Conclusion. GC and CT infections increased between 2013 and 2017 in VA. Although females comprise 10% of the VA population, they proportionally had increased GC and CT positive Results. VA providers could improve retesting practices 3–12 months post-infection for patients with GC and/or CT.

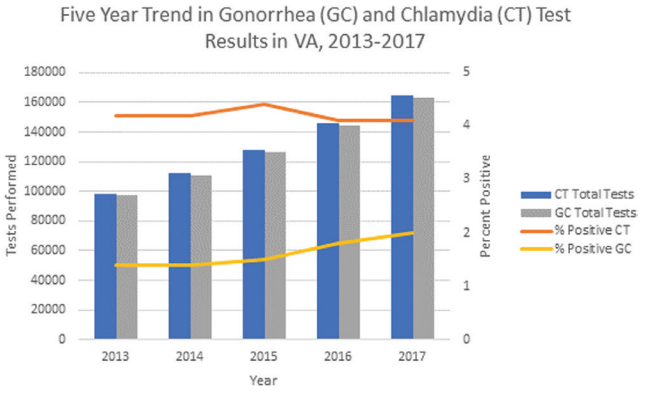
Table. Demographic Factors and Repeat Testing in Gonorrhea (GC) and Chlamydia (CT) Infections in VA, January 1, 2013–December 31, 2017.

	GC *N* = 641,535	CT *N* = 648,320	GC+CT *N* = 638,361
Unique patients tested	414,316	417,641	407,708
Total positive results	10,587	27,306	1,935
Unique positive patients	9,149	24,257	1,804
Female:male[a]	1,109:8,040	7,600:16,657	291:1,513
Average age (range)	40 (17–87)	31 (13–88)	36 (17–84)
Repeat testing performed (% of total positive results)[b]	2,702 (26)	7,906 (29)	593 (31)

[a]Overall, VA population is 10% female (www.womenshealth.va.gov).

[b]Any GC/CT test 3–12 months after a positive result.

Figure: Five-Year Trend in Gonorrhea (GC) and Chlamydia (CT) Test Results in VA, January 1, 2013–December 31, 2017.



Disclosures. **All authors:** No reported disclosures.

1500. At Risk Drinking Is Common Among HIV-Infected Department of Defense (DoD) Beneficiaries But Was Not Associated with Prevalent GC/CT Infections

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Session: 149. Sexually Transmitted Infections
Friday, October 5, 2018: 12:30 PM

Background. At-risk drinking and sexually transmitted infections (STIs) are both common among HIV-infected patients. Nearly 50% of subjects in the US Military Natural History Study (NHS), a cohort of HIV-infected DoD beneficiaries, report alcohol misuse. Nonetheless, few studies have examined whether at-risk drinking, a modifiable risk factor, is associated with STIs in this population. We examined the relationship between alcohol use and prevalent gonorrhea (GC) and chlamydia (CT) infections.

Methods. Consented NHS subjects underwent genitourinary (GU) and extragenital nucleic acid amplification testing (NAAT) for GC/CT infections and responded to a behavioral survey to describe substance use and sexual risk. At-risk drinking was defined as consumption of >4 drinks/day or 14 drinks/week. Logistic regression was used to examine the association of at risk drinking and GC/CT infections.

Results. A total of 472 men were included with a median age of 41 years (IQR 31, 51); 44% were African American. Male sexual partners were reported by 90%. At-risk drinking (54%) and having sex while drunk in the last 6 months (21%) was commonly reported. Overall, 15% (*n* = 70) had either GC or CT infection. With respect to anatomic site, 11% had anorectal infections (GC = 4%; CT = 7%), 5.3% had pharyngeal infection (GC 3.8%; CT –1.4%) and, 2.3% had GU infection (GC 0.6%; CT 1.7%). In univariate analysis, younger age, multiple male sexual partners, having sex while drunk, and concurrent partnership were associated with STI diagnosis. In the adjusted model, multiple male partners and concurrent sex remained significant (see table).

Conclusion. At-risk drinking remains common in the NHS; however, it was not associated with GC/CT infections. We observed a high prevalence of GC/CT infection, emphasizing the importance of ongoing screening of this high-risk population. Although strategies to reduce alcohol use are unlikely to reduce STIs in our population, these strategies are necessary to reduce other adverse health consequences associated with alcohol use.

Characteristics	Odds Ratio (95% CI)
Age per 10-year increase	0.81(0.64,1.02)
Male sex partner (last 3 months)	
None	Ref
1–4	4.1 (1.2–13.6)
>5	5.5 (1.5–21.1)
Concurrent sex (last 3 months)	
No	Ref
Yes	2.03 (1.04–3.96)

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1501. Comparative Effectiveness of Antibiotic Therapy for the Outpatient Treatment of Urinary Tract Infections Among Otherwise Healthy, Premenopausal Women

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Session: 150. Urinary Tract Infection
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Background. The comparative effectiveness of antibiotics for empiric therapy for urinary tract infection (UTI) is not well established. We sought to estimate the risk of treatment failure by guideline-recommended agent for treatment of UTI in otherwise healthy, premenopausal women.

Methods. Using US commercial insurance claims data (2006–2015), we conducted a retrospective cohort study of nonpregnant women 18–44 years who received an outpatient diagnosis of UTI with a prescription for an antibiotic with activity against common uropathogens. For each antibiotic agent, we estimated the daily cumulative risk and 95% confidence intervals (CIs) of treatment failure defined by a subsequent UTI-related antibiotic prescription since the index prescription. Propensity-score weighting accounted for patient-, geographic-, and provider-level characteristics.

Results. Among 1,100,661 eligible women, the majority received second-line fluoroquinolones (43%), first-line trimethoprim-sulfamethoxazole (28%), or first-line nitrofurantoin (24%). Seven-day and 30-day treatment failure occurred in 8.4% (*n* = 92,382) and 20.5% (*n* = 225,746) of women, respectively. Among initiators of first-line agents, the 7-day weighted cumulative incidence estimates of treatment failure were lower for nitrofurantoin (6.0%, 95% CI, 5.9%–6.1%) vs. trimethoprim-sulfamethoxazole (8.8%, 95% CI, 8.7%–9.0%). Among initiators of second-line agents, treatment failure did not differ between fluoroquinolones (5.0%, 95% CI, 4.9%–5.1%), narrow-spectrum β-lactams (5.1%, 95% CI, 4.9%–5.4%), or broad-spectrum β-lactams (5.3%, 95% CI, 4.9%–5.7%). Among initiators of nonguideline recommended β-lactams, treatment failure was 9.6% (95% CI, 9.0%–10.3%). Results were similar for 30-day treatment failure, with the exception of lower risk for fluoroquinolones compared with other second-line agents.

Conclusion. The risk of treatment failure differs widely by antibiotic agent, with substantial differences between two first-line agents. Understanding the effectiveness of antibiotic therapy is critical to guide clinical decision making, reduce suboptimal antibiotic prescribing, and prevent antibiotic resistance and other adverse events.

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1502. Identifying Risk Factors for Recurrent Urinary Tract Infections Among Female Outpatients

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