

PrEP becomes most common HIV prevention strategy used by gay and bisexual men in Australia and 'net prevention coverage' increases: results of repeated, national behavioural surveillance, 2014-19

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Background

- Combination prevention raises the possibility that sexual transmission of HIV can be eliminated in Australia
- Combination prevention = condoms, pre-exposure prophylaxis (PrEP) and HIV treatment as prevention
- We assessed trends in these strategies and the proportion of gay and bisexual men (GBM) protected by any of them – what we are referring to as *net prevention coverage*
- We also assessed trends in the characteristics of GBM at risk of HIV, to see if this group had become more/less at risk over time





Sample

- Gay Community Periodic Surveys, national data, 2014-19
- n=32,048 GBM who had casual partners
- Median age 34 yrs (IQR 27-45)
- 90% gay, 7% bisexual
- 70% Australian born
- 3% Aboriginal or Torres Strait Islander
- 82% HIV-negative, 10% HIV-positive, 9% untested/unknown



Sexual practices with casual male partners in the 6m prior to survey



Net prevention coverage





Biomedical prevention coverage during CAIC



CAIC: HIV-negative/untested not on PrEP

- CAIC: HIV-positive not on treatment or detectable viral load
- CAIC: HIV-negative on PrEP
- CAIC: HIV-positive on treatment with undetectable viral load
- CAIC = condomless anal intercourse with casual partners



Biomedical prevention coverage during CAIC





Analysis of 'at risk' group (the men in red)

| | 2014 | 2019 | <i>p</i> value | Adjusted Odds Ratio (95% CI) |
|-----------------------------------|---------------|---------------|----------------|--------------------------------------|
| Mean age | 34.3 yrs | 35.2 yrs | .014 | 1.17 (1.00-1.37) |
| Gay identity Bisexual identity | 90.2% 7.2% | 87.3% 9.5% | .009 .008 | 0.95 (0.90-0.99) 1.07 (1.01-1.12) |
| Born overseas | 24.2% | 30.2% | <.001 | 1.05 (1.01-1.08) |
| University degree | 41.5% | 50.7% | <.001 | 1.05 (1.03-1.08) |
| No. of male partners last 6m | . = 0 (| | | |
| 0-1 | 4.5% | 7.7% | .002 | 1.08 (1.02-1.15) |
| >10 | 39.6% | 30.3% | <.001 | 0.91 (0.88-0.94) |
| Any CAIR | 49.8% | 54.7% | .011 | 1.03 (1.00-1.06) |
| Frequent CAIC | 23.7% | 30.1% | <.001 | 1.10 (1.07-1.14) |



Analysis of 'at risk' group cont.

| | 2014 | 2019 | <i>p</i> value | Adjusted Odds Ratio (95% CI) |
|---------------------|-----------------|-------|----------------|------------------------------|
| Serosorting | 49.9% | 51.7% | .696 | - |
| Viral load sorting | 9.6% | 14.9% | <.001 | 1.08 (1.04-1.13) |
| PrEP sorting | 21.4% [in 2017] | 33.9% | <.001 | 1.37 (1.27-1.49) [crude OR] |
| HIV test last 6m | 61.6% | 68.5% | <.001 | 1.06 (1.03-1.09) |
| PEP last 6m | 5.6% | 5.4% | .745 | - |
| Any injecting | 7.5% | 3.7% | <.001 | 0.87 (0.82-0.94) |
| Party drugs for sex | 31.0% | 22.3% | <.001 | 0.96 (0.92-0.99) |



Summary

- In 2019, PrEP replaced condoms as the most commonly used HIV prevention strategy by GBM
- Net prevention coverage increased to 75% in 2019
- PrEP/TasP coverage during CAIC reached 60% in 2019
- The 'at risk' group appears less at risk than before

- These conditions are likely to have contributed to falling HIV infections in Australia
- If coverage can be further increased, virtual elimination of sexual transmission between GBM may be possible



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- State/territory health departments
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 Department of Health



GAY COMMUNITY PERIODIC SURVEY

