Quarterly Surveillance Report



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

Period ending 31 December 2021 Vol. 21 (1), issued March 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.

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# Summary

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 Number of chlamydia notifications in WA by month, for the two most recent 12-month periods



* The number of chlamydia notifications for the 12-month period from January 2021 to December 2021 was comparable to the previous 12-month period and 4% lower than the previous five-year mean, reflecting relative stability in chlamydia notifications over this period (Table 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 were two notifications among transgender people in the 12-month period from January 2021 to December 2021 and one notification among a transgender person in the 12-month period from January 2020 to December 2020

**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

* The chlamydia notification rate remained stable among both Aboriginal and non-Aboriginal people 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 10% increase in the Pilbara region.

# Gonorrhoea

**Figure** 2 **Number of gonorrhoea notifications in WA by month, for the two most recent 12-month periods**



* The number of gonorrhoea notifications in the most recent 12-month period was 19% lower than the previous 12-month period and 17% lower than the previous five-year mean (Table 1).
* In the current 12-month period, 57% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 70%.

**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 12-month period from January 2021 to December 2021 and two notifications among a transgender person in the 12-month period from January 2020 to December 2020

**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 39% of gonorrhoea notifications and notifications among this age group decreased by 26% 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

**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

* Trends in the gonorrhoea notification rate varied between regions. Most notable was the 13% increase in the Goldfields region and 53% decrease in the South West region.

# Infectious syphilis

**Figure** 3 **Number of infectious syphilis notifications in WA by region and exposure category, for the two most recent 12-month periods**



* A total of four 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, Kimberley and Pilbara regions in Aboriginal children.
* The total number of infectious syphilis notifications was 19% higher than the previous 12-month period and 80% higher than the previous five-year mean (Table 1).
* In the current 12-month period, 77% of notifications had a completed enhanced surveillance form provided by notifying clinicians, compared to the previous five-year mean of 91%.
* Unlike the historical trend, the number of notifications in the Perth metropolitan area categorised as heterosexual was higher than those categorised as MSM from the third quarter of 2020 onwards.
* The number of notifications in the Perth metropolitan area categorised as unknown increased by more than three-fold in comparison to the previous 12-month period (n=47 vs. 14) and the previous five-year mean of 13 cases per 12-month period. There was also a 37% increase in the number of notifications among females, and 13% of those of reproductive age (n=16/125) were pregnant at the time of diagnosis.

**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 among a transgender person in the 12-month period from January 2021 to December 2021 and three notifications among transgender people in the 12-month period from January 2020 to December 2020

* The number of infectious syphilis notifications increased by 9% among males and by 41% among females, resulting in a higher rate ratio 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 49% of infectious syphilis notifications and notifications among this age group increased by 8% in comparison to the previous 12-month period. Notifications among 15 to 19 year olds increased by 96%, predominantly among Aboriginal people in the non-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 increased by 30% among Aboriginal people and by 8% among non-Aboriginal people, resulting in a higher 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: <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-infectious-syphilis-outbreak.htm>.
* The infectious syphilis notification rate remained highest in the Kimberley region and increased by 48% in comparison to the previous 12-month period. A total of 531 infectious syphilis cases (236 male, 295 female) were notified from the beginning of the outbreak in the region in June 2014 to December 2021. Prior to 2014, there had been no infectious syphilis notifications in the region for two years.
* In the Pilbara region, a total of 357 infectious syphilis cases (163 male, 193 female) were notified from the beginning of the outbreak in the region in February 2018 to December 2021. 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 89 infectious syphilis cases (45 male, 44 female) were notified from the beginning of the outbreak in the region in January 2019 to December 2021.

# 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 55 HIV cases were notified in the January to December 2021 period, a 24% decrease compared to the previous 12-month period (n=72) (Table 1).
* The number of HIV notifications in the October to December 2021 quarter (n=15) was stable compared to the previous quarter (n=16). In 2021, the number of quarterly HIV notifications fluctuated between 8 and 16 cases per quarter (Figure 4).
* The decrease in HIV notifications in the January to December 2021 period was mainly due to a decline in male cases, which decreased by 23% compared to the previous 12-month period (60 to 46 cases). Over the same period the number of HIV notifications among females remained stable (9 vs 11 cases). Corresponding with the decrease in male cases, the male: female ratio for new HIV diagnoses decreased from 5.5:1 to 5.1:1 over the two reporting periods.

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 across most age groups over the two 12-month reporting periods. The largest decrease was reported in cases aged 40 to 44 years, where the number of notifications decreased by 69% (Table 14).
* The median age of HIV notifications in the October 2020 to September 2021 period was 40 years (range: 20 to 71 years) and slightly younger than the previous 12-month period (42 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 were five new cases of HIV among Aboriginal people in the January to December 2021 period. 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 2.4 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 39% 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 (82%; n=18).
* The number of male heterosexual HIV cases remained stable over the two reporting periods (Table 16). The majority of these cases in the current period had acquired HIV overseas (67%;n=12), most of whom reported acquisition in South-East Asia (n=8).
* 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 overseas (67%; n=9).

# Hepatitis B

**Figure** 5 **Number of hepatitis B notifications in WA by disease status, for the two most recent 12-month periods**



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 65% and the number of unspecified hepatitis B notifications decreased by 24% 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 decreased by 17% among males and by 33% among females, resulting in a higher rate ratio compared to the previous 12-month period.

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 60 years or older, and notifications among this age group decreased by 16% 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

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



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 decreased by 13% while the number of unspecified hepatitis C notifications remained stable 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

**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 39 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 42% while notifications among those aged 60 years or older increased by 26%.

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 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 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 or remained stable in most regions. Most notable was a 38% decrease in the South West region, primarily among Aboriginal people. The notification rate in the Kimberley region increased by 66%, primarily among non-Aboriginal people.

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