Asian/Pacific Islander, 2 were other/unknown; 4 were Hispanic and 14 non-Hispanic. Both GC positive female students were asymptomatic; one was 19, and one was 25 yrs old. Both were non-Hispanic with one being Asian and one White.

Conclusions This ongoing screening program of male and female students from the Johns Hopkins University Student Health and Wellness Center demonstrated a low prevalence of CT and GC among students, attending the Center. Targeted, innovative screening programs may improve outreach to populations with higher prevalences.

Epidemiology poster session 2: Population: Ethnic minorities: aboriginal population

P1-S2.68 TARGETED INTERVENTIONS FOR REMOTE AUSTRALIANS; TRENDS IN CHLAMYDIA AND GONORRHOEA NOTIFICATIONS IN ABORIGINAL AND NON-INDIGENOUS AUSTRALIANS 2005–2009

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Background Higher rates of chlamydia and gonorrhoea notifications have been reported in Aboriginal and Torres Strait Islander than non-Indigenous people in Australia since the early 1990s.

Methods Chlamydia and gonorrhoea notification data from the National Notifiable Disease Surveillance System were analysed by age, sex, remoteness and Aboriginal status in jurisdictions where complete data were available. Population rates and χ^2 test for trend were calculated using STATA version 10.

Results In the study period, there were 14 000 (1303 per 100 000) chlamydia notifications in Aboriginal people and 111 947 (242 per 100 000) in non-Indigenous people. In both populations the highest rates were in females aged 15–19, with Aboriginal females reporting a rate four times that of the non-Indigenous females. There was a significant increasing trend in the chlamydia notification rate in Aboriginal people over the 5 years (10%, p-trend p<0.001) and also in non-Indigenous people (59% p-trend p<0.001). Over the 5 years there were 17 336 (964 per 100 000) gonorrhoea notifications in Aboriginal people compared to 14 771 (22 per 100 000) in non-Indigenous people. The highest notification rates were in Aboriginal people aged 15–19 years who lived in very remote areas while in non-Indigenous people the highest notification rates were in males aged 30–39 years. Gonorrhoea notification rates in Aboriginal people over the 5 years decreased over the time period (18%, p-trend p<0.001), but there was no significant trend in non-Indigenous people (19% p-trend p=0.667). Although the rate of gonorrhoea decreased in Aboriginal people the rate was 26 times greater than the rate in non-Indigenous people. The female to male ratio for gonorrhoea of 1.1:1 in Aboriginal people suggests mainly heterosexual transmission, while in non-Indigenous people the female to male ratio was 0.29:1 suggesting predominantly homosexual transmission. The reported rates of gonorrhoea in Aboriginal people resident in very remote areas were 19 times Aboriginal people resident in urban areas.

Conclusion Chlamydia is a generalised epidemic among both Aboriginal and non-Indigenous peoples. In contrast gonorrhoea is predominantly a disease of Aboriginal people in remote areas and urban gay men. We are undertaking a range of trials in quality improvement interventions with Aboriginal communities to address the continued higher burden of STIs notified among Indigenous people in Australia.

P1-S2.69 PREVALENCE OF HPV INFECTIONS IN METIS AND FIRST NATIONS LIVING IN MANITOBA, CANADA

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Background Information on human papillomavirus (HPV) prevalence among Aboriginal populations (First Nations, Métis, Inuit) in Canada remains scarce but is needed for informed public health programming. This need is reinforced by the rapidly changing rates of cervical cancer screening in these populations and the introduction of prophylactic vaccines.

Method In 2008, 52 clinics across the province of Manitoba, Canada participated in a Pap Week initiative during which left over tissues from conventional Pap tests were used for HPV typing using the Luminex method (developed by the National Microbiology Laboratory). A risk-behaviour survey was also administered to consenting women. Chi-square was used to compare frequencies and logistic regression was used to model the data. The most significant factors were included in the multivariate logistic model.

