

GONORRHOEA INCREASES AMONG NON-ABORIGINAL HETEROSEXUAL PEOPLE IN METROPOLITAN WESTERN AUSTRALIA

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Background: In Western Australia (WA), gonorrhoea has historically affected Aboriginal people in non-metropolitan regions and men who have sex with men (MSM) in the metropolitan region. Recently, there has been a surge in notifications among non-Aboriginal heterosexual males and females in the metropolitan region. It has been suggested that the increase is artefactual resulting from increased testing and introduction of dual testing (chlamydia and gonorrhoea). We describe trends in gonococcal notifications among non-Aboriginal heterosexual people in metropolitan Perth and explore if there is a true increase in disease.

Methods: Analysis of Western Australian gonococcal notification, testing and enhanced surveillance data from 2012-2016.

Results: In the Perth metropolitan area from 2012-2016, the number and rate of gonorrhoea notifications more than doubled, from 964 cases (51/100,000) to 2,276 cases (109/100,000). This reflected a 2.4-fold increase in non-Aboriginal rates from 43/100,000 (807 cases) to 103/100,000 (2,116 cases) with no increase in Aboriginal rates.

Of the metropolitan non-Aboriginal cases notified from 2012-2016, the largest increase was among heterosexual females (3-fold increase) followed by heterosexual males and MSM (both 2-fold increase). Females were younger than males (median: 27 vs 30 years).

While overall testing rates in the metropolitan area only increased by 20%, test positivity doubled.

Conclusion: Gonorrhoea infections have increased markedly among Perth metropolitan heterosexual people, particularly among females. This cannot be explained by changes in testing and/or diagnostic practices indicating a true increase in disease. Reasons for this are likely to be multifactorial, highlighting the need for further research to identify human risk behaviours (e.g. use of online dating apps, recreational drug use, lack of condom use) or changes in the organism that facilitate transmission, thus enabling appropriate public health action.

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