Australia, 2015 to 2024**




Note: Data sourced from NNDSS 21 March 2025

# 10.3 Enhanced hepatitis C surveillance

Hepatitis C enhanced surveillance forms were not distributed in 2024 due to resourcing constraints.

# 10.4 Hepatitis C testing

Between 2016 and 2022, the hepatitis C testing rate remained stable (52 to 50/1,000 population) while the notification and test positivity rates decreased by 41% (48 to 29/100,000 population) and 13% (0.55% to 0.48%), 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).

Between 2022 and 2024, the testing and notification rates increased by 16% (to 58/1,000 population) and 11% (to 32/100,000 population), respectively, while the test positivity rate remained stable. The increase in testing rate together with the stable test positivity rate indicates the increase in notifications over this period resulted from increased testing (Figure 10.10).

In 2024, the highest testing rate was observed in people aged 15 to 24 years (73/1,000 population) and remained stable in comparison to 2015 (72/1,000 population).

The highest test positivity rate was also in people aged 15 to 24 years (0.47%) and decreased by 16% from 2015 (0.56%) (Figure 10.9).

In 2024, the testing rate among females was 33% higher than the rate among males (66 vs. 49/1,000 population), while the test positivity rate among males was more than three-times higher than the rate among females (0.79 vs. 0.22%) (Figure 10.10).

**Figure 10.9 Hepatitis C testing rate, notification rate and test positivity rate by age group, WA, 2015 to 2024**

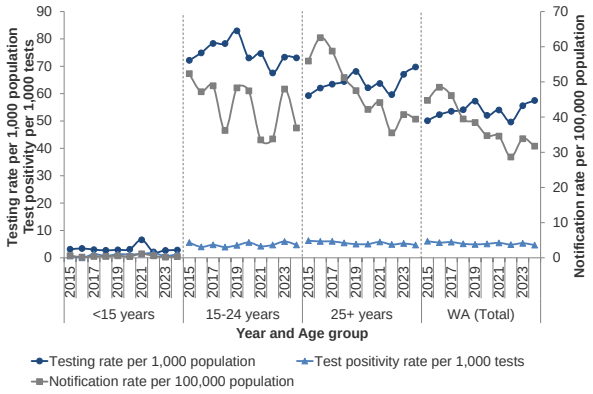
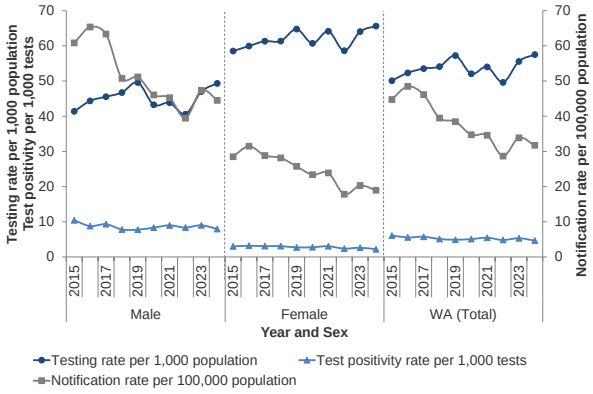



**Figure 10.10 Hepatitis C testing rate, notification rate and test positivity rate by sex, WA, 2015 to 2024**




## 10.5 Outbreaks and other investigations

No significant outbreaks or clusters of hepatitis C infections were reported in 2024.

Government of Western Australia
Department of Health

# 2024 Sexual Health & BBV Prevention and Control Highlights

## Enabling environment

- The WA Sexual Health and Blood-borne Virus Strategy 2024-2030[3] was launched in August 2024. The Strategy was co-designed with statewide stakeholders, in partnership with the Sexual Health and Blood-borne Virus Program (SHBBVP) and the Aboriginal Health Council of WA (AHCWA).
- Communicable Disease Control Directorate Guideline: Provision of Hepatitis A and B Vaccine to Adults in Western Australia at Risk of Acquisition by Sexual Transmission and/or Injecting Drug Use published in July 2024.

