Quarterly Surveillance Report



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

Period ending 30 September 2022 Vol. 22 (3), issued November 2022

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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 syphilis outbreak continues in the metropolitan and non-metropolitan regions of WA.
* 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 16%, the notification rate remained stable and the test positivity rate increased by 20%.

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 five notifications among people of unknown sex in the 12-month period from October 2021 to September 2022 and three notifications among transgender people in the 12-month period from October 2020 to September 2021

* The number of chlamydia notifications increased by 6% among males and remained stable among females compared to the previous 12-month 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 57% in comparison to the previous 12-month period. The notification rate increased by 14% 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 21% increase in the Kimberley and Pilbara regions.

# 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 15%, the notification rate increased by 8% and the test positivity rate increased by 26%.
* In the current 12-month period, 45% 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 two notifications among people of unknown sex in the 12-month period from October 2021 to September 2022 and four notifications among transgender people in the 12-month period from October 2020 to September 2021

**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 7% 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 number of gonorrhoea notifications with an unknown Aboriginality increased by five-fold in comparison to the previous 12-month period. The notification rate remained stable among Aboriginal people and increased by 12% among non-Aboriginal people, resulting in a lower rate ratio compared to the previous 12-month 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

* While gonorrhoea notification rates increased in most regions, there was a 29% 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 increased by 8%, the notification rate increased by 5% and the test positivity rate remained stable.
* Two congenital syphilis cases were reported in the current 12-month period: one in the Goldfields region in an Aboriginal child and one in the Pilbara region in an Aboriginal child. Both cases were notified as stillbirths.

**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, 70% 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 unknown increased by more than four-fold in comparison to the previous 12-month period (n=82 vs. 19) (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 12-month period from October 2021 to September 2022 and one notification in a transgender person in the 12-month period from October 2020 to September 2021

* The number of infectious syphilis notifications increased by 16% among males and remained stable among females compared to the previous 12-month 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 20 to 34 years comprised 51% 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 60 years or older increased almost three-fold, 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 remained stable among Aboriginal people and increased by 23% 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 gonorrhoea notification rates increased in most regions, there was a 29% decrease in the Goldfields region.
* The infectious syphilis notification rate remained highest in the Kimberley region but was stable in comparison to the previous 12-month period. The notification rate in the Great Southern region doubled and increased by 49% in the Midwest region. In the Goldfields and Pilbara regions the notification rate decreased by 32% and 23% respectively.

# 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 55 HIV cases were notified in the October 2021 to September 2022 period, an 10% decrease compared to the previous 12-month period (n=61) (Table 1).
* In comparison to the previous 12-month period, the HIV testing rate decreased by 6%, the notification rate decreased by 9% and the test positivity rate decreased by 3% (Figure 5).
* Compared to the previous 12-month period, there was a 14% decrease in male HIV notifications in the October 2021 to September 2022 period (49 to 42 cases), while the number of HIV notifications among females remained stable (12 vs 11 cases). The male: female ratio for new HIV diagnoses was also stable compared to the previous 12-month period (3.8:1 vs 4.1:1).

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 largest decrease in HIV notifications was reported in cases aged 20-24 years, where the number of notifications was just under half that reported in the previous 12-month period (Table 14).
* The median age of HIV notifications in the October 2021 to September 2022 period was 38 years (range: 21 to 72 years) and slightly younger than the previous 12-month period (40 years; range: 19 to 76 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 number of HIV notifications among Aboriginal people increased to nine cases in the October 2021 to September 2022 period. Most of the nine cases reported heterosexual acquisition (n=4) or IDU (n=4). The crude HIV notification rate for Aboriginal people is sensitive to small changes in the number of cases notified and increased in the current period to 4.8 times 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 a 34% decrease in the number of HIV notifications in MSM the current period (Table 16). Most MSM who were newly diagnosed with HIV in the current period had acquired their infection in Australia (68%; n=13).
* Compared to the previous 12-month period, there was a 12% decrease in the number of male heterosexual HIV cases in the current period (Table 16). Over half of these cases in the current period had acquired HIV overseas (67%; n=10), most of whom reported acquisition in South-East Asia (n=6).
* Compared to the previous 12-month period, there was a three-case decrease in the number of female HIV notifications attributed to heterosexual exposure (Table 16). Most of these cases had acquired HIV in Australia (67%; 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 decreased by 5%, the notification rate remained stable and the test positivity rate increased by 11%.

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 decreased by 92% and the number of unspecified hepatitis B notifications increased by 5% 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

In addition to the number of notifications above, there was one notification in a person of unknown sex in the 12-month period from October 2021 to September 2022

* The number of total hepatitis B notifications increased by 8% 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 32% in comparison to the previous 12-month period. Notifications among those aged 60 years or older decreased by 24%.

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 decreased by 44% among Aboriginal people and by 10% among non-Aboriginal people, resulting in a lower 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 6% and the test positivity rate remained stable.

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 18% and 4% respectively in comparison to the previous 12-month period. 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. 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 18% among females, resulting in a 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 25 to 34 years and notifications among this age group remained stable in comparison to the previous 12-month period. Notifications among those aged 55 to 59 years decreased by 23%.

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 46% in comparison 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. Most notable was a 54% decrease in the Kimberley region, primarily among Aboriginal people. The notification rate in the Great Southern region increased by 27%, primarily among people notified by corrective services.

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