Quarterly Surveillance Report



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

Period ending 31 March 2023 Vol. 23 (2), issued June 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.
* HIV cases among Aboriginal people have remained stable compared to the previous 12-month period however cases remain higher than 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 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 decreased by 6%, the notification rate increased by 6%, and the test positivity rate increased by 13% (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 two notifications among transgender people 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 10% 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 19% among Aboriginal people and remained stable among non-Aboriginal people, resulting in a higher rate ratio compared to the previous 12-month period (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 (30% increase) and Pilbara (20% 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 decreased by 6%, the notification rate increased by 23% and the test positivity rate increased by 30% (Figure 2).
* In the current 12-month period, 53% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 63%.

**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 34% among males and by 11% among females compared to the previous 12-month period. The increase in notifications among males was most notable in the Perth metropolitan and Midwest regions (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 34% 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 8% among Aboriginal people and by 29% 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 four-fold in comparison to the previous 12-month period but represented only 2% 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

* Gonorrhoea notification rates increased in most regions, however there was a 15% decrease in the Wheatbelt 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**



* In comparison to the previous 12-month period, the syphilis testing, notification, and test positivity rates remained stable (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, 67% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 88%.
* The number of notifications in the Perth Metropolitan area categorised as having an unknown exposure category increased by almost three-fold in comparison to the previous 12-month period (n=111 vs. 41) (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 two notifications among transgender people in the current reporting period and three notifications among transgender people in the previous reporting period.

* The number of infectious syphilis notifications remained stable among males and increased by 13% among females compared to the previous 12-month period. The increase in notifications among females was most notable in the Midwest 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 36% of infectious syphilis notifications and notifications among this age group increased by 20% in comparison to the previous 12-month period. Notifications among those aged 15 to 19 years decreased by 33%, predominantly in the 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 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 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 almost three-fold increase in the Midwest region. The notification rate remained highest in the Kimberley region but remained stable 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 58 HIV cases were notified in the April 2022 to March 2023 period, a 7% increase compared to the previous 12-month period (n=54) (Table 1).
* The number of HIV notifications in the January to March 2023 quarter (n=13) was lower compared to the previous quarter (n=19). In the past 12 months the number of quarterly HIV notifications fluctuated between 12 and 19 cases per quarter (Figure 5).
* In the January to March 2023 period the number of HIV notifications among males slightly decreased compared to the previous 12-month period (45 to 44 cases), while number of female cases slightly increased (9 to 11 cases). The male: female ratio for new HIV diagnoses decreased from 5.0:1 to 4.0:1 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 30-34 years, where the number of notifications increased by 70% (Table 14).
* The median age of HIV notifications in the April 2022 to March 2023 period was 37 years (range: 21 to 72 years) and slightly younger than the previous 12-month period (39 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 seven new cases of HIV among Aboriginal people in the April 2022 to March 2023 period, which was stable 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 3.3 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 4% decrease in the number of HIV notifications in MSM in the current period (Table 16). Over half of these cases in the current period had acquired their infection in Australia (54%; n=12).
* Compared to the previous 12-month period, there was a 32% 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 (61%; n=8).
* Compared to the previous 12-month period, there was a 25% increase in the number of female HIV notifications attributed to heterosexual exposure (Table 16). Half of these cases had acquired HIV overseas (50%; n=4).

# 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 remained stable, the notification rate increased by 12%, and the test positivity rate increased by 17% (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 notifications increased by almost three-fold and the number of unspecified hepatitis B notifications increased by 12% in comparison to the previous 12-month period (Table 17). 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

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 44 years and notifications among this age group increased by 13% in comparison to the previous 12-month period. Notifications among those aged 15 to 24 years decreased by 18% (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 increased by more than three-fold 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 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 remained stable, the notification rate decreased by 8%, and the test positivity rate decreased by 5% (Figure 7).

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 15% and 7% respectively in comparison to the previous 12-month period (Table 22). 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 remained stable among males and decreased by 17% among females, resulting in a slightly higher rate ratio compared to the previous 12-month period (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 20 to 34 years and notifications among this age group decreased by 13% in comparison to the previous 12-month period. Notifications among those aged 50 to 54 years increased by 39% (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 remained stable among Aboriginal people and decreased by 13% 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 in most regions, there was a 23% increase in the Midwest region (Table 26).

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