Abstracts

be important access points for syphilis and drug use prevention.

Disclosure No significant relationships.

**P768** THE EVOLUTION OF AN INFECTIOUS SYPHILIS EPIDEMIC IN A CANADIAN URBAN SETTING

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**Background** Reflecting worldwide trends, an outbreak of infectious syphilis was declared in Winnipeg, Canada in 2012. Initially exclusively an outbreak amongst men who have sex with men (MSM), increases among women were observed in 2014/15. This study compared the characteristics of more recent heterosexual cases of syphilis to those at the start of the heterosexual outbreak.

**Methods** Data were from infectious syphilis investigations (September 1st, 2011 to August 31st, 2018) from Winnipeg, Canada. Age-standardized rates (2006 Canadian population standard) and 95% confidence intervals (95%CI) are reported. Bivariate analyses (χ² tests) and multivariable logistic regression models compared heterosexual cases from 2011/2012-2014/15 to 2015/2016-2017/18 cases on socio-demographic characteristics and risk factors. Adjusted odds ratios (AOR) and 95%CI are reported.

**Results** A total of 770 infectious syphilis cases were reported to public health. Rates increased 25-fold, from 1.6/100,000 persons (95%CI:0.8–2.9) to 40.5/100,000 persons (95%CI: 36.1–45.3), between 2011/12 and 2017/18. The proportion of women increased from 8% to 47%; correspondingly, the ratio between male and female rates decreased from 4.5 to 1.3. Amongst men, the heterosexual proportion increased from 9% in 2011/12 to 75% in 2017/18. In bivariate analyses, more recent heterosexual cases were younger (p<0.001); more likely to report crystal methamphetamine (CM) use (30% vs 3%, p<0.001); gonorrhea (21% vs 3%, p<0.001) and chlamydia co-infection (23% vs 10%, p=0.004); history of incarceration (36% vs 14%, p<0.001); and having no fixed address (15% vs 2%, p<0.001). No significant relationships.

**Conclusion** Overall, 23 patients were treated with penicillin alternatives (15 with beta-lactam antibiotics, 7 with macrolide antibiotics, 1 with clindamycin), and 13 were treated successfully. Clinical research should evaluate amoxicillin and cephalosporins. Our review does not support the use of macrolide antibiotics.

Disclosure No significant relationships.

**P770** JARISH-HERXHEIMER REACTION IN CENTRAL NERVOUS SYSTEM AMONG NEUROSYPHILIS PATIENTS: DISCONTINUATION OF THERAPY OR NOT?

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**Background** Syphilis has returned to china with a vengeance since the 21st century, and the epidemiology of neurosyphilis has largely paralleled that of active syphilis. Prompt therapy with high-dose intravenous benzylpenicillin is critical to alleviate clinical symptoms of neurosyphilis patients. However, patients may experience an exacerbation of mental and/or neurological symptoms following the initiation of treatment due to a severe Jarisch-Herxheimer reaction (JHR) in central nervous system (CNS). We retrospectively analyzed the incidence, risk factors and prognosis for JHR in CNS in Shanghai Skin Disease Hospital, China.

**Methods** From July 1, 2017 to December 31, 2018 at our sexually transmitted disease ward, 574 neurosyphilis patients received the high-dose intravenous benzylpenicillin. Patient factors were recorded, including age, gender, neurosyphilis type, serum and cerebrospinal fluid-venereal disease research laboratory test (CSF-VDRL) titer, white blood cell count and protein