## 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 – 6,500 WA users/month
  - Get the Facts[5] (GtF) website for teens – 3,000 WA users/month
  - Let's Yarn website[6] for people working with young Aboriginal people – 1,250 WA users/month
  - Talk Soon. Talk Often. website[7] for parents – 1,083 WA users/month.
- HIV Pre-exposure prophylaxis (PrEP) was accessed by 3,036 individuals.
- A total of 7,921,291 needles and syringes were distributed in WA, a substantial (16.7%) increase on the number distributed in 2023.
- A total of 71 condom dispensers were provided to 30 locations across the Great Southern, Southwest, Goldfields, Kimberley, Pilbara, Gascoyne, Midwest, Wheatbelt, Peel and Perth metropolitan regions.
- The GDHR website design was updated, and new consent content was included in line with the new WA Health and Physical Education Curriculum.
- A new Look After Your Blood campaign concept was finalised and launched.

## Integrated care

- There were 59 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 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 2024, there were 44 testing sites offering syphilis point of care (PoC) testing and a total of 8,161 syphilis PoC tests were performed, with 335 (4.1%) returning a reactive result.
- The Hepatitis B hub was established to support primary care clinician management of hepatitis B.
- A Silver book reference group was convened in 2024 with the purpose to review the functionality, user experience and content inclusions of the Silver Book and provide recommendations for implementation in the update of the Silver Book.

## Workforce development

- The Needle and Syringe Program (NSP) Online Orientation and Training was completed by 134 participants, while 14 pharmacist and pharmacy staff completed the pharmacy NSP online training. The 2024 face-to-face NSP Coordinator Training had 39 participants.
- Curtin University provided training to 41 undergraduate teachers and 43 school staff.
- 6,715 health professionals in WA received syphilis training from July 2022 to June 2024.
- RACGP delivered two webinars, the 'Hepatitis B in primary care' in March (64 attendees) and 'Syphilis outbreaks in WA' in June (53 attendees).
- Two syphilis webinars were delivered by ASHM, which were attended by 55 WA based health professionals.
- Seven new HBV s100 prescribers and four new HIV s100 prescribers approved from the ASHM prescriber courses.

## Data, evaluation, and research

- 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.

# 12 References


1. Department of Health, Western Australia. (2025). *The epidemiology of notifiable sexually transmitted infections and blood-borne viruses in Western Australia 2024 – appendix*. Department of Health, Western Australia.

2. Department of Health, Commonwealth of Australia. (2025). *National response to syphilis*. https://www.health.gov.au/initiatives-and-programs/national-response-to-syphilis?utm_source=health.gov.au&utm_medium=callout-auto-custom&utm_campaign=digital_transformation

3. Department of Health, Western Australia. (2024). *Western Australian sexual health and blood-borne virus strategies 2024-2030*. sexual-health-and-blood-borne-viruses-strategy-2024-30.pdf

4. Department of Health, Western Australia. (n.d). *Growing and developing healthy relationships*. https://gdhr.wa.gov.au/home

5. Department of Health, Western Australia. (n.d). *Get the facts*. https://www.getthefacts.health.wa.gov.au

6. Department of Health, Western Australia. (n.d). *Let's Yarn!*. https://letsyarn.health.wa.gov.au

7. Department of Health, Western Australia. (2021). *Talk soon. Talk often.* https://www.healthywa.wa.gov.au/~/media/HWA/Documents/Healthy-living/Sexual-health/talk-soon-talk-often.pdf

8. Carson JM, Hajarizadeh B, Dore GJ. (2024). *Monitoring hepatitis C treatment uptake in Australia (Issue 14)*. The Kirby Institute, UNSW, Sydney NSW, Australia. https://www.kirby.unsw.edu.au/sites/default/files/documents/Monitoring-hepatitis-C-treatment-uptake-in-Australia-Issue-14-July-2024_0.pdf

**9.** Department of Health, Western Australia. (2022). *WA syphilis outbreak response progress report (2018-2022).* https://www.health.wa.gov.au/~/media/Corp/Documents/Health-for/Sexual-health/SORG/WA-Syphilis-Outbreak-Response-Report-2018-2022.pdf

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