

STI Testing Beyond *Chlamydia trachomatis* & *Neisseria gonorrhoea*: *Mycoplasma genitalium* & *Trichomonas vaginalis* Trends Data From a US Commercial Laboratory

Background

- The Centers for Disease Control and Prevention recommends screening people at risk for sexually transmitted infections (STIs) caused by *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoea* (NG).¹ Because these infections are reportable, trends can be monitored.
- Infections caused by *Mycoplasma genitalium* (MG) and *Trichomonas vaginalis* (TV) are not reportable, which makes trends for these STIs harder to monitor.
- However, MG and TV infections are a growing public health concern owing to associated comorbidities and increasing antimicrobial resistance.^{2,3}
- Objective:** To determine MG and TV infection rates in the United States, investigators examined molecular testing data from a national commercial reference laboratory.

Methods

- The retrospective study included >6 million molecular testing results reported between January 2014 and August 2019; specimens were submitted to Quest Diagnostics for MG, TV, CT, or NG testing.
- Positivity rates were assessed by sex, age group, and US geographic region.
- MG and TV positivity rates were compared to CT and NG positivity rates.
- Rates of coinfection were also examined.

Results

- Sex:** Overall positivity rates by sex were as follows:

Infection	Women	Men
MG	2.2%	6.3%
TV	4.7%	2.5%
CT	4.0%	6.5%
NG	0.6%	2.9%

- Age:** Positivity rates varied by age.
 - MG positivity was highest in women (4.5%) and men (9.0%) 18 to 25 years of age.
 - TV positivity was highest in women 41 to 55 years of age, while in men it continued to increase in older age groups.
- US geographic region:** Positivity rates varied by geographic region.
 - Overall positivity rates for CT, TV, and NG were highest in the Midwest and South.
 - Among men, MG positivity was higher in the Midwest (10.2%), West (7.6%), and Northeast (7.5%) compared to the South (4.9%) ($P < 0.0001$).
- Coinfection:** Among those tested for MG, CT, and NG concurrently, the rate of MG positive-only was 2.3% for women and 6.7% for men. TV coinfection rates were <1%.

Conclusions

- These results from a national commercial reference laboratory indicate that positivity rates for MG and TV vary by sex, age group, and US geographic region.
- Coinfection rates were low; however, MG and TV cases may be missed and therefore not treated appropriately without more comprehensive STI testing.
- The findings of this study may help target MG and TV testing to particular populations and improve sexual health screening and prevention programs.

Poster scheduled for presentation at the Centers for Disease Control and Prevention STD Prevention Conference (in-person conference canceled; abstract available online)

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Webpage:

https://s6.goeshow.com/ncsd/prevention/2020/profile.cfm?profile_name=session&master_key=A7155F77-929D-B495-827F-694AB62A56F5&page_key=D379DFE4-E7D5-41D9-8DC1-8E1CEF5E729A&xtemplate&userLGNKEY=0&hide_role=Co-Author

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