Quarterly Surveillance Report



Notifiable Sexually Transmissible Infections and Blood-borne Viruses in Western Australia

Period ending 31 December 2022 Vol. 23 (1), issued March 2023

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**Notes:**

1. All data in this report are provisional and subject to future revision.
2. To help place the data in this report in perspective, comparisons with other reporting periods are provided. As no formal statistical testing has been conducted, some caution should be taken with interpretation.
3. Notifications for Christmas Island, Curtin, Leonora, Perth and Yongah Hill Immigration Detention Centres have been excluded from all analyses because of potential bias introduced through the inclusion of cases detected by screening of asylum seekers at these locations in previous years.

# Summary

* Infectious syphilis notifications in the non-metropolitan area decreased for the first time compared to the previous five 12-month periods.
* HIV cases among Aboriginal people have increased compared to both the previous 12-month period and the previous five-year average.
* Gonorrhoea notifications increased despite a decrease in the testing rate.

Table 1 **Number and percentage change of STI and BBV notifications by reporting period, WA**



Notes: 1 Historical five-year mean (i.e. from 2017 to 2021) for the current quarter.

2 Percentage change of the number of notifications in the current quarter compared to the historical five-year mean of the same quarter. Positive values indicate an increase compared to the historical five-year mean of the same quarter. Negative values indicate a decrease compared to the historical five-year mean of the same quarter.

3 Historical five-year mean (i.e. from 2017 to 2021) for the current 12-month period.

4 Percentage change of the number of notifications in the current 12-month period compared to the historical five-year mean for the same 12-month period. For interpretation of positive and negative values, see note 2.

5 Unspecified hepatitis B and unspecified hepatitis C notifications have been analysed by specimen date as a batch of retrospective notifications were received in March 2021

6 Newly acquired hepatitis C data should be interpreted with caution as laboratory information used to determine if a case had a documented seroconversion within the past two years has not been routinely available since September 2020.

# Chlamydia

Figure 1 Chlamydia testing rate, notification rate and test positivity rate in WA over the past six 12-month periods



* In comparison to the previous 12-month period, the chlamydia testing rate decreased by 18%, the notification rate remained stable and the test positivity rate increased by 21%.

Table 2 Number and proportion of chlamydia notifications in WA by sex, for the two most recent 12-month periods



Notes: N/A = Not applicable

In addition to the number of notifications above, there were two notifications among transgender people in the current reporting period and one notification in a transgender person in the previous reporting period.

**Table** 3 **Number and proportion of chlamydia notifications in WA by age group, for the two most recent 12-month periods**



* The largest proportion of chlamydia notifications was among those aged 20 to 24 years and notifications among this age group remained stable in comparison to the previous 12-month period.

**Table** 4 **Number and crude rate of chlamydia notifications in WA by Aboriginality, for the two most recent 12-month periods**



Notes: Rate = Crude notification rate per 100,000 population

N/A = Not applicable

* The number of chlamydia notifications with an unknown Aboriginality increased by 70% in comparison to the previous 12-month period. The majority of these notifications were from the Perth Metropolitan area. The notification rate increased by 10% among Aboriginal people and remained stable among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period.

**Table** 5 **Number and crude rate of chlamydia notifications in WA by region, for the two most recent 12-month periods**



Notes: Rate = Crude notification rate per 100,000 population

Metropolitan = East Metropolitan + North Metropolitan + South Metropolitan

Other = Overseas residents diagnosed in WA

Unknown = Unknown residential address within WA

N/A = Not applicable

* While chlamydia notification rates declined or remained relatively stable in most regions, there was a 22% increase in both the Kimberley and Wheatbelt regions, and a 16% increase in the Pilbara region.

# Gonorrhoea

**Figure** 2 **Gonorrhoea testing rate, notification rate and test positivity rate in WA over the past six 12-month periods**



* In comparison to the previous 12-month period, the gonorrhoea testing rate decreased by 17%, the notification rate increased by 12% and the test positivity rate increased by 33%.
* In the current 12-month period, 50% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 65%.

