INCREASE IN SYPHILIS TESTING AND DETECTION OF EARLY SYPHILIS AMONG MEN WHO HAVE SEX WITH MEN ACROSS AUSTRALIA, 2007-2014

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Introduction: Australia’s national strategy for controlling syphilis in gay, bisexual and other men who have sex with men (GBM) has been based on frequent syphilis screening of GBM. This study examined trends in syphilis testing and detection to determine the effectiveness of Australia’s national response.

Methods: Data on syphilis testing and diagnoses among GBM from 46 sexual health clinics from the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of Sexually Transmissible Infections and Blood Borne Viruses (ACCESS) from 2007 to 2014 were analysed. The proportion of GBM serologically tested for syphilis, tests per man, and number of early syphilis cases was determined for each year. P values were calculated using the chi-square test for proportions and Poisson regression for count data.

Results: 117,387 GBM attended a clinic during the period; 17\% were HIV positive. From 2007 to 2014, the proportion of GBM tested for syphilis increased in HIV-negative (48\% to 91\%, $p_{trend}<0.001$) and HIV-positive men (42\% to 77\%, $p_{trend}<0.001$). Mean tests per man per year increased from 1.3 to 1.6 among HIV-negative men ($p_{trend}<0.001$) and from 1.6 to 2.3 among HIV-positive men ($p_{trend}<0.001$). Among HIV negative men, the number of syphilis cases increased over the study period (primary: from 117 to 225; secondary: 59 to 113; and early latent: 65 to 262; [each $p_{trend}<0.001$]). Similarly, the number of syphilis cases also increased among HIV-positive MSM over the study period (primary: from 30 to 67; secondary: 41 to 60; and early latent: 21 to 103; [each $p_{trend}<0.001$]). Among HIV negative men, the proportion of early syphilis cases in HIV negative men that were latent increased from 23\% to 45\% ($p_{trend}<0.001$) and among HIV positive men from 27\% to 44\% ($p_{trend}<0.001$).

Conclusion: Syphilis screening and detection of asymptomatic infection increased substantially but has not been sufficient to prevent a worsening epidemic

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