

Introduction Canvassing venues where people meet social or sexual partners is an effective and efficient means of identifying syphilis cases for transmission control and may be important to access MSM at high risk for HIV transmission for PrEP delivery. The objective was to determine variability in the frequency of report and transmission risk across sex partner meeting venues reported by HIV and/or syphilis positive MSM.

Methods Routinely reported public health surveillance data from early syphilis and/or HIV positive MSM between 2009–2015 in a U.S. mid-Atlantic city were utilised. Past 3 month sex partner meeting venues were collected as a part of routine partner services. Venue geometric mean syphilis titer load (VTL) and HIV viral load (VVL) were calculated and tested using generalised linear additive models with random effects.

Results There were 1870 cases–63%(1177) syphilis, 37%(693) HIV. 88% (1641) were interviewed; among these, 48% (790) reported >1 venue and were on average aged 31(SD10), 78% (615) Black. Cases reported 1331 venues (avg 2, range 1–16 per case). Syphilis and HIV cases reported 940 (avg 2, range 1–16) and 449 venues (avg 2, range 1–7). Overall and by syphilis and HIV cases, 43%(577), 45%(415) and 46%(208) of reports were for the highest frequency venues (n=9); 3 internet venues accounted for 66% of reports. Among the top frequency venues (n=9, reports n=577), there was significant ($p<0.001$) variability in the report frequency for venues overall (Chi square(CS) 314.7) and by syphilis (CS 225.5) and HIV cases (CS 130). 68% (642) of syphilis cases had an RPR titer and the VTL was significantly variable (CS 2252.9, $p<0.001$). 35% (159) of HIV cases had an HIV viral load, and there was not significant variability (CS 5.3, $p=0.725$).

Conclusion Sex partner meeting venues are similar for syphilis and HIV positive MSM suggesting overlapping transmission networks, although the variability of their report differs. Significant differences venue TL suggest targeting specific venues may be important for transmission control and prevention strategies.

P3.100 HIGH MYCOPLASMA GENITALIUM PREVALENCE IN CHLAMYDIA TRACHOMATIS POSITIVE PATIENTS

^{1,2}Dirks JAMC, ¹Wolffs PFG, ²Dukers-Muijers NHTM, ^{1,2}Hoebe CIPA. Department of Medical Microbiology, School of Public Health and Primary Care (CAPHRI), Maastricht University Medical Centre (MUMC+), Maastricht, The Netherlands

10.1136/sextrans-2017-053264.335

2 Department of Sexual Health, Infectious Diseases, and Environmental Health, South Limburg Public Health Service (GGD), Geleen, The Netherlands

Introduction: *Mycoplasma genitalium* (MG) is increasingly seen as a clinically relevant sexually transmitted infection (STI), with a clinical spectrum similar to *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae*, including pelvic inflammatory disease and adverse reproductive outcomes. In the Netherlands, MG testing is not currently recommended for first-line STI screening despite a ~4% background prevalence. Very little is known about co-infections with CT or NG as patients are usually only tested after negative CT/NG tests. We therefore studied the co-occurrence of MG and CT in both low- and high-prevalence populations.

Methods 1024 CT-positive participants from the Dutch general population (participants in the Chlamydia Screening

Intervention-study) (60.3%; 462 □) and STI-clinic in South Limburg, the Netherlands (39.6%; 259 □) were retrospectively tested for MG. Men provided urine samples and women self-collected vaginal swabs. Samples were tested for human cells to ensure adequate sampling. CT/MG co-infections were investigated and correlated to symptoms. Statistical testing was performed using Chi-square test.

Results Of 1024 CT-positive patients, 5.5% had a co-infection with MG. CT/MG co-infections were present in 6.3% of the general population, compared to 4.2% of STI-clinic visitors. 3.9% of STI-clinic women had a CT/MG co-infection, compared to 7.4% in the general population. STI-clinic and general population men had a similar MG prevalence of 3.2% and 4.7%. Symptoms were reported by 37.3% of patients; 37.2% in single CT-infections and 39.3% in CT/MG co-infections.

Conclusion CT/MG co-infections are at least as common (5.5%), and in some populations more common (up to 7.4%), than in the general (CT-negative) population. As MG-testing is currently not routine practice in most clinics, these women go undiagnosed and receive inferior treatment, which likely contributes to current 30%–45% azithromycin resistance in MG. However, the higher prevalence of MG in the general population and the similar frequency of symptoms in both groups questions the clinical relevance of this pathogen.

