

Of 7584 test events positive for chlamydia or gonorrhoea, 1028 (13.6%) were positive for either infection at multiple sites. Being aged 16–29 (aOR = 2.9, 95% CI = 1.8–4.6) or 30–39 (aOR = 2.4, 95% CI = 1.5–3.9) was associated with testing positive for either infection at multiple sites.

Conclusion The high prevalence of co-occurring STIs and infection at multiple anatomical sites supports national guidelines for frequent comprehensive testing for GBM. These results support the promotion of comprehensive STI testing for GBM, including in lower-caseload settings alongside taking appropriate sexual histories, and underline the importance of structural efforts to maximise access to comprehensive testing for GBM.

Disclosure of interest statement All authors have no conflicts to declare. The authors gratefully acknowledge patients and participating clinics and laboratories for the ongoing data contribution. The authors acknowledge Drs Norm Roth and BK Tee for their ongoing support of surveillance work at the Burnet Institute. The Victorian Department of Health funds ongoing surveillance projects within the Burnet Institute. The authors would like to acknowledge the NHMRC who provide funding to Anna Wilkinson as a public health scholarship recipient. Mark Stoové is supported by an NHMRC Career Development Fellowship. The authors gratefully acknowledge the contribution to this work of Victorian Operational Infrastructure Support Program received by the Burnet Institute.

P11.12 PHARYNGEAL NEISSERIA GONORRHOEAE AND CHLAMYDIA TRACHOMATIS IN MEN AND WOMEN WITH A HISTORY OF RECEPTIVE ORAL AND ANAL INTERCOURSE

¹CS Danby*, ²LA Cosentino, ²LK Rabe, ²CL Priest, ²KC Damare, ²IS Macio, ²LA Meyn, ^{1,2}HC Wiesenfeld, ^{1,2}SL Hillier. ¹University of Pittsburgh, Department of Obstetrics, Gynecology and Reproductive Sciences; ²Magee-Womens Research Institute (2), Pittsburgh, PA, USA

10.1136/sextrans-2015-052270.460

Introduction Both women and men who have sex with men (MSM) report frequent receptive oral sex, but there are no FDA approved tests for detection of *Neisseria gonorrhoeae* (GC) and *Chlamydia trachomatis* (CT) from pharyngeal swabs. The objective of this study was to evaluate the number of pharyngeal GC and CT infections, and to assess the sensitivity of GC culture.

Methods Women (n = 172) and MSM (n = 222) reporting a lifetime history of both receptive oral and anal sex completed a structured questionnaire and clinicians collected swab samples from the pharynx and anorectum. Vaginal swabs were obtained from women and urine samples from men. Testing for CT and GC was performed using Cepheid Xpert CT/NG (Xpert) and Gen-Probe Aptima (AC2). True positives were defined if both AC2 and Xpert were positive, if GC culture was positive, or if either AC2 or Xpert were positive and confirmatory tests APTIMA CT or APTIMA GC were positive.

Results Identification of GC and/or CT at any site (pharyngeal, rectal or genitourinary) occurred in 78/222 (35%) males and 25/172 (14.5%) of females. Only 8 (2%) of pharyngeal swab samples were positive for CT, while 4 women (2.3%) and 37 (16.7%) men tested positive for pharyngeal GC based on NAAT. GC culture of the pharynx was performed for 373 of participants in the study, and was positive in 13 (3.5%), for a

sensitivity of 32% for culture vs NAAT. Overall, 17/55 (31%) of the total GC infections in men would have been missed without NAAT pharyngeal testing.

Conclusion Men who report a lifetime history of receptive oral intercourse have high rates of pharyngeal GC, most of which will remain undetected unless NAAT is used. The frequency of pharyngeal infection due to CT is low even among people having high overall rates of infection.

Disclosure of interest Reagents for CT/GC testing were provided for by Cepheid and Hologic.

P11.13 EXTRA-GENITAL AND URETHRAL CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE PREVALENCE AND ASSOCIATED RISK FACTORS IN MEN WHO HAVE SEX WITH MEN AND TRANSGENDER WOMEN IN LIMA, PERU

¹J Cabeza*, ¹ER Segura, ²SM Montano, ³JR Lama, ³J Sanchez, ¹JD Klausner, ¹JL Clark. ¹Department of Medicine, Division of Infectious Diseases and Center for World Health, David Geffen School of Medicine at University of California at Los Angeles, Los Angeles, California, USA; ²US Naval Medical Research Unit 6, Lima, Peru; ³Asociación Civil Impacta Salud Y Educación, Lima, Peru

10.1136/sextrans-2015-052270.461

Introduction Data regarding extra-genital *Neisseria gonorrhoeae* (NG) and *Chlamydia trachomatis* (CT) in men who have sex with men (MSM), and transwomen (TW) in Latin America is limited. We determined the prevalence of pharyngeal, rectal, and urethral NG and CT among MSM, and TW and associated risk factors and behaviours.

