

1583. Randomized, Active-duty U.S. Military Population-based NAAT Screening for Asymptomatic *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, and *Trichomonas vaginalis* Infection using De-identified Urine Samples Received by the Navy Drug Screening Laboratory, San Diego

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Background. Sexually-transmitted infections (STIs) continue to disproportionately comprise the majority of infectious diseases reported within the Department of Defense; however, data predominantly represent symptomatic males, females identified during routine cervical cancer screening and other subsets of the U.S. military (e.g., recruits, recently-deployed personnel). To determine whether routine STI screening would be cost-effective, a more accurate prevalence estimate of *Neisseria gonorrhoeae* (NG), *Chlamydia trachomatis* (CT), and *Trichomonas vaginalis* (TV) from a randomized sample of U.S. active-duty military personnel is needed.

Methods. During the period 17 October to 29 November 2013, residual urine specimens randomly collected from San Diego regional Navy and Marine Corps

commands and delivered to the Navy Drug Screening Laboratory (NDSL), San Diego, were set aside for STI testing. NDSL provides drug testing for U.S. Navy and Marine Corps units located west of the Mississippi River and in the Pacific Rim. All specimens received by NDSL were eligible if drug-negative and stored at room temperature for <7 days prior to transfer to Gen-Probe (San Diego, CA) collection tubes. NAAT was conducted using the TIGRIS DTS Automated Analyzer system to detect NG, CT and TV rRNA using the APTIMA COMBO 2 (NG and CT) and APTIMA TV Assays. Rates were calculated to determine CT, NG, and TV prevalence.

Results. To date, 1,748 urine specimens have been tested for CT, NG, or TV. The prevalence rates of CT, NG, and TV were 3.5% (95% CI 2.6% - 4.4%, n = 61/1,737), 0.35% (95% CI 0.07% - 0.63%, n = 6/1,734), and 0.19% (95% CI 0.006% - 0.32%, n = 3/1,609), respectively.

Conclusion. CT prevalence (3.5%) is slightly less than previous asymptomatic rates reported among a non-random sample of U.S. military personnel (4.2%) and higher than U.S. civilians (2.2%) screened in a population-based study. NG prevalence (0.35%) is similar to the reported prevalence among U.S. civilians (0.24%). Urine specimens randomly selected from active-duty military personnel as part of the required drug testing program will provide more accurate prevalence data for NG, CT and TV infections and can be used to inform cost and feasibility associated with implementing routine screening among male and female active-duty U.S. military personnel.

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