

Mycoplasma genitalium Trends Among Men and Women in a National Reference Laboratory Database

Background

- *Mycoplasma genitalium* (MG) is an emerging pathogen that causes sexually transmitted infection (STI). Routine testing has only recently been possible with the introduction of commercially available assays in 2019.
- Despite a growing public health concern due to antibiotic resistance and associated comorbidities,¹ MG is not reportable to public health authorities, nor is it a nationally notifiable condition. Thus, surveillance data on the prevalence of MG infection are limited.
- **Objective:** In this retrospective study, the investigators examined molecular testing data from a national commercial reference laboratory database to assess MG infection rates in the United States.

Methods

- The investigators analyzed molecular testing data from the Quest Diagnostics database for the period of January 2014 through August 2019.
- MG positivity rates were determined by sex, geographic region, and age group.
- Positivity rates for other STIs, including *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* infection, were compared to MG positivity rates; rates of coinfection with MG were also assessed.

Results

- An analysis of >60 million STI test results included >183,000 results for MG infection; 95.4% of MG results were from women.
- Overall MG positivity rates were 6.3% for men and 2.2% for women.
 - **Sex:** The rate of MG positivity in men increased significantly during the study period, from 3.1% in 2014 to 7.4% in 2019 ($P<0.0001$). The positivity rate in women was 2.1% in 2014 and 2.4% in 2019.
 - **Age:** MG positivity was highest in men and women aged 18 to 25 years (9.0% in men; 4.5% in women). The median (interquartile range) age for MG positivity was higher in men (28.7 [23.7-36.5] years) than in women (24.2 [20.7-29.2] years) ($P<0.0001$).
 - **Geography:** Among men, MG positivity was higher in the Midwest (10.2%) than in the West (7.6%), Northeast (7.5%), or South (4.9%) ($P<0.0001$).
- CT positivity rates were 4.0% among women and 6.5% among men; NG positivity rates were 0.6% among women and 2.9% among men.
 - Among women and men, CT and NG positivity rates were highest in the Midwest and South.
- Within the cohort tested for CT, NG, and MG, 2.3% of women and 6.7% of men were positive for MG but negative for CT or NG.

Conclusions

- The findings of this study indicate that age-based prevalence rates of MG were consistent with those of CT and NG.
- MG infections may have been missed had only CT and/or NG been tested. This finding suggests that targeted MG testing may enhance sexual health screening programs.

ePoster presentation at the ASM Microbe Online

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ASM Microbe Online, June 22-July 20, 2020

Webpage

<https://www.abstractsonline.com/pp8/#/19103/presentation/10980>

Reference

1. Golden MR, Workowski KA, Bolan G. Developing a public health response to *Mycoplasma genitalium*. *J Infect Dis*. 2017;216:S420-S426.