Quarterly Surveillance Report



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

Period ending 30 June 2023 Vol. 23 (3), issued August 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

* The rate of gonorrhoea notifications increased in comparison to the previous 12-month period (Figure 2).
* The rate of infectious syphilis notifications decreased in comparison to the previous 12-month period, most notably in the Kimberley and Pilbara regions (Table 13).
* The number of newly acquired hepatitis C notifications decreased by 23% in comparison to the previous 12-month period and by 40% in comparison to the previous five-year mean (Table 1 and Table 22).
* HIV cases among Aboriginal people have decreased compared to the previous 12-month period however, cases remain higher than the previous five-year average (Table 15).

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

Notes: 1 Historical five-year mean (i.e., from 2018 to 2022) 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 2018 to 2022) 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 Notifications were analysed by optimal date of onset except for 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 increased by 12%, the notification rate increased by 10%, and the test positivity rate remained stable. This suggests that the increase in notifications over this period may have resulted from increased testing (Figure 1).

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 was one notification in a transgender person 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 increased by 16% in comparison to the previous 12-month period (Table 3).

**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 notification rate increased by 15% among Aboriginal people and by 6% among non-Aboriginal people (Table 4).

**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 increased in most regions, the largest increases occurred in the Kimberley (35% increase) and South West (30% increase) regions (Table 5).

# 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 increased by 12%, the notification rate increased by 33% and the test positivity rate increased by 17%. This suggests that the increase in notifications over this period may have resulted from a combination of increased testing and increased disease transmission (Figure 2).
* In the current 12-month period, 48% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 58%.

**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 two notifications among transgender people in the previous reporting period.

* The number of gonorrhoea notifications increased by 41% among males and by 23% among females compared to the previous 12-month period (Table 6).

**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 37% in comparison to the previous 12-month period (Table 7).

**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 increased by 5% among Aboriginal people and by 44% 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 3% of all notifications in the current reporting period (Table 8).

**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

* While gonorrhoea notification rates increased in most regions, the rate more than doubled in the South West region and decreased by 23% in the Pilbara region (Table 9).

# Infectious syphilis

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



* Infectious syphilis notifications increased by 81% from the July 2017 to June 2018 period (n=576) to the July 2021 to June 2022 period (n=1,075) before stabilising in the current reporting period (n=1,052).
* In comparison to the previous 12-month period, the syphilis testing rate increased by 7%, the notification rate remained stable, and the test positivity rate decreased by 8%. This suggests that the stability in notifications over this period may have resulted from decreased disease transmission (Figure 3).
* Two congenital syphilis cases were reported in the current 12-month period: one in the Perth metropolitan area in a non-Aboriginal child and one in Pilbara region in an Aboriginal child.

**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, 63% 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 increased by 42% in comparison to the previous 12-month period (n=55 vs. 78) (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 was one notification in a transgender person in the current reporting period and five notifications among transgender people in the previous reporting period.

* The number of infectious syphilis notifications decreased by 7% among males and remained stable among females compared to the previous 12-month period. The decrease in notifications among males was most notable in the Kimberley region (Table 10).

**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 37% of infectious syphilis notifications and notifications among this age group increased by 14% in comparison to the previous 12-month period. Notifications among those aged 15 to 24 years decreased by 24%, predominantly in the Goldfields, Kimberley, and Pilbara regions (Table 11).

**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 remained stable among Aboriginal people and decreased by 11% among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period. The decrease in notifications among non-Aboriginal people was most notable in the Perth metropolitan region (Table 12).

**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 generally 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>.
* Trends in the infectious syphilis notification rate varied between regions. Most notable was the increase in the South West region, where the rate doubled. The notification rate remained highest in the Kimberley region but decreased by 18% in comparison to the previous 12-month period (Table 13).

# 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 4 Number of HIV notifications in WA by quarter, for the two most recent 12-month periods (excludes cases previously diagnosed outside WA)



* A total of 64 HIV cases were notified in the July 2022 to June 2023 period, a 10% increase compared to the previous 12-month period (n=58) (Table 1).
* The number of HIV notifications in the April to June 2023 quarter (n=18) was higher compared to the previous quarter (n=13). In the past 12 months the number of quarterly HIV notifications fluctuated between 13 and 19 cases per quarter (Figure 4).
* In the July 2022 to June 2023 period the number of HIV notifications among males remained stable compared to the previous 12-month period (47 to 48 cases), while number of female cases increased slightly (10 to 13 cases). The male: female ratio for new HIV diagnoses decreased from 4.7:1 to 3.7:1 compared to the previous 12-month period.

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 25 to 34 years, where the number of notifications increased by 71% (Table 14).
* The median age of HIV notifications in the July 2022 to June 2023 period was 37 years (range: 21 to 68 years) and slightly younger than the previous 12-month period (39.5 years; range: 20 to 72 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 four HIV notifications among Aboriginal people in the July 2022 to June 2023 period, a 50% decrease compared to the previous 12-month period. The crude HIV notification rate for Aboriginal people is sensitive to small changes in the number of cases notified and was 2.0 times the rate reported for non-Aboriginal people in the current period (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 a 13% increase in the number of HIV notifications in MSM in the current period (Table 16). Half of these cases in the current period had acquired their infection in Australia (50%; n=13).
* Compared to the previous 12-month period, there was a 30% decrease in the number of male HIV notifications attributed to heterosexual exposure (Table 16). Over half of these cases in the current period had acquired HIV overseas (64%; n=9).
* Compared to the previous 12-month period, there was a 50% increase in the number of female HIV notifications attributed to heterosexual exposure (Table 16). Half of these cases had acquired HIV overseas (50%; n=6).

# 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 increased by 5%, the notification rate increased by 10%, and the test positivity rate increased by 4%. This suggests that the increase in notifications over this period may have resulted from a combination of increased testing and increased disease transmission (Figure 6).

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 and unspecified hepatitis B notifications increased in comparison to the previous 12-month period (Table 17).

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

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 30 to 34 years and notifications among this age group increased by 38% in comparison to the previous 12-month period. Notifications among those aged 35 to 39 years decreased by 28% (Table 19).

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 50% among Aboriginal people and remained stable among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period (Table 20).

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 (Table 21).

# **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, notification rate and test positivity rates remained stable (Figure 7).

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



* In comparison to the previous 12-month period, the number of newly acquired hepatitis C notifications decreased by 23%, while the number of unspecified hepatitis C notifications increased by 5%.

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 remained stable among males and increased by 7% among females (Table 23).

**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 25 to 34 years and notifications among this age group decreased by 6% in comparison to the previous 12-month period. Notifications among those aged 50 to 59 years increased by 29% (Table 24).

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 total hepatitis C notification rate increased by 7% among Aboriginal people and remained stable among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period (Table 25).

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

* Although the total hepatitis C notification rate decreased or remained stable in most regions, the rate more than doubled in the Kimberley region (Table 26).

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