Results Of 592 women recruited, 113 self-reported being Meti or First Nations (M/FN); 70 did not report their ethnic background and were excluded from the analysis. M/FN participants were younger than the non-M/FN participants (mean age: 39 vs 45, p<0.0001). HPV infection prevalence was 2.3 times higher in M/FN than in other participants (32.7% vs 14.2%, p<0.0001). This increase was mainly due to the higher prevalence of HPV 32, 35, 51, 58, and 62. The prevalence of HPV 16 and 18 in the M/FN population was comparable to that of the non-M/FN (p=0.64), although HPV 18 slightly higher in M/FN (5.6% vs 3.8%). Compared to their non-Aboriginal counterparts, M/FN women participating in the study were more often smokers (p<0.0001), had a higher number of sexual partners in the last year (p=0.0004), and were more often in an unstable relationship (p=0.03). The strongest predictors for HPV infection in the study population were the number of sexual partners over the last year (OR 5.71; 95% CI 3.08 to 10.58) and having reported a M/FN identity (OR 2.17; 95% CI 1.28 to 3.69).

Conclusion Certain types of HPV may be more prevalent in M/FN than in the non-Aboriginal population. Although it is clear that the HPV vaccine has the potential to lower the prevalence of HPV 6, 11, 16, and 18 infections and related diseases in the M/FN population living in Manitoba, its impact could be mitigated by the relatively high prevalence of other HPV types.

P1-S2.70 THE DETECTION AND MANAGEMENT OF PELVIC INFLAMMATORY DISEASE IN ABORIGINAL WOMEN IN CENTRAL AUSTRALIA: CHALLENGES OF A REMOTE HIGH PREVALENCE SETTING

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Background In many remote Aboriginal communities in Australia, the prevalence of gonorrhoea and chlamydia is very high. Client mobility, frequent staff turnover and delays in laboratory results hamper timely treatment. Untreated gonorrhoea and chlamydia can lead to pelvic inflammatory disease (PID). In Central Australia, current remote health guidelines recommend three levels of criteria for diagnosing PID in women with lower abdominal pain: (1) cervical excitation or adnexal tenderness or uterine tenderness; or (2)

in the absence of a bimanual examination, vaginal discharge; or (3) in the absence of vaginal discharge in women aged <35 years, intermenstrual bleeding or dyspareunia or a history of STI or PID in the past 12 months. We review adherence to these guidelines in remote primary healthcare centres.

Methods We conducted a review of medical records of Aboriginal women aged 14–34 years attending five primary healthcare centres in areas with high STI prevalence. Any clinical presentation during 2007–2008 with documented lower abdominal pain after the exclusion of other causes was included. We ascertained if the recommended investigations, diagnosis and treatment were documented, according to the guidelines.

Results Of the 741 medical records reviewed, there were 224 presentations with lower abdominal pain in 119 women (16%). Of these, a bimanual examination was undertaken in 15 presentations and either cervical excitation, adnexal or uterine tenderness was recorded in eight (Level 1). History taking for vaginal discharge was documented in 59 presentations (26%), and vaginal discharge recorded in 16 (Level 2). History taking for intermenstrual bleeding or dyspareunia was documented in 27 (12%) and 17 (8%) presentations, respectively and recorded in 10 and 3 presentations, respectively (Level 3). From the available records, at least 78 presentations had evidence of a positive STI or PID in the previous year (Level 3). Overall, a PID diagnosis was documented by the remote practitioner in 35 (16%) of the 224 presentations and none had the recommended treatment regime documented.

Conclusion These results show that most Aboriginal women in remote Central Australia presenting with lower abdominal pain are having inadequate investigations for PID. When a PID diagnosis is made treatment is often inappropriate. Efforts are currently being made to develop electronic diagnosis and management pathways to improve adherence to clinical guidelines.

Epidemiology poster session 2: Population: Prisoners

P1-S2.71 SEXUALLY TRANSMITTED INFECTIONS IN MEXICO-CITY'S PENITENTIARY CENTERS: THE PONTE A PRUEBA: PUT YOURSELF TO THE TEST "STUDY"

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Background Social and behavioural risk factors, as well as the conditions within penitentiary centers, place incarcerated people at high risk for infectious diseases. Few data exist for penitentiary health in Latin America and even fewer outside the context of small sample size studies, usually focused on a single one disease or infection. Our study aimed to probe Mexico City's inmates' health status and relevant, associated Behaviours with focus on HIV and other sexually transmitted infections (STI).

