



Missed Opportunities to Detect Trichomonas in Los Angeles County



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BACKGROUND

- Trichomonas vaginalis* (TV) is the most common curable STD, however, many infections are missed due to insensitive tests or lack of screening
- TV is associated with increased risk of HIV acquisition
- Sensitive screening tests for TV are now available

OBJECTIVES

- Use nucleic acid amplification tests (NAATs) for TV to determine:
 - The prevalence of TV in multiple high risk populations
 - The number of TV cases missed by using microscopy in STD clinic females

METHODS

- De-identified consecutive remnant samples from routine chlamydia & gonorrhea (CT/GC) screening were collected Sept-Dec 2010
- Samples tested for TV with APTIMA® TV Assay (Gen-Probe):

Self-collected vaginal swabs

- Internet CT/GC home testing: age 12-26 years
- 12 STD clinics: all females presenting for a new visit

Urine specimens

- Women's Jail: all females age 18-30 years; >30 years if pregnant, possibly pregnant or sex-related charge
- Juvenile Hall: all females age 12-18 years
- One STD clinic: all males presenting for a new visit

Data sources

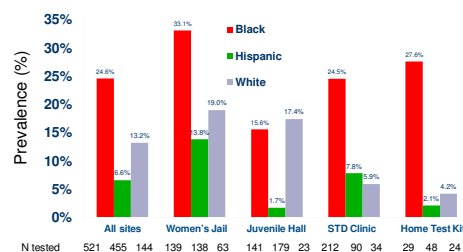
- All venues: demographics and laboratory results from registration and laboratory data
- STD clinics only: clinical data from clinic intake form

RESULTS

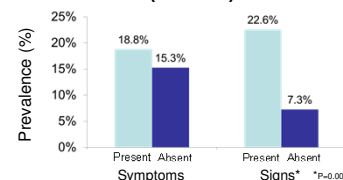
TV, GC & CT Prevalence by Venue

	n	% positive by NAAT		
		TV	CT	GC
Women's Jail	358	21.8	10.6	3.4
Juvenile Hall females	349	8.3	14.9	2.0
STD clinic females	362	17.4	9.7	2.7
Home test kit females	137	7.3	7.3	1.5
STD clinic males	99	6.1	11.1	1.0

TV Prevalence by Race/Ethnicity (females)



TV Prevalence by Urogenital Symptoms and Signs (females)

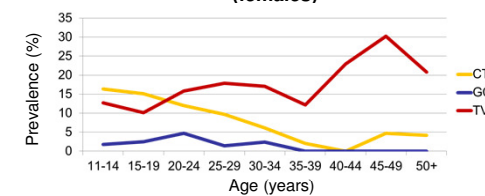


TV Diagnosis in STD Clinic (females)

NAAT	Current Clinic Practice			
	TV pos.	TV neg.	Not done	Total
NAAT pos.	25	25	13	63
NAAT neg.	7	197	95	299
Total	32	222	108	362

- Of the 50 TV NAAT pos. patients who had microscopy, only 50% had TV on wet mount
- 12.6% of the 108 patients who did not have microscopy were TV NAAT pos.
- 60.3% (38/63) of TV NAAT pos. cases were missed due to false negative or no microscopy

TV, GC & CT Prevalence by Age (females)



LIMITATIONS

- Prevalence in women ≥30 years may be overestimate due to selective screening in jail
- STD clinical data is dependent on quality of clinic chart completion

CONCLUSIONS

- High prevalence of TV across all female CT/GC screening populations:
 - Highest rates in African Americans
 - Prevalence >10% in all age groups
- Microscopy missed half of TV cases
- The presence of symptoms was a poor predictor of TV

IMPLICATIONS

- TV is being missed in populations at high risk of STD/HIV
- Evidence-based TV testing guidelines are needed