P3.101 EFFECTIVENESS OF PRENATAL SCREENING TO PREVENT CONGENITAL SYPHILIS, FLORIDA AND LOUISIANA, 2013–2014

¹James Matthias, ²Mohammad Rahman, ³Daniel Newman, ³Tom Peterman. ¹Centres for Disease Control and Prevention, Tallahassee, USA; ²Centres for Disease Control and Prevention, New Orleans, USA; ³Centres for Disease Control and Prevention, Atlanta, USA

10.1136/sextrans-2017-053264.336

Introduction Between 2012 and 2014, rates of congenital syphilis increased in Louisiana (LA) (from 52.7 to 73.4 cases per 1 00 000 live births) and Florida (FL) (from 17.4 to 22.1 cases per 1 00 000 live births) ranking them among the highest in the United States. Both states have rules and regulations that require testing pregnant women for syphilis during the first trimester, early third trimester, and at delivery. We evaluated the effectiveness of early and third trimester syphilis screening for the prevention of congenital syphilis in these high-morbidity states.

Methods Reported syphilis cases among pregnant women in FL and LA during January 1, 2013–December 31, 2014, were reviewed for documented screening for syphilis in the first two trimesters and the third trimester. Pregnant women with syphilis were linked to congenital syphilis records and stratified by whether their pregnancy led to a reported congenital syphilis case.

Results 710 pregnant women with syphilis in LA and FL led to 155 congenital syphilis cases. 555 (78%) potential congenital syphilis cases were averted. 370 (52%) of the pregnant women with syphilis were staged as early syphilis or high-titer late-latent syphilis, and they were linked to 109 (70%) of the congenital syphilis cases. 513 pregnant women tested positive for syphilis in the first two trimesters and 470 (92%) of them had babies without congenital syphilis. Of the remaining 197 women, 109 tested positive for syphilis in the third trimester, and 85 (78%) of them had babies without congenital syphilis. 39 (6%) women had no reported syphilis screening ≥ 30 days

prior to delivery. 85 women had at least one negative screening test during pregnancy before the positive test, and 55 of them had a baby with congenital syphilis.

Conclusion Screening for syphilis both early and in the third trimester prevented many pregnant women with syphilis from having a baby with congenital syphilis. Preventing all congenital syphilis would likely require preventing all syphilis among women.

P3.102 INFANT OUTCOMES OF MATERNAL SYPHILIS CASES DIAGNOSED IN BRITISH COLUMBIA, CANADA 2010–2016

J Wong, ^{1,2}C Arkell, ²M Durigon, ¹S Makaroff, ¹C Montgomery, ¹M Morshed, ^{2,3}D Money, ⁴J van Schalkwyk, ⁴A King, ⁵M Gilbert, ^{1,2}T Grennan, ^{1,2,12}G Ogilvie. ¹BC Centre for Disease Control, Canada; ²University of British Columbia, Canada; ³BC Centre for Disease Control Public Health Laboratory, Canada; ⁴BC Women's Hospital, Canada; ⁵Perinatal Services BC, Canada

10.1136/sextrans-2017-053264.337

Introduction In British Columbia (BC), Canada, 2 reported cases of congenital syphilis have been confirmed for the years 2010–2016. However, USA has reported increases in congenital syphilis cases. We sought to characterise outcomes of infants born to pregnant or recently pregnant mothers diagnosed with syphilis in BC to identify areas to strengthen syphilis prevention programming.

Methods All positive syphilis tests in BC are reviewed by centrally-located expert clinicians who diagnose, stage, and provide treatment recommendations. Infant outcome information for all syphilis cases (primary, secondary, early and late latent) diagnosed in pregnant women (or within 90 days after delivery) from January 2010 to July 2016 were collected and analysed descriptively.

