

TRENDS IN THE INCIDENCE OF SEXUALLY TRANSMISSIBLE INFECTIONS AMONG TRANSGENDER AND GENDER NON-BINARY PEOPLE IN AUSTRALIA: A 10-YEAR NATIONAL STUDY

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Background:

Globally, transgender and gender non-binary (hereafter 'trans') people experience disproportionate rates of HIV, but less is known about other sexually transmissible infections (STIs). In Australia, epidemiological details on STIs among trans populations is also lacking, impeding programming and policy. To address this gap, we undertook a longitudinal national study of STI incidence.

Methods:

Ten years of de-identified data were extracted from 83 general practices, sexual health clinics, hospitals, and community services participating in the *Australian Collaboration for Coordinated Enhanced Sentinel Surveillance* (ACCESS). Among trans patients, repeat testing estimated annual incidence. Poisson regression analyses assessed time-trends and within-population differences.

Results:

During 2013-2022, 5,701 trans people attended a sentinel site, with 4,525 tested for HIV/STIs (2,846 trans women, 1,273 trans men, 406 non-binary people). Chlamydia incidence (any anatomical site) increased (28.7/100PY in 2013 to 33.7/100PY in 2022, $p=0.005$) with differences by gender: 36.2/100PY among trans women (95%CI:34.8-37.8), 24.9/100PY among non-binary people (95%CI:21.3-29.1), and 14.2/100PY among trans men (95%CI:12.3-16.3, $p's<0.001$). While urogenital and pharyngeal infections were stable, anorectal incidence increased 79% during the study period ($p<0.001$). Gonorrhoea incidence (any site) was stable (24.5 in 2013 and 28.1/100PY in 2022, $p=0.2$) and similar among trans women (32.1/100PY, 95%CI:30.7-33.5) and non-binary people (32.0/100PY, 95%CI:27.9-36.8, $p=0.9$) but lower among trans men (10.5/100PY, 95%CI:8.9-12.4, $p<0.001$). Again, while urogenital and pharyngeal infections were stable, anorectal incidence increased 30% ($p<0.001$). Infectious syphilis incidence was stable (4.3 and 2.3/100PY, $p=0.09$) and higher among non-binary people (5.5/100PY, 95%CI:4.2-7.2) compared to trans women (4.1/100PY, 95%CI:3.7-4.5, $p<0.001$) and men (1.7/100PY, 95%CI:1.3-2.2, $p=0.045$).

Conclusion:

Trans people in Australia have an STI epidemiology heterogeneous by gender. As incidence of these infections has increased or remained stable, there is need for enhanced prevention and management. Testing for anorectal infections should be

prioritised, while Australia's STI strategies should include trans people as a 'key population'.

Disclosure statements:

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