

TRENDS AND RISK FACTORS OF INFECTIOUS SYPHILIS AMONG WOMEN AND HETEROSEXUAL MEN IN MAJOR AUSTRALIAN CITIES: ANALYSIS OF NATIONAL SENTINEL SURVEILLANCE DATA 2011-2019

Carter A,^{1,2} McManus H,¹ Vickers T,¹ Asselin J,³ Chow EPF,^{4,5,6} Chen M,^{4,5} Fairley C,^{4,5} Bourne C,^{1,7} McNulty A,^{7,8} Reed P,⁹ Heath K,⁹ Ryder N,^{1,10,19} McCloskey J,^{11,12} Carmody C,¹³ McCormack H,^{1,20} Alexander K,¹⁷ Casey D,¹⁷ Ward J,¹⁸ Stoové M,^{3,14,15} Hellard M,^{3,14,16} Donovan B,¹ Guy R,¹ On behalf of ACCESS

¹ The Kirby Institute, UNSW Sydney, ² Faculty of Health Sciences, Simon Fraser University, ³ Burnet Institute, Melbourne, ⁴ Melbourne Sexual Health Centre, Alfred Health, ⁵ Central Clinical School, Monash University, ⁶ Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, ⁷ Sydney Sexual Health Centre, Sydney Hospital, ⁸ School of Population Health, UNSW Sydney, ⁹ Kirketon Road Centre, ¹⁰ Hunter New England Clinic, ¹¹ Royal Perth Hospital Sexual Health Clinic, ¹² Division of Infection & Immunity, The University of Western Australia, ¹³ Liverpool Sexual Health Clinic, ¹⁴ School of Public Health and Preventive Medicine, Monash University, ¹⁵ School of Psychology and Public Health, La Trobe University, ¹⁶ Department of Infectious Diseases, Alfred Health and Monash University, ¹⁷ National Aboriginal Community Controlled Health Organisation, ¹⁸ UQ Poche Centre for Indigenous Health, University of Queensland, ¹⁹ School of Medicine and Public Health, University of Newcastle ²⁰ NSW STI Programs Unit

Background: In Australia, infectious syphilis notifications have increased from 1280 in 2009 to 5078 in 2018. Although historically concentrated among urban men who have sex with men and remote Indigenous communities, a rise in syphilis notifications among women in major cities and cases of congenital syphilis have been observed. We analysed trends in infectious syphilis positivity among women and heterosexual men in major Australian cities and identified associated risk factors.

Methods: De-identified data were extracted from 34 sexual health clinics within ACCESS. Included patients were 52,221 women and 36,341 heterosexual men ≥ 15 years who lived in major cities who had attended a sexual health clinic for the first time during the study period. Infectious syphilis positivity was defined as the proportion of attendees per calendar year with recorded syphilis testing who had recorded diagnoses of infectious syphilis. Poisson regression determined annual trends in positivity (rates per 1000 tests) and risk factors for infectious syphilis (rate ratios [95% CIs]).

Results: Between 2011 and 2019, infectious syphilis positivity increased by 63% in women (1.82[1.01–2.02] to 2.98[2.76–4.34]) and 24% in heterosexual men (6.06[2.74–4.92] to 7.56[5.37–8.13]). For both men and women, infectious syphilis was higher in those reporting lifetime injecting drug use (women:4.87[2.18–10.86]; men:1.96[0.96–3.99] and those from disadvantaged areas (women: 2.01[1.37–2.93]; men: 2.57[1.44–4.57]). For women only, infectious syphilis was higher among Indigenous women (2.39[1.22–4.70]) and women from culturally and linguistically diverse backgrounds (3.72[1.41–9.81]), and lower in bisexually active women (0.48[0.29–0.89]) and female sex workers (0.35[0.29–0.44]). Among men only, it was higher among those aged 40–49 years (2.08[1.38–3.13]) and ≥ 50 (2.33[1.50–3.61]).

Conclusion: Increasing syphilis in women and heterosexual men in major Australian cities requires enhanced prevention, including integration of culturally appropriate sexual and reproductive health care into harm reduction programs.

Disclosure of interest:

Nothing to declare.