Conclusion The first lockdown resulted in a decrease of 62.7% of infected individuals. A remarkable decrease of resistant gonococcal strains to azithromycin and no resistance to cefixime occurred in 2020. This is in contrast to an increase of resistances until 2019. Increasing numbers of isolates of women approached the MIC breakpoint for ceftriaxone.

P351 CLINICAL PRESENTATIONS OF SYPHILIS DIAGNOSED AT WESTERN SYDNEY SEXUAL HEALTH CENTRE, 2015–2019

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Background Correct syphilis staging requires attentive history-taking and clinical examination; this assists with optimal patient management. We describe the clinical presentations of syphilis cases diagnosed at Western Sydney Sexual Health Centre (WSSHC) over a five-year period.

Methods We undertook a retrospective descriptive study of syphilis presentations at WSSHC between January 2015 and December 2019. Paper and electronic medical records were reviewed for 557 syphilis cases managed during this period. Clinical data were extracted and entered into an Access database for subsequent analysis. The Chi square test for trend was used to analyse incident infections over time. Ethics Committee approval was obtained.

Results During the study period, there were 203 symptomatic (93 primary, 110 secondary) and 354 asymptomatic (351 latent, 3 late neurosyphilis) syphilis cases. Primary and secondary syphilis cases increased over time ($p=0.038$ and $p=0.004$, respectively). Most primary (91/93, 98%) and secondary (99/110, 90%) cases were in men. Ulceration was a feature of 92/93 (99%) primary syphilis cases; one additional patient presented with isolated inguinal lymphadenopathy. Locations of syphilitic ulceration were as follows: penile (68, 74%), anal (19, 21%), male genital skin (4, 4%) and oral (4, 4%). Most ulcers were solitary (65/93, 70%) although 30% (27/92) were multiple. Most of the secondary syphilis cases presented with a rash (84/110, 76%); the rash was demonstrable on palms/soles in 34/84 (40%) cases and on the trunk in 73/84 (87%) cases. Palmoplantar rash alone occurred in 7/84 (8%). Oral lesions and condylomata lata were documented in 16 (15%) and 10 (9%) of secondary syphilis patients, respectively. Six (5%) secondary syphilis patients also had CSF-confirmed neurosyphilis; three were symptomatic (headache, $n=2$; neck stiffness, $n=1$; blurred vision/photophobia, $n=1$; reduced hearing, $n=1$).

Conclusions Syphilis presents in many different ways and correct staging requires careful examination in order to inform clinical management and partner notification practice.

P354 LABORATORY CAPACITY ASSESSMENT FOR SEROLOGICAL DETECTION OF SYPHILIS IN GUANGDONG, CHINA

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Objective To investigate and identify the detection capability of syphilis in the STD (sexually transmitted disease) laboratories in Guangdong, China.

Method An External quality assessment (EQA) of syphilis tests was performed and an online questionnaire surveys on tests and screening algorithms were conducted. Three positive and two negative EQA panels were prepared for qualitative or quantitative test of Nontreponemal tests (NTT) and Treponemal test (TT). The samples were distributed to all participants in October 2019 and the results were reported within one month and analyzed by Guangdong Central STD Laboratory through an online quality assessment software.

Results A total of 838 laboratories participated in the program, which come from different STD clinics, including primary, secondary and tertiary general hospitals, Maternal and Child Health Care Hospitals and CDC from the provincial, prefecture and county levels in Guangdong. The results showed that overall coincidence rate of the 838 participated laboratories was 98.0%. The coincidence rate of NTT were that 99.3% of qualitative test and 96.7% of quantitative test. Coincidence rate of qualitative TT were 99.3%. There were 286 laboratories reported the quantitative TT results, with an overall coincidence rate of 94.7%. Tolidine red unheated serum test (TRUST) was the most used NTT, and Treponema pallidum particle assay (TPPA) popularly chosen as Treponemal test. There were 273 laboratories returned a second survey on syphilis screening algorithms. Among them, 118(43.2%) laboratories adopted the traditional screening, 81(29.7%) laboratories adopted the reverse screening, and 64(23.4%) laboratories employed two algorithms simultaneously. Moreover, 10(3.7%) laboratories adopted the ECDC (European Centre for Disease Control and Prevention) algorithm.

Conclusion Laboratories in Guangdong Province have great capabilities of syphilis diagnosis, especially in the CDC and the Maternal and Child Hospitals. Traditional screening is the most used algorithm, while the use of reverse screening is increasing.

P355 THE PERFORMANCE OF LABORATORY-BASED DIAGNOSTIC ASSAYS TO DIAGNOSE PRIMARY SYPHILIS CASES AT WESTERN SYDNEY SEXUAL HEALTH CENTRE, 2015–2019

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Background Treponema pallidum subsp. pallidum infection (TP) may be diagnosed either directly by dark-field microscopy (DFM) or polymerase chain reaction (PCR) assay, or indirectly by serology. TP PCR and serology are currently the mainstay of laboratory-based diagnosis due to technical challenges associated with DFM. We describe the performance of TP PCR and serology in the diagnosis of primary syphilis at Western Sydney Sexual Health Centre (WSSHC).

Methods This is a retrospective study of primary syphilis cases diagnosed at WSSHC over a five-year period (2015–2019). Medical case records were reviewed to extract laboratory results. Patients without a prior history of syphilis were screened with either an enzyme-linked immunosorbent total antibody assay (EIA, WSSHC-associated laboratory) or a