**Abstracts**

**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 2–16) 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=29, 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**

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**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 [3] and STI-clinic in South Limburg, the Netherlands (39.6%; 259 [0]) 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**

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**Introduction** Between 2012 and 2014, rates of congenital syphilis increased in Louisiana (LA) (from 52.7 to 73.4 cases per 1 000 000 live births) and Florida (FL) (from 17.4 to 22.1 cases per 1 000 000 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 83 (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 screen-
ing 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 congeni-
tal syphilis would likely require preventing all syphilis among
women.

Abstracts

P3.102 INFANT OUTCOMES OF MATERNAL SYPHILIS CASES
DIAGNOSED IN BRITISH COLUMBIA, CANADA 2010–2016
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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 congeni-
tal syphilis cases. We sought to characterise outcomes of
infants born to pregnant or recently pregnant mothers diag-
osed with syphilis in BC to identify areas to strengthen syphi-
lis prevention programming.

Methods All positive syphilis tests in BC are reviewed by cen-
trally-located expert clinicians who diagnose, stage, and pro-
vide treatment recommendations. Infant outcome information
for all syphilis cases (primary, secondary, early and late latent)
diagnosed in pregnant women (or within 90 days after deliv-
er) from January 2010 to July 2016 were collected and ana-
lysed 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
brought 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 syphi-
lis may also support prenatal syphilis screening and better cap-
ture of all congenital syphilis cases.