**Table** 6 **Number and proportion of gonorrhoea notifications in WA by sex, for the two most recent 12-month periods**



Notes: N/A = Not applicable

In addition to the number of notifications above, there were four notifications among transgender people in the previous reporting period.

* The number of gonorrhoea notifications increased by 21% among males and remained stable among females compared to the previous 12-month period. The increase in notifications among males was most notable in the Midwest and Kimberley regions.

**Table** 7 **Number and proportion of gonorrhoea notifications in WA by age group, for the two most recent 12-month periods**



* Those aged 20 to 29 years comprised 40% of gonorrhoea notifications, and notifications among this age group increased by 17% in comparison to the previous 12-month period.

**Table** 8 **Number and crude rate of gonorrhoea notifications in WA by Aboriginality, for the two most recent 12-month periods**



Notes: Rate = Crude notification rate per 100,000 population

N/A = Not applicable

* The gonorrhoea notification rate remained stable among Aboriginal people and increased by 13% among non-Aboriginal people, resulting in a lower rate ratio compared to the previous 12-month period. The number of notifications with unknown Aboriginality increased by more than six-fold in comparison to the previous 12-month period but represented only 2% of all notifications in the current reporting period.

**Table** 9 **Number and crude rate of gonorrhoea notifications in WA by region, for the two most recent 12-month periods**



Notes: Rate = Crude notification rate per 100,000 population

Metropolitan = East Metropolitan + North Metropolitan + South Metropolitan

Other = Overseas residents diagnosed in WA

Unknown = Unknown residential address within WA

N/A = Not applicable

* Gonorrhoea notification rates increased in most regions, however there was a 20% decrease in the Goldfields region.

# Infectious syphilis

**Figure** 3 **Syphilis testing rate, notification rate and test positivity rate in WA over the past six 12-month periods**



* In comparison to the previous 12-month period, the syphilis testing rate and notification rate remained stable, and the test positivity rate decreased by 6%.
* Four congenital syphilis cases were reported in the current 12-month period: one in the Goldfields region in an Aboriginal child that was notified as a stillbirth; one in the Perth Metropolitan area in a non-Aboriginal child; and two in the Pilbara region among Aboriginal children, one of which was notified as a stillbirth.

**Figure** 4 **Number of infectious syphilis notifications in WA by region and exposure category, for the two most recent 12-month periods**



* In the current 12-month period, 69% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 89%.
* The number of notifications in the Perth Metropolitan area categorised as having an unknown exposure category more than doubled in comparison to the previous 12-month period (n=68 vs. 24) (Figure 4).

**Table** 10 **Number and proportion of infectious syphilis notifications in WA by sex, for the two most recent 12-month periods**



Notes: N/A = Not applicable

In addition to the number of notifications above, there were four notifications among transgender people in the current reporting period and one notification in a transgender person in the previous reporting period.

**Table** 11 **Number and proportion of infectious syphilis notifications in WA by age group, for the two most recent 12-month periods**



* Those aged 25 to 34 years comprised 35% of infectious syphilis notifications and notifications among this age group increased by 10% in comparison to the previous 12-month period. Notifications among those aged 55 to 59 years more than doubled, predominantly in the Metropolitan area.

**Table** 12 **Number and crude rate of infectious syphilis notifications by Aboriginality for the two most recent 12-month periods, WA**



Notes: Rate = Crude notification rate per 100,000 population

N/A = Not applicable

* The infectious syphilis notification rate decreased by 10% among Aboriginal people and remained stable among non-Aboriginal people, resulting in a lower rate ratio compared to the previous 12-month period.

