

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 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.

Disclosure of interest statement The STD Surveillance Network (SSuN) is funded by the US Centres for Disease Control and Prevention (CDC). No pharmaceutical grants were received in the development of this study.

P11.17 INTENSIFICATION OF A SHIGELLOSIS EPIDEMIC ASSOCIATED WITH SEXUAL TRANSMISSION BETWEEN MEN: DIAGNOSES OF *SHIGELLA FLEXNERI* AND *S. SONNEI* IN ENGLAND, 2004 TO 2015

^{1,2}N Field, ¹T Childs, ³C Jenkins, ¹I Simms, ¹VL Gilbart, ³TJ Dallman, ⁴P Mook, ⁴PD Crook, ¹G Hughes*. ¹HIV and STI Department, Public Health England Health Protection Services, Colindale; ²Department of Infection and Population Health, University College London; ³Gastrointestinal Bacteria Reference Unit, Public Health England Reference Microbiology Services, Colindale; ⁴Public Health England Health Protection Field Epidemiology Services

10.1136/sextrans-2015-052270.465

Introduction Although Shigellosis is often associated with travel to high incidence regions, outbreaks of *Shigella flexneri* and *S. sonnei* associated with sexual transmission between men have been reported in the UK, Australia and elsewhere. We examined national trends in *Shigella* spp. diagnoses to explore the evidence for on-going sexual transmission of *S. flexneri* 3a and transmission of other *Shigella* serotypes or species between men in England.

Methods Local hospital laboratories submit presumptive strains of *Shigella* spp. to the Public Health England national reference laboratory for confirmation and typing. We report trends in diagnoses in men and women aged 16 to 60 years old, excluding cases with recent travel outside the UK.

Results Between January 2004 and February 2015, 53% (5,051/9,534) of *Shigella* spp. diagnoses made in England were not travel-associated, and diagnoses of *S. flexneri* 3a, *S. flexneri* 2a, and *S. sonnei* accounted for 78% of these cases. *S. flexneri* 3a

diagnoses in men increased steadily from 2004 (3 cases) and peaked in 2013 (154 cases). Diagnoses of *S. flexneri* 2a in men followed a similar pattern, although increases emerged later, rising from 9 cases in 2004 to 220 cases in 2014. In 2010, diagnoses of *S. sonnei* in men began to exceed those in women (147 compared to 133 cases), and have since risen steadily in men (267 cases in 2014). Diagnoses in women remained low/stable throughout the study period, and the male to female gender ratios increased substantially, peaking in 2014 at 59:1, 17:1 and 3:1 for *S. flexneri* 3a, *S. flexneri* 2a, and *S. sonnei*.

Conclusion Surveillance data suggest an intensification of the shigellosis epidemic associated with sex between men in England. The timing and heterogeneity in species and serotypes implies separate introductions into the population. These data raise the possibility of new shigellosis outbreaks occurring elsewhere.

Disclosure of interest statement No pharmaceutical grants were received in the development of this study.

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

^{1,2}VA Benites-Zapata*, ³KA Konda, ^{1,2}SR Leon, ³J Chow, ⁴B Brown, ^{1,2}CF Caceres, ³JD Klausner. ¹Unit of Health, Sexuality and Human Development, Universidad Peruana Cayetano Heredia, Lima, Peru; ²Sexual Health Laboratory, Universidad Peruana Cayetano Heredia, Lima, Peru; ³Division of Infectious Diseases, UCLA David Geffen School of Medicine, Los Angeles, California, USA; ⁴Department of Population Health & Disease Prevention, UC Irvine, Irvine, California, USA

10.1136/sextrans-2015-052270.466

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 $\geq 1/16$ and TPPA $\geq 1:80$) 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