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-case load 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, 1SM Macio, 2LA Meyn, 3HC Wiesenfeld, 3SL Hiller, 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.
Background Repeate 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 was warranted.