Methods A cross-sectional health survey was implemented in three penitentiary centers for male and two for female detainees, between May and September 2010. All inmates were offered voluntary HIV, Hepatitis C (HCV), Hepatitis B (HBV) and Syphilis tests, along with screening for metabolic disorders. Informed consent and usable blood samples were obtained from 78% of males (15 835/20 688) and 92% of females (1757/ 1914). A random sample of participants answered a risk-factor questionnaire. The institutional review board (IRB) at Mexico's National Institute of Public Health approved study methods. Data analysis was performed using SPSS 16.

Results HIV prevalence was 0.7%, irregardless of sex. For HCV, we found 3.3% and 2.7% for men and women, respectively. HBV antibodies were found in 3.0% of men (of which 5% had positive surface antigen (sAg+)) and 3.2% of women (of which 9% of had sAg+). Of men, 3.6% had antitreponemic antibodies for syphilis (half of these were untreated). Among women 8.8% ever had syphilis, just over a third of these (36%) untreated. Lifetime marijuana use was 48.7% and 29.6% for men and women, respectively; 38.44% and 27.4% ever used cocaine; 5.2% and 3.5% ever injected drugs; 2.2 and 1.1 ever used heroine; 32.9% of men and 25.7% of women reported sex in prison, 75% of both genders declared unprotected last coitus.

Conclusion Despite the challenges in penitentiary centers of middle-income countries, ethical testing for HIV and STIs proved feasible and acceptable. All diagnosed individuals are now receiving the follow-up or treatment they need. HIV and other STI rates were low compared with prisons in other countries but higher than the general population in Mexico. Our study provides baseline data which can be used to design and evaluate prevention strategies within the prison system.

P1-S2.72 PREDICTORS OF HSV-2 SEROPREVALENCE AND WILLINGNESS TO ACCEPT A PRESCRIPTION FOR SUPPRESSIVE THERAPY AMONG RECENTLY INCARCERATED WOMEN

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Background HSV-2 seropositivity has direct links with one's increased risk for HIV acquisition. Given that increases in HIV incidence are highest among women of colour in the USA, they may benefit from HSV-2 control efforts. We evaluated the acceptability of a community-based HSV-2 screening program for women in the justice system and assessed factors related to HSV-2 positivity and willingness to accept a prescription for suppressive therapy.

Methods As part of a larger randomised controlled trial, recently arrested women were recruited from a community court handling lower-level misdemeanour cases, including prostitution, in a large Midwestern city. Individuals completed an interviewer administered survey assessing factors related to HSV-2 screening intentions and were offered no-cost of point-of-care HSV-2 testing. Individuals screening positive were offered low-cost ($4) suppressive therapy.

Results Participants included 136 women, 18–62 years old (median=31) with reported ethnicities of White (51%), Black (43%) and other (6%). Most (51%) had less than a high school education, were unemployed (68%) and 28% were currently facing prostitution charges. The majority (64%) of participants accepted testing and 60% tested HSV-2 seropositive. Factors associated with an infection included age (OR=1.09; 95% CI 1.03 to 1.16), Black race (OR=50.06; 95% CI1.1.70 to 1472.14), lower educational attainment (OR=5.86; 95% CI 1.13 to 30.37), current genital symptoms (OR=6.5; 95% CI 1.25 to 34.17), and lifetime number of sexual partners (OR=102.33; 95% CI 6.62 to 1581.73). Being recently arrested for prostitution was not associated with an HSV-2 diagnosis. The majority of women testing positive (84.6%) accepted a prescription for suppressive therapy.

Conclusion We detected very high rates of HSV-2 among recently incarcerated women, especially among Black women. Nearly all women who tested positive accepted a prescription for Acyclovir, indicating they were interested in suppressive therapy which could provide some benefit in preventing HIV acquisition. These results highlight how non-traditional public health partnerships, like academic-judicial system collaborations, provide an opportunity for STD control programs to intervene with high-risk individuals.