Introduction Men are not routinely tested for *Trichomonas vaginalis* (Tv) and *Mycoplasma genitalium* (Mg) in the Netherlands and, therefore, their prevalence and/or role in urogenital complaints in the Dutch male population is unknown. Our aim was to describe the age-specific prevalence of Tv and Mg and the possible association of Tv and Mg infections with male urogenital complaints, ethnicity, high-risk sexual behaviour and co-infections with *Chlamydia trachomatis* (Ct), in men attending the Sexually Transmitted Infection (STI) clinic in Amsterdam, the Netherlands.

Methods Urine samples and clinical data were collected from 526 heterosexual men and 678 men who had sex with men (MSM) attending the STI clinic. To investigate age as a risk factor, we oversampled older men. Urine samples were tested for Tv and Mg using TMA (Hologic) and in-house PCR.

Results TV infection was rare in heterosexual men (1.1%) and non-existent in MSM attending the STI clinic, whereas Mg infection was equally common in both groups (3.1%). Most Tv cases were older than 40, of non-Dutch ethnicity and associated with low-risk sexual behaviour. No age or ethnic trends were observed for Mg infection; however, high-risk sexual behaviour in MSM did correlate with Mg infection. Co-infections of Tv or Mg with Ct were very rare (< 0.5%). Of the patients with Mg infection 21.6% reported urogenital symptoms.

Conclusion Tv infection is rare and asymptomatic among men attending the STI clinic in Amsterdam. Our results support previous findings that Tv prevalence increases with age. Mg is quite common in men, but also remains mostly asymptomatic. While the outcome of this study does not encourage general testing for Tv in men, it does, however, suggest that some male urogenital symptoms – not caused by gonorrhoea or Ct - could be explained by Mg infection.

Disclosure of interest statement This work was funded by the Public Health Laboratory in Amsterdam, the Netherlands. The authors declare no conflicts of interest.

P09.05 UNUSUALLY LOW PREVALENCE OF *MYCOPLASMA GENITALIUM* AND *TRICHOMONAS VAGINALIS* IN URINE SAMPLES FROM CHINESE WOMEN ATTENDING A CENTRE OF PRENATAL DIAGNOSIS

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Introduction Sexually transmitted infections (STIs) in pregnant women are health problems that lead to serious medical complications and consequences. This study aimed to investigate the prevalence of six STIs among pregnant women attending a centre of prenatal diagnosis.

Methods From Feb 2008 to Dec 2010, women who attending centre of prenatal diagnosis of Nanjing maternity and child health hospital seeking for medical care were enrolled in this study. A case-control study was conducted that 42 case women who suffered a medically unexplained spontaneous abortion and 159 control women who had no history of spontaneous abortion and had at least one living child. Six kinds of sexually transmitted infections such as *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Mycoplasma genitalium*, *Trichomonas vaginalis*, *Mycoplasma hominis*, and *Ureaplasma urealyticum* was detected by using the DiaPlexQ^{TM} STI-6 Detection Kit.

Results The overall prevalence of any STI was 11.90% in case women while 16.98% in control women. *Mycoplasma genitalium* and *Trichomonas vaginalis* were not found in case women and these in 0.63% control women. *Chlamydia trachomatis* and *Ureaplasma urealyticum* were detected in 4.76% and 11.90% of case women which were higher than these in control women; None *Neisseria gonorrhoeae* were found in case women while in 4.40% control samples. *Mycoplasma hominis* were 2.38% in case and 9.43% in control. The lack of association between STIs and spontaneous abortion was found in this study.

Conclusion Comparison with reported data, unusually low prevalence of *Mycoplasma genitalium* and *Trichomonas vaginalis* were found in Chinese women attending a centre of prenatal diagnosis who residing in the middle and lower reaches of the Yangtze River. While screening all pregnant women with these STI-6 PCR method will save a lot of time, the Chinese *Mycoplasma genitalium* and *Trichomonas vaginalis* prevalence remains low and this STI-6 Detection Kit is unlikely to be cost effective.

Disclosure of interest statement The Australasian Society for HIV Medicine recognises the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.

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

P09.06 HIGH PREVALENCE OF GENITAL INFECTIONS WITH *MYCOPLASMA GENITALIUM* IN FEMALE SEX WORKERS REACHED AT THEIR WORKING PLACE IN GERMANY: THE STI-OUTREACH-STUDY

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Background Data on *Mycoplasma genitalium* (MG) in female sex workers (FSW) is scarce. FSW without regular contact to public health services may be at high risk for STI. Amongst other STI, we measured prevalence of MG among FSW at their workplace to identify most vulnerable subgroups and to plan effective interventions.

Methods Outreach-workers screened FSW in Berlin, Hamburg, and North Rhine-Westphalia for MG using self-collected vaginal swabs. Swabs were analysed by TMA (APTIMA® *Mycoplasma genitalium* assay, RUO). We collected data on sociodemographics, duration of sex work and access to medical care through cultural mediators. We fitted multivariate logistic regression models to calculate adjusted odds ratio (aOR) and 95% confidence intervals (95 CI) for diagnosis of MG.

Results Overall, 1,445 FSW working at 292 places were enrolled. 88% of FSW were born abroad, 28% in Romania, 21% in Bulgaria. 41% of non-Germans had no German skills. German and non-German FSW differed regarding existing health insurance (89% vs. 21%, $p < 0.01$) and ever attending low threshold STI clinics (70% vs. 43%, $p < 0.01$). FSW worked in brothels (26%), clubs/bars (20%), rented rooms inside brothels (18%), apartments (14%), saunaclubs (9%) and on the street (7%).

