

Stay Alert for Cases of Multi-Drug Non-Susceptible Gonorrhea

- Cases of non-susceptible gonorrhea continue to occur in New York City (NYC).
- Treat uncomplicated gonorrhea with a single 500 mg intramuscular dose of ceftriaxone. Treatment for coinfection with chlamydia with oral doxycycline (100 mg twice daily for seven days) should be administered when chlamydial infection has not been excluded.
- For patients with persistent symptoms, perform nucleic acid amplification testing (NAAT) and culture. Send culture specimens to laboratories that perform antibiotic susceptibility testing and include cephalosporins (ceftriaxone and cefixime) and azithromycin in the antibiotic panel.
- Send culture specimens from NYC residents with suspected treatment failure to the NYC
 Department of Health and Mental Hygiene (NYC Health Department)'s Public Health
 Laboratory for antibiotic susceptibility testing. Call the NYC Health Department's Sexually
 Transmitted Infections (STI) Surveillance Unit at 347-396-7201 for pre-authorization or to
 notify of suspected treatment failures.

July 10, 2023

Dear Colleague:

Neisseria gonorrhoeae continues to demonstrate decreased susceptibility to cephalosporins nationally and in NYC. In NYC, the proportion of isolates demonstrating reduced susceptibility to ceftriaxone or cefixime increased from 0.6% in 2019 to 1% in 2021 overall, and from 0.7% to 1.4% for the same period in men who have sex with men.

In January 2023, a novel strain of *Neisseria gonorrhoeae* demonstrating decreased susceptibility to ceftriaxone, cefixime, and azithromycin, as well as resistance to ciprofloxacin, penicillin, and tetracycline, was identified in Massachusetts. While treatment failures have not yet been reported in the U.S., the Massachusetts case was the first known gonorrhea case in the U.S. identified with resistance or decreased susceptibility to all recommended drugs.

Antibiotic resistant strains of gonorrhea and transmission of these strains have been, and continue to be, a public health concern nationally and in NYC. Since 2006, NYC has participated in gonorrhea resistance surveillance with the Centers for Disease Control and Prevention (CDC).¹

Below are guidance and recommendations for clinicians related to gonorrhea screening, diagnosis, and treatment.

¹ Centers for Disease Control & Prevention, Gonococcal Isolate Surveillance Project (GISP) (last accessed Jun. 9, 2023), available at https://www.cdc.gov/std/gisp/default.htm; Centers for Disease Control & Prevention, Combating the Threat of Antimicrobial-Resistant Gonorrhea (Jun. 9, 2023), available at https://www.cdc.gov/std/gonorrhea/drug-resistant/carb.htm.

Screening and diagnosis

All sexually active women younger than age 25 years should be screened for gonorrhea annually.

Women 25 years and older should be screened for gonorrhea annually if risk factors for infection are present (e.g., new or multiple sex partners, a sex partner with an STI or concurrent partners, inconsistent condom use when not in a mutually monogamous relationship, history of exchanging sex for money or drugs, history of incarceration).

All sexually active gay, bisexual, and other men who have sex with men should be screened for gonorrhea at sites of potential exposure (e.g., pharynx, urethra, rectum) annually, or every 3-6 months if indicated (e.g., if they are taking HIV pre-exposure prophylaxis (PrEP) or if they or their sex partners have multiple sex partners).

NAAT and culture are available for detecting genital and extragenital gonorrhea infection. NAAT sensitivity and specificity are superior to culture; however, there is currently no NAAT-based antibiotic susceptibility testing (AST) available to identify and assist in the care of patients with potentially drug-resistant gonorrhea infections.

Treatment

Treat gonorrhea infection per the CDC's 2021 <u>STI Treatment Guidelines</u>, which recommend monotherapy with ceftriaxone and no longer include azithromycin.

Recommended Regimen for Uncomplicated Gonococcal Infection of the Cervix, Urethra, or Rectum Among Adults and Adolescents

Ceftriaxone 500 mg* IM in a single dose for persons weighing <150 kg

If chlamydial infection has not been excluded, treat for chlamydia with doxycycline 100 mg orally 2 times/day for 7 days.

