

VARIATIONS IN HIV PREVENTION COVERAGE BY STATE, AGE, COUNTRY OF BIRTH, SEXUAL IDENTITY, AND PROPORTION OF GAY RESIDENTS: ANALYSIS OF AUSTRALIAN GAY COMMUNITY PERIODIC SURVEYS 2015-20

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Background:

In behavioural surveillance of gay and bisexual men we have tracked the impact of PrEP and treatment as prevention, and 'net prevention coverage' (the use of any effective strategy e.g. condoms, PrEP or undetectable viral load). Here we assess variations in prevention coverage across Australia.

Methods:

We included national data collected during 2015-20. Trends in net prevention coverage were assessed with logistic regression, stratifying by state, age, country of birth, sexual identity and proportion of gay residents.

Results:

32,593 survey responses from participants with casual male partners were included. The mean age of the sample was 36.7 years, 89.5% were gay-identified, 69.7% Australian-born and 9.1% were HIV-positive. Nationally, net prevention coverage increased from 68.3% in 2015 to 78.7% in 2020 ($p<.001$), influenced by rising PrEP use (1.2% to 34.6%, $p<.001$). Net prevention coverage varied by state (from 68.8% in TAS to 81.9% in VIC in 2020). Participants aged under 25 were the most likely to report consistent condom use (42.7% in 2015 to 32.3% in 2020, $p<.001$), 35-44 year olds were the most likely to use PrEP (1.8% to 42.2%, $p<.001$) and 45-54 year olds the most likely to use/report undetectable viral load (12.6% to 10.7%, $p=.443$). In 2020, net prevention coverage was similar for Australian and overseas-born men (78.5% vs. 79.3%), and higher among gay-identified than non-gay-identified participants (79.9% vs. 71.3%). During 2015-20, net prevention coverage increased the most in suburbs with >10% gay residents (71.1% to 84.1%, $p<.001$) and less in suburbs with <5% gay residents (66.1% to 75.7%, $p<.001$).

Conclusion:

Net prevention coverage has increased nationally, concentrated in (and driven by) locations with more gay residents (with smaller increases elsewhere). Younger men remain more focused on condom use, with biomedical prevention concentrated among older participants. Recognising and responding to these variations is necessary to achieve more equal HIV prevention coverage.

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