**Table** 13 **Number and crude rate of infectious syphilis notifications by region for the two most recent 12-month periods, WA**



Notes:Rate = Crude notification rate per 100,000 population

Metropolitan = East Metropolitan + North Metropolitan + South Metropolitan

Other = Overseas residents diagnosed in WA

Unknown = Unknown residential address within WA

N/A = Not applicable

* Notifications in the Kimberley, Pilbara and Goldfields regions have increased as part of a larger outbreak in northern Australia that commenced in January 2011 in the Northern Territory. Further information about the infectious syphilis outbreak affecting Aboriginal people living in northern Australia is available from: <https://www.health.gov.au/resources/collections/national-syphilis-monitoring-reports>.
* While syphilis notification rates decreased or remained stable in most regions, the notification rate more than doubled in the Midwest region. The infectious syphilis notification rate remained highest in the Kimberley region but decreased by 19% in comparison to the previous 12-month period.

# HIV

* The following analysis of HIV notifications data includes cases diagnosed for the first time in WA and excludes notifications of HIV cases previously diagnosed overseas.

Figure 5 HIV testing rate, notification rate and test positivity rate in WA over the past six 12-month periods



* A total of 59 HIV cases were notified in the January to December 2022 period, a 5% increase compared to the previous 12-month period (n=56) (Table 1).
* In comparison to the previous 12-month period, the HIV testing rate decreased by 6%, the notification rate increased by 5% and the test positivity rate increased by 12% (Figure 5).
* Over the last two reporting periods, the number of HIV cases remained relatively stable among males (47 to 46 cases) and females (9 to 11 cases), while the male: female ratio for HIV notifications decreased from 5.2:1 to 4.2:1. Two of the HIV cases notified in the January to December 2022 period were transgender.

Table 14 Number and proportion of HIV notifications in WA by age group, for the two most recent 12-month periods (excludes cases previously diagnosed outside WA)



* The number of HIV notifications decreased or remained stable across most age groups over the two 12-month reporting periods. The largest increase was reported in cases aged 30 to 34 years, where the number of notifications increased by 55% (Table 14).
* The median age of HIV notifications in the January 2022 to December 2022 period was 39 years (range: 21 to 72 years) and slightly younger than the previous 12-month period (42 years; range: 20 to 71 years).

Table 15 Number and crude rate of HIV notifications in WA by Aboriginality, for the two most recent 12-month periods (excludes cases previously diagnosed outside WA)



Note: Rate = Crude notification rate per 100,000 population

* There were nine new cases of HIV among Aboriginal people in the January to December 2022 period, most of whom reported acquisition via heterosexual sexual activity (n=3) or injecting drug use (IDU) (n=4). The crude HIV notification rate for Aboriginal people almost doubled in comparison to the previous 12-month period (noting small numbers), and was 4-times higher than the rate reported for non-Aboriginal people (Table 15).

Table 16 Number and proportion of HIV notifications in WA by exposure, for the two most recent 12-month periods (excludes cases previously diagnosed outside WA)



* Compared to the previous 12-month period, there was an 8% decrease in the number of HIV notifications in men who have sex with men (MSM) the current period (Table 16). Most MSM who were newly diagnosed with HIV in the current period had acquired their infection in Australia (59%; n=13).
* The number of male heterosexual HIV cases decreased by 32% over the two reporting periods (Table 16). The majority of these cases in the current period had acquired HIV overseas (62%; n=8), most of whom reported acquisition in South-East Asia (n=5).
* The number of female HIV notifications attributed to heterosexual exposures remained stable compared to the previous 12-month period (Table 16). Most of these cases had acquired HIV in Australia (55%; n=5).

# Hepatitis B

**Figure** 6 **Hepatitis B testing rate, notification rate and test positivity rate in WA over the past six 12-month periods**



* In comparison to the previous 12-month period, the hepatitis B testing rate decreased by 6%, the notification rate remained stable and the test positivity rate increased by 13%.

Table 17 **Number and proportion of newly acquired and unspecified hepatitis B notifications in WA, for the two most recent 12-month periods**



* The number of newly acquired hepatitis B notifications increased by 57% and the number of unspecified hepatitis B notifications remained stable in comparison to the previous 12-month period. It should be noted that unspecified hepatitis B notifications have been analysed by specimen date as a batch of retrospective notifications were received in March 2021.