Results 45 maternal syphilis cases (18 early latent, 27 late latent) were reported from Jan 2010 to July 2016. Of the 45 cases, 36 had a live birth, 5 had a 1st trimester miscarriage, 1 had a therapeutic abortion, 1 lost her fetus due to a motor vehicle collision, and 2 had not delivered her baby yet as of Sept 2016. Of the 36 mothers with live births, 28 were treated within 4 weeks, 3 were treated after 4 weeks but greater than 30 days before delivery, 2 were treated less than 30 days before delivery, and 3 were treated post-partum. For these 5 infants, 3 had mothers born outside Canada and 1 was in a marginalised population. All 5 infants were treated empirically with penicillin at delivery. 3 were RPR negative at birth, and 2 had titres lower than their mothers; by 3 months of age, both had a negative RPR.

Conclusion Most maternal syphilis cases are treated quickly after diagnosis. However, a few are treated shortly before delivery or after delivery. Strengthening early syphilis screening among mothers born outside Canada may be an area to focus on to help ensure adequate time for treatment before delivery. Communication with providers of the risk of congenital syphilis may also support prenatal syphilis screening and better capture of all congenital syphilis cases.

P3.103 NEW INSIGHTS INTO CIRCULATING *NEISSERIA GONORRHOEA* SEQUENCE TYPES USING NON-CULTURED CLINICAL SPECIMENS IN BRITISH COLUMBIA, CANADA

J Wong, ^{1,2}I Martin, ³L Hoang, ^{2,4}D Roth, ¹M Gilbert, ^{1,2,12}T Grennan. ¹BC Centre for Disease Control, Vancouver, BC, Canada; ²University of British Columbia, Vancouver, BC, Canada; ³National Microbiology Laboratory, Winnipeg, MB, Canada; ⁴BC Centre for Disease Control Public Health Laboratory, Vancouver, BC, Canada

10.1136/sextrans-2017-053264.338

Introduction From 2014 to 2015, there was a 114% and 56% increase in gonorrhoea reports in females and males, respectively. Historically, culture-based *Neisseria gonorrhoeae* multi-antigen sequence type (NG-MAST) surveillance is over-represented by males attending STI clinics. We sought to understand trends in NG-MAST of gonorrhoea cases among females in relation to this recent increase.

Methods From Oct to Dec 2015, the first 30–40 gonorrhoea positive nucleic acid amplification test (NAAT) samples each month in BC females were characterised by NG-MAST based on the sequence of the *porB* and *tbpB* genes. Sequence type was determined using the NG-MAST website (www.ng-mast.net). These were compared against the overall prevalent strain types as routinely reported in the National Surveillance of Antimicrobial Susceptibilities of *Neisseria gonorrhoeae* Annual Summary 2014. Descriptive statistics were completed using Microsoft Excel.

Results Of 112 NAAT samples analysed, 35 were non-typeable. Of the remaining 77 samples, the most common sequence types identified were ST-5985 (32%), ST-7638 (21%) and ST-4637 (10%). For comparison, ST-5985, ST-7638, and ST-4637 comprised of 52%, 0%, and 0.3%, respectively, of prevalent NG-MAST sequence types from culture in BC and NAAT in 2014. ST-7638 and ST-4637 have rarely been identified in BC cultures in prior years, but have been commonly seen in neighbouring provinces. The vast majority of ST-5985 cultures from BC demonstrated a high level of resistance to tetracycline while cultures of ST-7638 and ST-4637 have been virtually all susceptible.

Conclusion A substantial number of gonorrhoea diagnoses were identified as NG-MASTs types not previously known to be circulating in BC. Whether this represents strain replacement (which may in turn contribute to increases in incidence) or is due to undersampling of females in prior years requires further study. Ongoing strain typing surveillance of both sexes, now feasible with NAAT-based NG-MAST, will help improve our understanding of the changing epidemiology of *N. gonorrhoeae*.

P3.104 LYMPHOGRANULOMAVENEREUM: A DESCRIPTIVE STUDY OF THE EPIDEMIOLOGY AND RISK FACTORS IN BRITISH COLUMBIA, CANADA

^{1,2}J Wong, ^{1,3}L Hoang, ¹S Makaroff, ¹C Montgomery, ⁴A Severini, ¹L Goldman, ^{1,2}M Gilbert, ^{1,2}T Grennan. ¹University of British Columbia, Vancouver, BC, Canada; ²BC Centre for Disease Control, Vancouver, BC, Canada; ³BC Centre for Disease Control Public Health Laboratory, Vancouver, BC, Canada; ⁴National Microbiology Laboratory, Winnipeg, MB, Canada

10.1136/sextrans-2017-053264.339