Methods We used data from the Expedited Partner Therapy Screening Study of men who have sex with men (MSM) and transgender women (TW) in Lima, Peru. Participants completed a CASI survey regarding socio-demographic data, sexual risk behaviours, and STD symptoms. Anal and pharyngeal swabs and urine specimens collected by the study physician were tested for CT and NG using NAAT (Aptima GenProbe).

Results We screened 834 participants (551-gay identified men, 264 heterosexual/bisexual men and 19 TW) for CT and NG between October 2012 and July 2014. The median age of participants was 27 years (range 18–70). CT prevalence was 3.5% in urine, 4.5% in pharyngeal and 15.6% in rectal specimens. NG prevalence was 2.7% in urine, 9.4% in pharyngeal and 8.3% in rectal specimens. Approximately 75% of participants with rectal infections reported no symptoms in the previous 30 days. More than 92% of extra-genital CT infections and 83% of extra-genital NG infections were identified in participants with negative urine test results. Younger age was strongly associated with increased prevalence of both pharyngeal NG (p = 0.054) and rectal CT (p = 0.008) and NG infections (p = 0.002). Receptive anal intercourse was associated with higher prevalence of rectal CT infection (p = 0.012). Pharyngeal NG (p = 0.005) was more frequent in participants reporting multiple partners.

Conclusion Extragenital CT and NG infection is highly prevalent, usually asymptomatic and in a majority of cases, associated with negative urine tests among MSM and TW in Peru. Routine screening at multiple anatomic sites using NAAT should be performed.

P11.14 PHARYNGEAL AND ANOGENITAL CHLAMYDIA IN MEN WHO HAVE SEX WITH MEN: TEMPORAL TRENDS AND CHARACTERISTICS AMONG ATTENDEES AT A SYDNEY METROPOLITAN SEXUAL HEALTH CLINIC 2011–2014

¹SL Goddard*, ¹P Rajagopal, ^{1,2,3}DJ Templeton. ¹RPA Sexual Health, Sydney Local Health District, Sydney, Australia; ²The Kirby Institute, UNSW Australia, Sydney, Australia; ³Central Clinical School, University of Sydney, Sydney, Australia

10.1136/sextrans-2015-052270.462

Introduction Australian STI testing guidelines recommend regular *Chlamydia trachomatis* (CT) testing at pharyngeal and anogenital sites among asymptomatic men who have sex with men (MSM). Our aim was to investigate temporal trends and characteristics of clinic-diagnosed pharyngeal and anogenital CT among MSM.

Methods Testing was performed using Aptima Combo 2 (Hologic, US). Data were extracted from the laboratory database and medical records. Statistical analyses were performed using STATA13 (Statcorp, College Station, TX).

Results During the study period 2919 MSM were tested on 6850 occasions, and 556 (8.2%) episodes of CT were diagnosed. Pharyngeal (PCT), urethral (UCT) and rectal (RCT) positivity rates were 1.2%, 2.3% and 6.2%, respectively. From 2011–2014, there was a significant increase in number of tests performed, (999–2834, p-trend <0.001), although the positivity rate over the study period remained stable at all 3 sites. There was a non-significant decline in the proportion of those diagnosed with CT who reported any anogenital symptom during the study period (OR 0.85, p-trend = 0.079). Local symptoms were present in 24.3% and 8.0% of those with UCT and RCT, respectively. Of 85 visits where PCT was detected, almost half (n = 39, 45.9%) had no concurrent anogenital infection. Of those, 2 were CT contacts and were treated at the initial visit. Men with PCT had a median of 15 sexual partners over the past year (range 1–1000) which was non-significantly higher than men diagnosed with either UCT (p = 0.077) or RCT (p = 0.094).

Conclusion CT positivity remained stable despite substantially increased testing. The temporal decline in symptomatic infections likely reflects a recent policy shift towards regular asymptomatic testing for MSM. Despite a relatively low prevalence of PCT, men with PCT had more sexual partners than men with anogenital CT and close to half the pharyngeal infections would have remained untreated without pharyngeal testing. There may be valuable public health benefits of regular PCT testing among MSM.

Disclosure of interest statement No disclosures of interest.

