

## **Research School of Population Health Seminar Series**

## **MAE SEMINAR**

## Trends in the epidemiology of infectious syphilis among gay and bisexual men in Melbourne: 2012-2019

Caroline Taunton, MAE Scholar

Thursday 27<sup>th</sup> August 2020, 13:00 – 13:15

Zoom Link Meeting ID: 989 2327 2351 Password: 037507



Caroline is an MAE student and is placed with the Burnet Institute in Melbourne. Her MAE projects centre on the surveillance of sexually transmitted infections among priority populations in Australia.

Caroline has previously worked in health management and analytical roles in the UK and Australia. She has a particular interest in health informatics and in harnessing technology to enhance clinical and public health outcomes.

## **Abstract**

**Background:** Notifications of infectious syphilis in Australia have increased every year since national notification was introduced in 2002. Between 2012 and 2019, Victoria reported the most infectious syphilis cases of all Australian jurisdictions, with the majority detected among gay, bisexual and other men who have sex with men (GBM). In order to support the ongoing public health response, this study describes recent trends in the epidemiology of infectious syphilis among GBM attending General Practice (GP) clinics specialising in gay men's health.

**Methods**: Demographic, consultation and syphilis pathology data for GBM attending three inner-Melbourne GP clinics were obtained from the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of sexually transmitted infections and blood borne viruses (ACCESS). We conducted a retrospective descriptive analysis of testing and test positivity data, stratified by HIV status, and used generalised linear models to assess trends over the study period.

**Results:** A total of 2217 cases of infectious syphilis were detected among 16 723 GBM attending the clinics during the eight-year study period. Between 2012 and 2019, annual syphilis testing rates increased from 74.3% to 81.5% ( $p_{trend}$ <0.01) among HIV-positive GBM, and from 56.5% to 73.4% ( $p_{trend}$ <0.001) among HIV-negative GBM. Annual infectious syphilis test positivity increased from 1.9% in 2012 to 4.9% in 2019 ( $p_{trend}$ <0.001) among HIV-negative GBM. We found an increasing trend in the number of infectious syphilis cases detected among HIV-positive ( $p_{trend}$ <0.001) and HIV-negative GBM ( $p_{trend}$ <0.001), with more infectious syphilis cases detected among HIV-negative GBM than among HIV-positive GBM during the last three years of the study period.

**Conclusions:** While increases in annual syphilis testing rates among GBM are encouraging, increasing infectious syphilis test positivity among HIV-negative GBM and the increasing representation of these men in infectious syphilis cases requires further investigation and a focused intervention as part of the ongoing public heath response to infectious syphilis in Victoria.