

# DECREASING HIV INCIDENCE BUT STABLE AND INCREASING INCIDENCE OF SEXUALLY TRANSMISSIBLE INFECTIONS AMONG TRANS AND GENDER NON-BINARY PEOPLE IN AUSTRALIA: A 10-YEAR NATIONAL STUDY

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## Background:

Transgender and non-binary ('trans') people are disproportionately affected by HIV. In Australia, efforts to improve HIV prevention among trans populations include community-based testing, pre-exposure prophylaxis (PrEP), and increasing access to gender affirmation. To track progress towards reduced transmission, we conducted a longitudinal study of HIV prevention among a clinical cohort of trans people in Australia.

## Methods:

A decade of de-identified health record data (2013-2022) were extracted from 83 general practices, sexual health clinics, hospitals, and community services participating in the 'ACCESS' sentinel surveillance system. Among trans people HIV-negative at baseline, HIV testing and PrEP were assessed. Annual HIV incidence was estimated using repeat testing. Wilcoxon rank-sum and Poisson regression investigated time-trends and gender differences.

## Results:

5,640 HIV-negative trans people attended a site (3,398 women, 1,779 men, 463 non-binary). Annual HIV test uptake increased from 54.9% in 2013 to 56.8% in 2022 ( $p=0.045$ ); the mean number of tests per patient annually increased from 1.21 in 2013 to 1.66 in 2019 ( $p<0.001$ ) before decreasing to 1.03 in 2022 ( $p<0.001$ ). PrEP became available in 2016 with 15.0% uptake among trans patients, which increased to 17.1% in 2019 ( $p<0.001$ ) then decreased to 15.1% in 2022 ( $p<0.001$ ). PrEP uptake was highest among trans women (25.9%), then non-binary people (15.3%) and trans men (7.7%;  $p<0.001$ ). Overall, 67 incident infections were detected, an incident rate of 0.81/100PY among non-binary people (95%CI:0.41-1.62), 0.49/100PY trans women (95%CI:0.38-0.64), and 0.16/100PY trans men (95%CI:0.07-0.36). HIV incidence was 0.68/100PY in 2013, declining 92.6% over ten years to 0.051/100PY in 2022 (IRR=0.78, 95%CI:0.72-0.86).

## Conclusion:

HIV incidence has fallen dramatically among trans people in Australia. Although gains in HIV testing and PrEP were achieved, these were interrupted from 2019 likely due to COVID-19. Renewed efforts are needed to achieve HIV transmission elimination and translate Australia's successes to support trans populations globally.

**Disclosure of Interest Statement:**