P11.15 FACTORS ASSOCIATED WITH REPEAT SYMPTOMATIC GONORRHOEA INFECTIONS AMONG MEN WHO HAVE SEX WITH MEN, BANGKOK, THAILAND

¹S Pattanasin*, ¹P Luechai, ¹A Sriporn, ¹J Tongtoyai, ¹W Sukwicha, ¹O Kongpechsatit, ²P Sirivongrangson, ^{1,3}TH Holtz, ^{1,3}ME Curlin, ^{1,3}EF Dunne. ¹HIV/STD Research Program, Thailand Ministry of Public Health – US Centers for Disease Control and Prevention Collaboration, Nonthaburi, Thailand; ²Department of Disease Control, Ministry of Public Health, Nonthaburi, Thailand; ³Division of HIV/AIDS Prevention, US Centers for Disease Control and Prevention, Georgia, USA

10.1136/sextrans-2015-052270.463

Theme C (Preventing HIV and related infections: Epidemiology and Prevention in Australia and the Region).

Background Repeat *Neisseria gonorrhoeae* (NG) infections indicate ongoing HIV and STI risk among men who have sex with men (MSM). We examined repeat NG among MSM enrolled in the Bangkok MSM Cohort Study (BMCS).

Methods Sexually-active Thai MSM aged ≥18 years from Bangkok were enrolled in the BMCS during 2006–2008 (Period1) and 2009–2010 (Period2) and were followed every 4 months for 3–5 years. At baseline, participants were screened for rectal and urethral NG and *Chlamydia trachomatis* (CT) infections using a nucleic acid amplification test (NAAT). Symptomatic participants at follow-up (i.e. men with urethral or anal discharge, urethral pain and rectal pain) had urethral or rectal specimens tested for NG by NAAT, and were treated if positive. We evaluated baseline factors associated with number of symptomatic NG infections using Poisson regression with robust standard error.

Results Among 1,595 participants who had specimens at enrollment (median age 26 years, Interquartile range (IQR): 22–30 years), prevalence of rectal and urethral NG was 6.1% and 1.8%, respectively. Of the 1,439 participants with at least one follow-up visit, 119 had NG infection at any follow-up visit. Forty-four (37.0%) had repeat NG (range 2–7), and 21/44 (47.7%) had only 2 infections. The median time between the first 2 infections was 294 days (IQR: 169–461 days). Factors significantly associated with number of symptomatic NG infections were enrollment in Period1 (Adjusted Incidence Rate Ratio (AIRR), 2.5, 95% Confidence Interval (CI), 1.5–4.3), history of HIV testing without awareness of test result (AIRR 2.8, 95% CI 1.2–6.7), history of previous STI (AIRR 2.9, 95% CI 1.8–4.4), and prevalent CT infection (AIRR 2.2, 95% CI 1.4–3.6).

Conclusion Repeat NG infections among BMCS participants were found and associated with other STIs. After NG diagnosis and treatment, follow-up evaluation in 3 months for repeat NG infection is warranted.

P11.16 DENOMINATORS MATTER: TRENDS IN NEISSERIA GONORRHOEAE INCIDENCE AMONG GAY, BISEXUAL AND OTHER MEN WHO HAVE SEX WITH MEN (GBMSM) IN THE US – FINDINGS FROM THE STD SURVEILLANCE NETWORK (SSUN) 2010–2013

¹MR Stenger*, ^{2,3}H Bauer, ¹E Torrone, ³SSuN Study Group. ¹Division of STD Prevention, US Centers for Disease Control & Prevention; ²STD Control Branch, California Department of Public Health, Richmond, CA; ³SSuN Working Group Includes: Greta Anschuetz, MPH (STD Control Program, Philadelphia Department of Public Health, Philadelphia, PA); Margaret Eaglin, MPH (City of Chicago Department of Public Health, Chicago, IL); Heidi Bauer (STD Control Branch, California Department of Public Health, Richmond, CA); Lynn Sosa, MD (STD Control Program, Connecticut Department of Public Health, Hartford, CT); Preeti Pathela, PhD (Bureau of STD Control and Prevention, The New York City Department of Health and Mental Hygiene, Long Island City, NY); Mary Reed, MPH (Colorado Department of Public Health and Environment, Denver, CO); Christina Schumacher, PhD (Johns Hopkins School of Medicine, Baltimore, MD); Jane Schwebke, MD (University of Alabama at Birmingham, Birmingham, AL); Julie Simon, MSPH (Infectious Disease Assessment Unit, Washington State Department of Health, Olympia, WA); Jeff Stover, MPH (Health Informatics & Integrated Surveillance Systems, Virginia Department of Health - Division of Disease Prevention, Richmond, VA)

10.1136/sextrans-2015-052270.464

Introduction Inequalities in *Neisseria gonorrhoeae* burden by sexual minority status have been observed in the United States but are difficult to characterise. GBMSM status of gonorrhoea cases is not routinely collected for reported cases and GBMSM population estimates at the level of geography necessary to most usefully inform public health responses are not readily available.