Background Briefing: HIV in Western Australia





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This paper has been developed to provide insight into the profile of HIV in Western Australia (WA). This paper is informed by the latest available research and epidemiological data on HIV in WA.

Western Australia's HIV Strategy

WA's most recent HIV Strategy (2015-2018)¹ is due to expire this year. For the most part, it aligns with the Eighth National HIV Strategy (2018-2022)² with the stated goals being:

- To work towards the virtual elimination of HIV transmission in WA
- To reduce the morbidity and mortality caused by HIV
- To minimise the personal and social impact of HIV

Similarly, the WA HIV Strategy identifies eight of the nine key populations identified in the Eighth National Strategy:

- People living with HIV
- Gay men and other men who have sex with men (MSM)
- Mobile populations
- People from culturally and linguistically diverse backgrounds
- Sex workers
- People who inject drugs (IDU)
- People in custodial settings
- Aboriginal people

The WA Strategy also emphasises that other populations, such as young people, should also be recognised as having unique health needs and potential barriers to sexual health.

HIV Epidemiology in Western Australia

HIV notification rates

The rate of HIV notification in WA has fluctuated between 3.0 and 4.3 per 100,000 in the past 10 years and has been at its lowest point of 3.0 per 100,000 since 2017³.

The latest data from the WA Department of Health shows that there were 67 new HIV diagnoses in WA in the last year (October 2017 to September 2018). Compared to the year before, there was an 7% decrease in the total number of HIV notifications (72 to 67). Of these, 52% were from male-to-male contact while 41% of transmissions were from heterosexual contact. In the October 2017 to September 2018 period, the total number of HIV notifications in males decreased by 18% (65 to 55 cases), while female HIV notifications doubled from 6 to 12 cases⁴.

¹ Western Australia Government Department of Health (2015) WA HIV Strategy 2015-2018, Perth.

² Australian Government Department of Health (2018) Eighth National HIV Strategy 2018-2022, Canberra.

³ Kirby Institute (2018) HIV in Australia: Annual Surveillance Short Report 2018, Sydney.

⁴ Western Australia Government Department of Health (2018) 2018 Third Quarter STI and BBV Report, Perth.

Mode of Transmission	01 Oct 2017 – 30 Sep 2018		01 Oct 2016 – 30 Sep 2017	
	Number	Percent	Number	Percent
Men who have sex with men	35	52%	34	47%
Male Heterosexual	17	25%	27	38%
Female Heterosexual	11	16%	6	8%
Male and Female IDU	1	1%	1	1%
Other/unknown	3	4%	4	6%
Total	67	100%	72	100%

The number of HIV notifications among MSM remained stable in the past year. Most MSM who were diagnosed in this period reported acquiring HIV in Australia (63%)⁵.

In contrast, most men who acquired HIV from heterosexual contact in the same period reported acquiring HIV overseas (76%). Of these men, the majority acquired HIV in South-East Asia (85%). Female HIV notifications attributed to heterosexual exposures almost doubled, compared to the previous twelve months (from 6 to 11). Most of these women were born overseas (64%). Of these women, the majority also acquired HIV overseas (86%)⁶.

The number of Aboriginal people diagnosed with HIV in the last year remained stable with three new notifications. Between 2008 - 2017, there have been thirty-one Aboriginal people diagnosed with HIV in WA⁷.

Aboriginality	01 Oct 2017 – 30 Sep 2018		01 Oct 2016 – 30 Sep 2017	
	Number	Rate	Number	Rate
Aboriginal	3	3.0	3	3.1
Non-Aboriginal	63	2.4	69	2.6
Unknown	1	N/A	0	N/A
Total	67	2.4	72	2.7

In the last year, the median age at diagnosis was 35, with a range of 1 to 73 years. Over the two reporting periods, the number of HIV notifications remained stable across most age groups. The largest decrease was reported in the 40 to 44 age group, where there was a five-case decrease in notifications. The one HIV notification in the 0 to 9 age group was acquired overseas from mother to child⁸. Mother to child transmission is extremely rare in Australia.

Age Group (Years)	01 Oct 2017 – 30 Sep 2018		01 Oct 2016 – 30 Sep 2017	
	Number	Percent	Number	Percent
0 – 9	1	1%	0	0%
10 – 14	0	0%	0	0%
15 – 19	2	3%	2	3%
20 – 24	5	7%	7	10%
25 – 30	10	15%	9	13%
31 – 34	14	21%	12	17%
35 – 39	10	15%	10	14%
40 – 44	4	6%	9	13%
45 – 49	5	7%	5	7%
50 – 54	4	6%	4	6%
55 – 60	4	6%	5	7%
60 +	8	12%	9	13%
Total	67	100%	72	100%

⁵ Western Australia Government Department of Health (2018) 2018 Third Quarter STI and BBV Report, Perth.

⁶ Ibid

⁷ Kirby Institute (2018) HIV in Australia: Annual Surveillance Short Report 2018, Sydney.

 $^{^8}$ Western Australia Government Department of Health (2018) 2018 Third Quarter STI and BBV Report, Perth.

Between 2013 – 2017, 20.9% of MSM, 52.5% of heterosexual men and 42.9% of heterosexual women were diagnosed late in WA (with a CD4 cell count of less than 350 copies)⁹. These data indicate infrequent testing among people at risk of acquiring HIV, such as gay and bisexual men and those from or travelling to high prevalence countries.

Knowledge and Use of PrEP

On 1 April 2018, HIV Pre-Exposure Prophylaxis (PrEP) was listed on the national Pharmaceutical Benefits Scheme (PBS) for people with a current Medicare card and a script from a General Practitioner (GP). The cost to a general patient under the PBS is \$39.50 and \$6.40 for concession card holders. Prior to this, most PrEP users in WA accessed the medication through the PrEPIT-WA trial (funded by the WA Government) which ceased enrolling new participants in September 2018 when PrEP became available on the PBS.

