Quarterly Surveillance Report



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

Period ending 30 June 2022 Vol. 22 (2), issued September 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.
* Total hepatitis C notifications continue to decline despite stable testing rates.

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 9%, the notification rate remained stable 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 among a transgender person in the 12-month period from July 2021 to June 2022 and two notifications among transgender people in the 12-month period from July 2020 to June 2021

* The number of chlamydia notifications increased by 7% 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 20 to 24 year olds, 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

**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 20% 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 9%, the notification rate remained stable and the test positivity rate increased by 12% (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 68%.

**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 12-month period from July 2021 to June 2022 and three notifications among transgender people in the 12-month period from July 2020 to June 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 34 years comprised 56% of gonorrhoea notifications, and notifications among this age group remained stable 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 decreased by 16% 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 declined in most regions, there was a 41% increase in the Great Southern 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 17%, the notification rate increased by 7% and the test positivity rate decreased by 4% (Figure 3).
* A total of three congenital syphilis cases were reported in the current 12-month period: one in the Metropolitan region in a non-Aboriginal child and one each in the Goldfields and Pilbara regions among Aboriginal children. All three 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, 64% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 91%.
* The number of notifications in the Perth metropolitan area categorised as unknown increased by more than five-fold in comparison to the previous 12-month period (n=74 vs. 14) and more than six-fold in comparison to the previous five-year mean of 12 cases per 12-month period (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 five notifications among transgender people in the 12-month period from July 2021 to June 2022 and two notifications among transgender people in the 12-month period from July 2020 to June 2021

**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 49% of infectious syphilis notifications and notifications among this age group increased by 10% in comparison to the previous 12-month period. Notifications among 20 to 24 year olds increased by 45%, 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 7% among Aboriginal people and increased by 20% 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>.
* The infectious syphilis notification rate remained highest in the Kimberley region and was stable in comparison to the previous 12-month period. A total of 583 infectious syphilis cases (270 male, 313 female) were notified from the beginning of the outbreak in the region in June 2014 to June 2022. Prior to 2014, there had been no infectious syphilis notifications in the region for two years.
* In the Pilbara region, a total of 406 infectious syphilis cases (185 male, 220 female, 1 transgender) were notified from the beginning of the outbreak in the region in February 2018 to June 2022. Prior to February 2018, there had been on average two infectious syphilis notifications per 12-month period in the region.
* In the Goldfields region, a total of 100 infectious syphilis cases (49 male, 51 female) were notified from the beginning of the outbreak in the region in January 2019 to June 2022.

# 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 57 HIV cases were notified in the July 2021 to June 2022 period, an 8% decrease compared to the previous 12-month period (n=62) (Table 1).
* In comparison to the previous 12-month period, the HIV testing rate decreased by 3%, the notification rate decreased by 9% and the test positivity rate decreased by 6% (Figure 5).
* Compared to the previous 12-month period, there was a 10% decrease in male HIV notifications in the July 2021 to June 2022 period (51 to 46 cases), while the number of HIV notifications among females remained stable (10 vs 11 cases). The male: female ratio for new HIV diagnoses was also stable compared to the previous 12-month period (4.6:1).

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 55+ years, where the number of notifications was just over half that reported in the previous 12-month period (Table 14).
* The median age of HIV notifications in the July 2021 to June 2022 period was 39 years (range: 20 to 72 years) and slightly younger than the previous 12-month period (43 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

* The number of HIV notifications among Aboriginal people increased to eight cases in the July 2021 to June 2022 period, which was higher than both the previous 12-month period (n=2) and previous five-year average (n=2.8). Most of the eight cases reported heterosexual acquisition (n=4), followed by injecting drug use (n=3). 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 3.8 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 24% 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 (64%; n=14).
* The number of male heterosexual HIV cases remained stable over the two reporting periods (Table 16). Over half of these cases in the current period had acquired HIV overseas (65%; n=11), most of whom reported acquisition in South-East Asia (n=8).
* 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 (63%; 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 remained stable, the notification rate decreased by 11% and the test positivity rate decreased by 5% (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 decreased by 82% and the number of unspecified hepatitis B notifications decreased by 9% 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 remained stable among males and by decreased by 21% 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 10% in comparison to the previous 12-month period.

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 total hepatitis B 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 remained stable, the notification rate decreased by 11% 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 notifications increased by 12% and the number of unspecified hepatitis C notifications decreased by 11% 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 decreased by 3% among males and by 20% 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 25 to 34 year olds, and notifications among this age group remained stable in comparison to the previous 12-month period. Notifications among 15 to 19 year olds decreased by 39%.

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

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 42%, primarily among people notified by corrective services.

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