

Spatiotemporal expansion of infectious syphilis notifications by sexual exposure groups, NSW, 2017 to 2023

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Background:

Australia is experiencing significant increases in infectious syphilis notifications. We report the epidemiology of infectious syphilis in NSW focusing on sexual groups, socio-economic disadvantage and remoteness.

Methods:

We extracted infectious syphilis notifications for NSW residents ≥ 15 years of age from the notification system, 2017 to 2023. Data were classified according to: sexual exposure group [i) females regardless of sex of partner (F), ii) males who reported sex with females only (MSF), iii) males who reported sex with both sexes (MSF&M) and iv) males who reported sex with males only (MSM)]; place of residence; Index of Relative Socio-economic Disadvantage; remoteness areas; and time (before (T1) and after 30 June 2020 (T2)). Change over time was compared using Person's Chi-squared and Wilcoxon rank sum tests.

Results:

9,916 notifications were classified, with 69.0% MSM, 13.4% MSF, 9.6% F, and 8.0% MSF&M. The greatest increase in notifications from T1 to T2 was for F (92%), followed by MSF (36%) and MSM (8%). Female and MSF notifications increased in inner Sydney and expanded into western Sydney suburbs and to nearly all regions of NSW in P2, which included a declared heterosexual outbreak in northern NSW. MSM notifications, while concentrated in inner Sydney, showed growth along the eastern seaboard. MSF&M notifications were generally confined to central and eastern NSW and inner Sydney. Females had the largest proportion of notifications associated with residing in regions with most disadvantage (29.1%), followed by MSF (21.7%), MSFM (14.6%) and MSM (9.8%). Disadvantage increased among all groups between T1 and T2 (P value 0.017 to <0.001).

Conclusion:

Evidence of expansion of infectious syphilis notifications across NSW, including into regions of socio-economic disadvantage is concerning. The NSW response to syphilis must strengthen health services in disadvantaged areas, including improving the implementation of the 'No Wrong Door' approach to STI screening.

Disclosure of Interest Statement:

Nil