Characteristics of *Mycoplasma genitalium* Infections at a Community-Based Sexual Health Program

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BACKGROUND

Mycoplasma genitalium (Mgen) is an important emerging sexually transmitted infection (STI). To support development of internal testing and treatment guidelines across our community sexual health program across 7 sites in Chicago, IL, we sought to characterize Mgen case demographics and treatment outcomes of recurrent or refractory cases.

METHODS

- Retrospective chart review of all Mgen nucleic-acid amplification tests (NAAT) across 7 clinical sites at Howard Brown
- Dates: January 1, 2024, to June 15, 2025
- Key data:
  - Anatomic testing site
  - Demographics
  - Clinical site
- Additional information for individuals with >1 positive test:
  - HIV pre-exposure prophylaxis (PrEP) use
  - HIV diagnosis (LWH)
  - Presence of urogenital co-infections
  - Antimicrobial treatment
  - Treatment outcome
- Treatment success defined as resolution of symptoms and/or repeat negative testing.

RESULTS

OVERALL POPULATION

- 2,753 Mgen tests among 2018 symptomatic or exposed individuals.
- 379(13.8%) positive tests among 332 individuals

MULTIPLE POSITIVE TESTS

- 37/2018 (1.8%) had ≥2 positive tests, 8 of whom had 3
- 18/37 (48.6%) were on PrEP and 0 were LWH
- 19/37 (51%) had a urogenital co-infection
- 26/37 (70.3%) received a first treatment of doxycycline (doxy) followed by moxifloxacin (moxi)

On-going surveillance of *Mycoplasma genitalium* cases can help to harmonize timely detection and appropriate treatment, including for refractory or recurrent cases.

Subsequent Tx regimen n=45	n (%)
Repeat of doxy/moxi	17 (37.8)
Minocycline	13 (28.9)
Doxy/moxi after inappropriate tx	9 (20.0)
Azithromycin	3 (6.7)
Doxy/tinidazole	1 (2.2)
Minocycline/metronidazole	1 (2.2)
Minocycline/tinidazole	1 (2.2)
Treatment response n=28	28 (100)

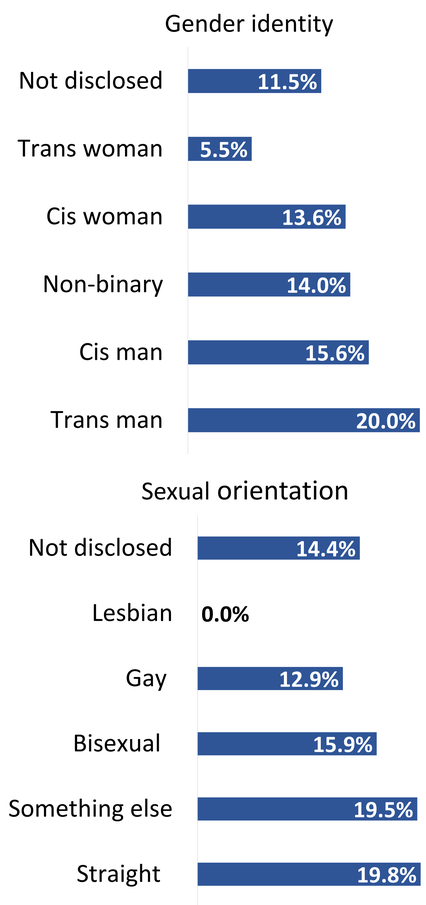
RESULTS

Baseline characteristics of patients tested for Mgen, N=2018

Gender identity	n	%
Cis man	1379	68.3
Cis woman	402	19.9
Non-binary	100	5
Trans woman	52	2.6
Trans man	27	1.3
Not disclosed	58	2.9
Sexual orientation	**n**	**%**
Straight	736	36.5
Gay	534	26.4
Bisexual	252	12.5
Lesbian	13	0.6
Something else	149	7.4
Not disclosed	334	16.5
Race/ethnicity	**n**	**%**
Non-Hispanic Black	901	44.6
Non-Hispanic White	524	26.0
Hispanic	368	18.2
Asian	65	3.2
Multiracial	47	2.3
AIAN/NHPI	3	<1
Not disclosed	110	5.5

AIAN/NHPI, American Indian Native Alaskan/Native Hawaiian Pacific Islander

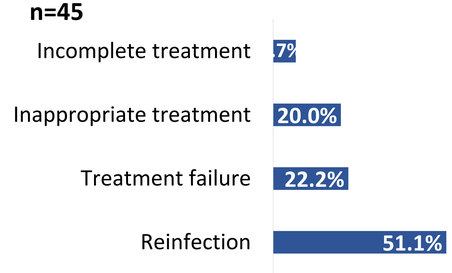
Mgen test positivity rates by demographic, N=2018



Mgen test positivity rates by source and location, Tests=2753

Source	+Mgen/Tests	%
Urethral	5/23	21.7
Rectal	8/39	20.5
Urine	292/2026	14.4
Vaginal	69/558	12.4
Throat	0/3	0.0
Unknown	5/104	4.8
Site	**+Mgen/Tests**	**%**
Youth Center	12/60	20.0
Hyde Park	50/304	16.4
South side	144/942	15.3
West side	9/60	15.0
Urgent care	135/1121	12.0
North side	17/154	11.0
Far North	11/104	10.6
Not recorded	0/8	0.0

Reason for subsequent positive test, n=45



CONCLUSIONS

- Mgen is an important STI across multiple populations, including heterosexual patients.
- There was variability in testing frequency between clinical sites, offering an opportunity to standardize testing indications.
- Recurrent cases were uncommon but successfully treated, either by repeating the initial treatment regimen or using a salvage regimen.

ADDITIONAL INFORMATION

- *Thank you for the dedication and advocacy of our patients and clinical teams at Howard Brown Health*
- *Author contact information: michelledp@howardbrown.org* ✉

PLAIN LANGUAGE SUMMARY

At this large sexual health program in Chicago, sexually-transmitted infections with *Mycoplasma genitalium* were most common in heterosexual patients. Multiple infections were rare and were successfully treated with antibiotics.