Table 18 **Number and proportion of hepatitis B notifications (newly acquired + unspecified) in WA by sex, for the two most recent 12-month periods**



Note: N/A = Not applicable

* The number of total hepatitis B notifications increased by 7% among males and remained stable among females.

Table 19 **Number and proportion of hepatitis B notifications (newly acquired + unspecified) in WA by age group, for the two most recent 12-month periods**



* The largest proportion of total hepatitis B notifications was among those aged 35 to 39 years and notifications among this age group increased by 16% in comparison to the previous 12-month period. Notifications among those aged 20 to 24 years decreased by 25%.

Table 20 **Number and crude rate of hepatitis B notifications (newly acquired + unspecified) in WA by Aboriginality, for the two most recent 12-month periods**



Notes:Rate = Crude notification rate per 100,000 population

N/A = Not applicable

* The number of total hepatitis B notifications with an unknown Aboriginality more than doubled in comparison to the previous 12-month period. The notification rate increased by 12% among Aboriginal people and decreased by 6% among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period.

Table 21 **Number and crude rate of hepatitis B notifications (newly acquired + unspecified) in WA by region, for the two most recent 12-month periods**



Notes:Rate = Crude notification rate per 100,000 population

Metropolitan = East Metropolitan + North Metropolitan + South Metropolitan

Other = Overseas residents diagnosed in WA

Unknown = Unknown residential address within WA

N/A = Not applicable

* Trends in the total hepatitis B notification rate varied between regions and the small number of notifications in most non-metropolitan regions makes it difficult to interpret any changes in trends.

# **Hepatitis C**

**Figure** 7 **Hepatitis C testing rate, notification rate and test positivity rate in WA over the past six 12-month periods**



* In comparison to the previous 12-month period, the hepatitis C testing rate decreased by 7%, the notification rate decreased by 16% and the test positivity rate decreased by 11%.

Table 22 **Number and proportion** of hepatitis C notifications in WA by disease status, for the two most recent 12-month periods



* The number of newly acquired hepatitis C and unspecified hepatitis B notifications decreased by 17% and 15% respectively in comparison to the previous 12-month period. It should also be noted that unspecified hepatitis C notifications have been analysed by specimen date as a batch of retrospective notifications were received in March 2021.

Table 23 **Number and proportion of hepatitis C notifications (newly acquired + unspecified) in WA by sex, for the two most recent 12-month periods**



Note: N/A = Not applicable

* The number of total hepatitis C notifications decreased by 11% among males and by 24% among females, resulting in a slightly higher rate ratio compared to the previous 12-month period.

**Table** 24 **Number and proportion of hepatitis C notifications (newly acquired + unspecified) in WA by age group, for the two most recent 12-month periods**



* The largest proportion of total hepatitis C notifications was among those aged 60 years or older and notifications among this age group remained stable in comparison to the previous 12-month period. Notifications among those aged 50 to 54 years increased by 14%.

Table 25 **Number and crude rate of hepatitis C notifications (newly acquired + unspecified) in WA by Aboriginality, for the two most recent 12-month periods**



Notes: Rate = Crude notification rate per 100,000 population

N/A = Not applicable

* The number of total hepatitis C notifications with an unknown Aboriginality increased by 19% in comparison to the previous 12-month period. The notification rate decreased by 9% among Aboriginal people and by 22% among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period.

Table 26 **Number and crude rate of hepatitis C notifications (newly acquired + unspecified) in WA by region, for the two most recent 12-month periods**



Notes:Rate = Crude notification rate per 100,000 population

Metropolitan = East Metropolitan + North Metropolitan + South Metropolitan

Other = Overseas residents diagnosed in WA

Unknown = Unknown residential address within WA

N/A = Not applicable

* Total hepatitis C notification rates decreased in most regions. The notification rate in the Pilbara region increased by 31%.

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