Incidence trends and inequalities among GBMSM have not been described across multiple jurisdictions.

Methods A random sample of reported gonorrhoea cases was interviewed and weighted to estimate GBMSM status of all cases reported in 12 geographically disparate states and/or cities collaborating in SSuN. Census and Gallup opinion polling data were used to estimate size of GBMSM, heterosexual male and female populations by age group at the state, county and city level for 2010–2013. Incidence rates and rate-ratios were calculated comparing incidence trends among GBMSM, heterosexual males and females.

Results The estimated size of GBMSM population varied across SSuN jurisdictions from 2.8% of males in Alabama to 15.4% in San Francisco. The proportion of male gonorrhoea cases attributable to GBMSM also varied by jurisdiction (range: 13.6% to 92.4%). GBMSM incidence increased in SSuN sites from 1,169.7 cases per 100,000 in 2010 to 1,474.4 in 2013, increased modestly among heterosexual men and remained stable among females at 106 cases per 100,000. The rate-ratio of GBMSM to females and to heterosexual men during the study period ranged from 10.7 to 13.9. The highest incidence among GBMSM across all sites was observed for those aged 25–29 years with estimated annual incidence exceeding 3,400 cases per 100,000 across the entire study period.

Conclusion Gonorrhoea incidence among GBMSM is increasing in a sentinel network of US jurisdictions. Estimates of the size of this population and ascertainment of GBMSM status for reported cases are essential first steps for better understanding the changing epidemiology of gonorrhoea.

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P11.18 RELATIONSHIP BETWEEN ANAL SEX BEHAVIOURS AND INCIDENT SYPHILIS INFECTION AMONG MSM AND TRANSGENDER WOMEN FROM TWO CLINICS IN LIMA PERU

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Background Cross-sectional studies have shown an independent association between receptive anal sex and active syphilis among men who have sex with men (MSM) and transgender women (TW). This study sought to evaluate the relationship between role in anal sex and incident syphilis in a cohort of MSM/TW in Lima, Peru.

Methods We are conducting an observational cohort study of MSM/TW recruited from two STI clinics. In quarterly follow-up visits, participants provide behavioural data, and serologic testing is performed for HIV and syphilis. Participants’ roles in anal sex reported at baseline were categorised as insertive, receptive or versatile. Participants with active syphilis (i.e. RPR titer ≥1/16 and TPPA ≥1:80) were treated according to CDC guidelines. We evaluated the relationship between anal sex role and incident syphilis with a multivariate logistic regression model using generalised estimating equations for longitudinal data.

Results At baseline, among the 401 participants, mean age was 31.6 years (SD 9.6); when asked about their role in anal sex, 32%, 46% and 22% reported being receptive, versatile and insertive, respectively. Prevalence of active syphilis was 22% at baseline; incidence was 18% and 23% at the third and sixth follow-up visits, respectively. In multivariate analysis, after controlling for age, education, employment, income, gender identity, number of sexual partners, alcohol/drug use, unprotected sex, and HIV, the odds for incident syphilis were higher among people who had defined their anal sex role as receptive (aOR = 2.48 (95% CI 1.23–5.02)) or versatile (aOR = 2.38 (95% CI 1.27–4.47)) as compared to the insertive role.

Conclusions MSM/TW who defined their role in anal sex as receptive or versatile showed a significantly higher syphilis incidence in this longitudinal analysis. Further research is needed to