LETTER

Population-based Neisseria gonorrhoeae, Chlamydia trachomatis and Trichomonas vaginalis prevalence using discarded, deidentified urine specimens previously collected for drug testing

We used a novel method to test for STIs among a non–healthcare-seeking military population in the San Diego region of California. Active-duty US Navy and Marine Corps personnel were randomly selected to provide urine specimens to Navy Drug Screening Laboratory, San Diego in October and November 2013 for the Department of Defense drug testing programme. If specimens screened negative for drugs (>99% of samples), urine specimens were discarded, deidentified and subsequently tested for Chlamydia trachomatis (CT), Neisseria gonorrhoeae (GC) and Trichomonas vaginalis (TV) using the Aptima Combo 2 and TV assay as specified by the manufacturer (Hologic, San Diego, CA, USA). The Tigris direct tube sampling system was used for high-throughput nucleic acid amplification testing (NAAT). Urine specimens older than 6 days were not tested due to sample degradation concerns.

The overall prevalence of CT was 2.1% (95% CI 1.79 to 2.36, n=205/9953), GC 0.01% (95% CI 0.00 to 0.07, n=1/9953) and TV 0.12% (95% CI 0.03 to 0.38, n=3/2553).

Prevalence was not significantly different from civilian estimates. Prior military data show higher prevalence but include higher prevalence groups (recruits, larger proportion of female or African American race/ethnicity) not comparable to the regional military population. In the USA, TV prevalence is higher in women than men (3.2% vs 1.9%, see online supplementary material), African Americans than Whites (6.9% vs 1.2%) and those ≥25 than 18–20-year-olds (4% vs 1.5%) which may partially account for the low TV prevalence (0.12%); the military population is predominantly male (86%), white (69%) and young (51% ≤25 years old).

This testing method was effective for obtaining a standardised STI prevalence in a non–healthcare-seeking US military population using specimens previously collected for drug testing. This method could be adjusted for monitoring changes in STI prevalence, or for measuring asymptomatic infections within the active-duty military population.

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Handling editor Khalid G Ghanem

Acknowledgements The authors would like to thank Danilo Fernandez, Don Mercado, Alex Natvidad and Cristela Olimpo for performing the Aptima Combo 2 and Aptima Trichomonas vaginalis testing, Melinda Balansay-Ames, Chris Myers and Gary Brice for PCR-based sex determination testing, and Kimberly De Vera for assisting with references and manuscript writing/compilation.

Contributors JH, BH and PS collaborated on study design, acquisition of data and analysis and interpretation of data; drafted the manuscript and provided critical revision of the manuscript. MJ and UK collaborated on study design, acquisition of data and critical review of the manuscript. NM collaborated on study design and critical review of the manuscript. PCFG and BH collaborated on study design, specimen collection and testing and critical review of the manuscript.

Funding This work was supported by a cooperative agreement (W81XWH-07-2-0067) between the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and the US Department of Defense, under Work Unit No. 60546.

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Competing interests None declared.

Provenance and peer review Not commissioned; internally peer reviewed.

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Additional material is published online only. To view please visit the journal online (http://dx.doi.org/10.1136/sextrans-2017-053355)

To cite Harbertson J, Jamerson M, Graf PCF, et al. Sex Transm Infect 2018;94:123.

Received 28 July 2017
Revised 18 September 2017
Accepted 23 September 2017
Published Online First 24 October 2017

Sex Transm Infect 2018;94:123.

doi:10.1136/sextrans-2017-053355

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