Prevalence of MG was 18%. Of MG-positive FSW, 18% were coinfected with chlamydia or trichomonas respectively, 9% with gonorrhoea. Diagnosis of MG was associated with younger age (aOR = 0.97; 95 CI = 0.95–0.99, per year increasing), being born in Bulgaria (aOR = 2.9; 95 CI = 1.2–7.2) or Romania (aOR = 3.4; 95 CI = 1.4–8.3; reference Germany), having no German skills (aOR = 3.1; 95 CI = 1.2–8.0), having no health insurance (aOR = 1.8; 95 CI = 1.0–3.2), and an interaction term of German skills and health insurance status.

Conclusion Prevalences of MG and STI-coinfections were high in the tested population, especially in younger, migrated FSW, without German skills and health insurance. Tests for MG, and if tested positive, for chlamydia, trichomonas and gonorrhoea, should be offered for FSW, combined with cultural mediation.

Disclosure of interest statement The testkits and reagents used in the scope of the study were distributed free of cost by Hologic.

P09.07 PREVALENCE OF *MYCOPLASMA GENITALIUM* IN PATIENTS VISITING HIV COUNSELLING INSTITUTIONS IN NORTH-RHINE-WESTPHALIA, GERMANY (STI-HIT STUDY)

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Introduction Patients asking for a free anonymous HIV test may have other STI such as *Mycoplasma genitalium* (Mg), yet Mg prevalence in that population is unknown. Among other STI, we measured Mg prevalence in patients seeking HIV testing at local public health authorities (LPHA) to inform decision making regarding Mg screening in HIV counselling institutions.

Methods LPHA in North Rhine-Westphalia screened patients for Mg infection on the basis of self-collected vaginal swabs and urine samples (men) which were analysed by transcription-mediated amplification assays (APTIMA® *Mycoplasma genitalium*). LPHA staff collected information on socio-demographic characteristics, sexual and HIV testing behaviours, previous STI history and clinical symptoms. We assessed overall and group-specific Mg prevalences and their 95% confidence intervals (CI). Using binomial regression, we calculated prevalence ratios adjusted for age and level of education.

Results Eighteen LPHA collected 3204 samples, of which seventeen could not be analysed. Of the remaining 3187 samples, LPHA recruited 1751 men, 1430 women and 6 transgenders. The median age was 30 years [25–38]. Overall prevalence of Mg was 3.42% (109/3187; 95% CI: 2.8–4.1%), 72.5% of those who tested positive were asymptomatic. Mg prevalence was 1.4% (16/1174; 95% CI: 0.8–2.2%) in heterosexual men, 2.0% (11/549; 95% CI: 1.0–3.6%) in MSM, 13.6% (39/286; 95% CI: 9.9–18.2%) in female sex workers (FSW) and 3.6% (41/1144; 95% CI: 2.6–4.8%) in other women. After adjusting for age and level of education, Mg infection was 7.4 times [95% CI: 4.0–13] and 2.8 times [95% CI: 1.5–5.0] more prevalent in FSW and in other women, respectively, as compared to heterosexual men.

Conclusion The prevalence of Mg was higher in women, especially among FSW. Use of vaginal swabs in women as compared to urine samples in men may have provided more sensitive detection of Mg among women. Increased attention should be paid to Mg screening in patients seeking HIV testing at LPHA, particularly among FSW.

Disclosure of interest statement Diagnostic tests were funded by Hologic®.

P09.08 STRONG AND ONGOING INCREASE OF SYPHILIS IN MSM IN GERMANY

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Background In Germany, the number of syphilis cases doubled 2001–04 to over 3,000/year and remained mainly stable until 2009. Between 2010 and 2013, the number increased between 11% and 22%. We analysed syphilis surveillance data to assess characteristics of this rise and whether it is continuing.

Methods Since 2001, laboratories are required to notify syphilis diagnoses anonymously, physicians complement clinical information. Potential double notifications are identified. We described syphilis cases by year of diagnosis, age, sex, area of residence and transmission category.

Results Overall, 5,722 cases were reported in 2014, corresponding to a 14% rise compared to 2013. The overall incidence was 7.1 per 100,000 inhabitants, with highest incidences in large cities such Berlin (31.0), Cologne (31.9) and Munich (27.2), especially in Berlin inner city areas (61.3–86.2/100,000 inhabitants). Notified cases increased in 13/16 federal states in 2014, and increase in Germany in a linear manner by 669 cases/year since 2010 ($R^2 = 0.9994$).

Men accounted for 94% of cases in 2014. The likely mode of transmission was available for 74% of cases; of these, 84% were men who have sex with men (MSM), in 16% heterosexual transmission was reported. The proportion of MSM aged 40 years or above was stable since 2008 with 49%. Stage of infection was reported in 74% of cases in 2014. Of these, 35% were diagnosed as primary, 27% as secondary and 35% as latent syphilis, similar to previous years.

Conclusion Syphilis cases continue to increase strongly since 2010, mainly attributable to MSM in large German cities, also in higher age groups. Berlin as a centre of sex tourism for MSM worldwide is heavily affected. Against the background of high proportions of cases diagnosed in later stages, early diagnosis and treatment, but also consistent condom use, are important to minimise the risk of syphilis and subsequently potential HIV-transmission.

Disclosure of interest statement The authors have nothing to disclose.

P09.09 EXPLORING THE RELATIONSHIP BETWEEN IMPORTATION FREQUENCY AND THE PERSISTENCE OF GONORRHOEA STRAINS IN AN MSM POPULATION: A MODELLING STUDY

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Introduction Molecular typing of fluoroquinolone resistant isolates from the US suggests that the importation of new strains, rather than mutation within existing strains, is the main source of *Neisseria gonorrhoeae* (NG) antimicrobial resistance (AMR) emerging within a properly treated population. In Australia,