According to the Perth Gay Community Periodic Survey, awareness of PrEP among gay and bisexual men has rapidly increased over the last 3 years, from 21.7% in 2014 to 67.8% in 2017¹⁰.

The proportion of HIV-negative men in WA who reported PrEP use increased from 1.3% in 2012 to 4.5% in 2017. The proportion of HIV-negative men who had condomless anal sex and reported taking PrEP increased from 2.8% in 2014 to 16.0% in 2017. Among the twenty-six men who reported taking PrEP in the six months prior to the 2017 survey, the majority were buying it online from overseas pharmacies (69.2%), with a smaller group obtaining PrEP from a trial or study (11.5%)¹¹. However, these data were collected prior to the PrEPIT-WA trial beginning (the trial offered 2,000 places and began in November 2017) and, as such, the current data would likely be different, with many more men in WA accessing PrEP today (either through their GP or a trial) than in early 2017.

HIV Testing

The importance of testing

HIV testing is critical if Australia is to reach its target of virtually eliminating HIV transmissions by 2022, as set out in the Eighth National HIV Strategy¹². Testing enables the individual to know their status, which builds the capacity of key populations and individuals to minimise the risk of transmission.

Testing supports healthcare workers or peer testers to engage an individual in a discussion about HIV risk. For an HIV negative person this can involve a discussion that reinforces the need to adopt risk reduction strategies such as condoms or PrEP to avoid exposure to HIV. For a person who returns a positive result, testing provides a critical opportunity to support the individual to access care and to start a conversation around commencing treatment.

In 2017, the majority of participants in the Perth Gay Community Periodic Survey reported that they had been tested for HIV in their lifetime. The proportion of men reporting that they had been tested for HIV in their lifetime increased from 75.1% in 2010 to 89.1% in 2017. In 2017, almost three-quarters of HIV-negative men surveyed (73.1%) reported having a HIV test in the 12 months prior to the survey. This is the highest level of recent HIV testing recorded in the Perth survey between the years 2010 and 2017¹³.

Community based and rapid HIV testing

The M Clinic in Perth (operated by Western Australian AIDS Council) offers peer-based rapid HIV and STI testing to gay and bisexual men in a community-based setting. In jurisdictions where community-based testing exists, gay men

⁹ Kirby Institute (2018) HIV in Australia: Annual Surveillance Short Report 2018, Sydney.

¹⁰ Lee, L. et al (2017) Gay Community Periodic Survey: Perth 2017. Centre for Social Research in Health, UNSW, Sydney.

¹¹ Ibid

¹² Australian Government Department of Health (2018) Eighth National HIV Strategy 2018-2022, Canberra.

¹³ Lee, L. et al (2017) Gay Community Periodic Survey: Perth 2017. Centre for Social Research in Health, UNSW, Sydney.

who had never previously been tested, or who had irregular patterns of testing, are more likely to get tested and then return for routine testing¹⁴. These men also report very high levels of satisfaction with these types of services.

Overall, gay and bisexual men have expressed a strong preference for rapid HIV testing over conventional HIV testing. These men report high-levels of satisfaction in having HIV testing in a welcoming, culturally-appropriate environment delivered by peers¹⁵. Gay and bisexual men also report finding rapid HIV testing more convenient, more comfortable and less stressful than conventional HIV testing in clinical settings¹⁶. Services such as M Clinic are therefore essential in maintaining the high levels of HIV testing among key populations such as gay, bisexual and other MSM.

HIV Treatment

HIV treatment is beneficial as it allows the individual to enjoy good health, and to look forward to a full life expectancy if treatment is started early and taken as prescribed¹⁷. As well as this, once on treatment, individuals who achieve an undetectable viral load cannot transmit HIV to another person¹⁸. 90% of all the HIV-positive men surveyed in the 2017 Perth Periodic Survey reported being on treatment. Of those men on treatment, 93% reported an undetectable viral load¹⁹.

In Summary

WA's HIV profile is unique in that the proportion of new diagnoses among heterosexuals is relatively high when compared to other Australian jurisdictions.

More effort will need to be made to tailor programs and health promotion messaging to heterosexuals (especially those from or travelling to high prevalence countries) and to encourage regular testing and treatment, if necessary. The high rate of late diagnoses among this population group in WA indicates that key messages around regular testing may not be getting through. Identifying and addressing barriers to testing in WA, dispelling misinformation about HIV risk for some populations of heterosexuals, and challenging HIV stigma will be critical going forward.

Nevertheless, gay, bisexual and other MSM continue to be over-represented in the HIV notification data and still account for around half of new HIV diagnoses. Ensuring that targeted and relevant health promotion messaging and tailored services aimed at this population group continue is vital.

As with other jurisdictions, biomedical prevention methods such as PrEP and Treatment as Prevention (TasP), as well as condom use and regular testing, will continue to play an important role in the effort to virtually eliminate new HIV transmissions in WA.

¹⁴ Conway D. et al (2015) Rapid HIV Testing Is Highly Acceptable and Preferred among High-Risk Gay and Bisexual Men after Implementation in Sydney Sexual Health Clinics, accessible at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4405382/

¹⁵ Ibid

¹⁶ Ibid

¹⁷ The InSIGHT START Study Group (2015) Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection. New England Journal of Medicine. 373 (9): 795-807

¹⁸ Cohen, M. et al (2011) Prevention of HIV-1 Infection with Early Antiretroviral Therapy. New England Journal of Medicine. 365 (6): 493-505

¹⁹ Lee, L. et al (2017) Gay Community Periodic Survey: Perth 2017. Centre for Social Research in Health, UNSW, Sydney.