The prevalence of syphilis with RP and TPHA was 0.9% (12/1400). RTs for syphilis showed >90% sensitivity and 100% specificity. RTs for C. trachomatis showed a low sensitivity between 22–37% and a 99% specificity, RTs for N. gonorrhoeae showed 97%. **Conclusions** In women with symptoms of LGIs RTs used at the point of care for syphilis have a sensitivity >90%. RTs for CT have sensitivity <40% and RTs for NG have sensitivity <12.5%.

**Background** Young people are worldwide a risk group for sexually transmitted infections (STIs) and a primary target for screening. Knowledge on STI prevalence in the youths is essential to elaborate preventive measures. Self-sampling has been shown to be an effective approach in screening and epidemiological programmes. This study aimed to assess the prevalence of *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Mycoplasma genitalium* and *Trichomonas vaginalis* in young people in St. Petersburg, Russia using self-collected non-invasive specimens.

**Methods** In total, 1207 consecutive sexually active attendees (1053 females and 154 males) of the youth centre Yuventa in St. Petersburg, Russia, aged 15–25 years and consenting to participate, were enrolled in the study from June through November 2011. The mean age of the women was 20.2 ± 2.8 years, and the men 20.2 ± 2.9 years. Vaginal and male urine samples were self-collected using Self-Collection Specimen Kit (Central Research Institute for Epidemiology, Russia) and UriSWAB (Copan, Italy), respectively. Testing for the STIs was performed by multiplex real-time PCR (AmpliSens, Russia) and UriSWAB (Copan, Italy), respectively. Testing for *T. vaginalis* was performed by culture for gonococci, respectively. The majority of samples are coming from gynaecologists and only 0–0.4% contains gonococci. In contrast, testing 4,000 to 10,000 venereology patients per dispensary and year reveals 4–9% of positive samples in all three regions. PCR equipment is available in Dnepropetrovsk and Zaporoz, however, this is rarely used because of lack of funding from the state. Nevertheless, in the private laboratories PCR is run using variety of reagents. Gonococcal culture is primarily performed using Russian or Ukrainian selective growth media. *Chlamydia trachomatis* and *Trichomonas vaginalis* diagnosis in young people in St. Petersburg, Russia using self-collected non-invasive specimens.

**Results** The overall prevalence of the examined STIs was 8.1% (85 of 1053) in the women and 7.8% (12 of 154) in the men. *C. trachomatis*, *N. gonorrhoeae*, *M. genitalium* and *T. vaginalis* were detected in 70 (6.6%), 6 (0.6%), 12 (1.1%) and 3 (0.3%) women, respectively. The prevalence of *C. trachomatis* and *M. genitalium* in the men was 6.5% (10 of 154) and 1.3% (2 of 154). *N. gonorrhoeae* or *T. vaginalis* were not detected in any men. In 7 women, multiple agents were found, i.e., *C. trachomatis* and *N. gonorrhoeae* (*n* = 3), *C. trachomatis* and *M. genitalium* (*n* = 2), and *M. genitalium* and *T. vaginalis* (*n* = 1).

**Background** The knowledge about approaches used for diagnosis of STIs in Ukraine is scarce. Aiming to optimise the laboratory diagnosis of STIs and introduce antimicrobial resistance surveillance for *Neisseria gonorrhoeae*, we aimed to survey the algorithms, methodologies and reagents used, and the laboratory capacities and possibilities in three regions of Ukraine.

**Methods** Laboratories of three regions of Ukraine, namely Dnepropetrovsk, Ternopil and Zaporoz, were visited and detailed views were conducted.

**Results** The three main dispensaries visited serve both the corresponding region as well as the city needs, and also have their own outpatient clinics. Large number of samples is tested, for example in Dnepropetrovsk and Zaporoz yearly 41,000 and 26,000 samples are tested by culture for gonococci, respectively. The majority of samples are coming from gynaecologists and only 0–0.4% contains gonococci. In contrast, testing 4,000 to 10,000 venereology patients per dispensary and year reveals 4–9% of positive samples in all three regions. PCR equipment is available in Dnepropetrovsk and Zaporoz, however, this is rarely used because of lack of funding from the state. Nevertheless, in the private laboratories PCR is run using variety of reagents. Gonococcal culture is primarily performed using Russian or Ukrainian selective growth media. *Chlamydia trachomatis* and *Trichomonas vaginalis* diagnosed using cytochrome staining, direct immunofluorescence nd/or serology. For the diagnosis of syphilis Wassermann reaction is still frequently sed; screening is conducted using non-trepnemal microprecipitation test, an analogue of the VDRL test. Laboratory quality management systems are unavailable.

**Conclusion** Optimization and quality assurance of the laboratory diagnosis of STIs in the three interviewed and visited laboratories is crucial. Both methods for testing, reagents as well as the operations tested have to be revised and adjusted to international evidence-based standards.