* For persons weighing ≥150 kg, 1 g ceftriaxone should be administered.

Alternative Regimens

If cephalosporin allergy:

Gentamicin 240 mg IM in a single dose

PLUS

Azithromycin 2 g orally in a single dose

If ceftriaxone administration is not available or not feasible:

Cefixime 800 mg* orally in a single dose

* If chlamydial infection has not been excluded, providers should treat for chlamydia with doxycycline 100 mg orally 2 times/day for 7 days.

Counseling

Advise patients treated for gonorrhea to abstain from anal, oral, and vaginal sex for one week after treatment completion and to notify sex partners with whom they have had sexual contact in the previous 60 days to seek testing and treatment. Offer HIV testing, as the presence of an STI is a risk factor for HIV. Reinforce consistent condom use with anal, oral, and vaginal sex. Discuss PrEP with HIV-negative patients with gonorrhea.

Guidelines for sex partners

Test sex partners of patients with gonorrhea for HIV and other STIs or refer them to other for STI testing sites. The Health Department's <u>Sexual Health Clinics</u> offer low- to no-cost services for anyone 12 years and older, regardless of immigration or insurance status. Parental consent is not needed to access services. For up-to-date information on the Sexual Health Clinics and the NYC Sexual Health Clinic Hotline, including services, locations, and hours, call 311 or visit nyc.gov/health/sexualhealthclinics. New Yorkers can also find an STI testing site by visiting the NYC Health Map and selecting "Sexual Health Services."

In the absence of partner testing, treat the patient's sex partners to prevent reinfection of the index patient. Expedited partner therapy (EPT) is permissible for gonorrhea in New York State. When using EPT for gonorrhea, provide the index patient with cefixime 800 mg PO once (in-hand or by prescription) for the patient's sex partner(s) who are unlikely to present for testing and treatment. If chlamydia infection cannot be excluded in the index patient, also treat the partner(s) for chlamydia. For more information, see the New York State Department of Health's 2020 updated interimguidance on expanded EPT for STIs.

Test of cure and retesting guidelines

Within three months of gonorrhea treatment, regardless of site of infection, retest patients to ensure reinfection has not occurred.

All patients with pharyngeal gonococcal infection should undergo NAAT test of cure 7-14 days after treatment, per CDC guidelines, to ensure that there are no signs and symptoms of gonorrhea and that treatment is considered adequate and complete.

If symptoms persist after gonorrhea treatment, ask the patient about interim exposure and retest for gonorrhea using both NAAT and culture with AST at sites of exposure. Send culture specimens to laboratories that perform antibiotic susceptibility testing and include cephalosporins (ceftriaxone and cefixime) and azithromycin in the antibiotic panel. AST for gonorrhea isolates is also available through the NYC Health Department's Public Health Laboratory via eOrder. Call the NYC Health Department's STI Surveillance Unit at 347-396-7201 for pre-authorization.

Suspected gonorrhea treatment failure

Clinical consultation for clinicians who diagnose gonorrhea infection with suspected cephalosporin treatment failure is available from the NYC Health Department or through the STD Clinical Consultation Network.

Cases of suspected antibiotic resistance or treatment failure should be reported to the NYC Health Department's STI Surveillance Unit at 347-396-7201. NAAT and culture specimens from urogenital and extragenital mucosal sites, as applicable, should be collected and processed. The NYC Health Department will facilitate communications with the CDC, as needed.

Resources

- Instructions for sending tests to NYC Public Health Laboratory for AST
- CDC STI Treatment Guide Mobile App
- CDC Drug-Resistant Gonorrhea information
- CDC Additional STD Treatment Resources
- National Network of STD Clinical Prevention Training Centers Online Consultation Requests
- University of Washington National STD Curriculum

Questions about gonorrhea diagnosis or reporting may be directed to Dr. Preeti Pathela at ppathela@health.nyc.gov or 347-396-7319.

Sincerely,

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Deputy Commissioner, Division of Disease Control

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Bureau of Hepatitis, HIV, and Sexually Transmitted Infections