

Wes Moore, Governor · Aruna Miller, Lt. Governor · Meena Seshamani, M.D., Ph.D., Secretary

September 10, 2025

#### Dear Colleague:

We are writing to make you aware of new Maryland statewide guidelines regarding *Neisseria meningitidis* antibiotic prophylaxis of close contacts. Specifically, Maryland has recently reached the <a href="mailto:threshold-recommended-by-CDC">threshold-recommended-by-CDC</a> whereby close contacts of patients with invasive meningococcal disease should preferentially receive prophylaxis options other than ciprofloxacin due to detection of increased ciprofloxacin-resistant strains.

# **Background**

Meningococcal disease is a rare but life-threatening illness caused by *Neisseria meningitidis*, gram-negative diplococcal bacteria. The two most common syndromes of meningococcal disease are meningitis and septicemia. There are multiple serogroups of *N. meningitidis*; serogroups B, C, and Y cause the majority of disease in the United States. People spread meningococcal bacteria to others by exchanging respiratory and throat secretions during close or lengthy contact. People with meningococcal disease and those who carry the bacteria asymptomatically in the nasopharynx can spread the bacteria.

As of September 3, 2025, there have been 10 lab confirmed invasive meningococcal cases in Maryland for 2025. In 2024, there were 10 confirmed cases, 11 in 2023, and 6 in 2022.

# Neisseria meningitidis and Antibiotic Resistance

Resistance to the antibiotics used for meningococcal treatment and prophylaxis has been increasing in the United States in recent years, particularly among serogroup Y isolates. Specifically, the number of cases caused by penicillin- and ciprofloxacin-resistant Neisseria meningitidis strains has increased.

Historically, for <u>prophylaxis</u> of close contacts, first-line choices for antibiotic prophylaxis include ceftriaxone, ciprofloxacin, and rifampin. However, <u>CDC currently recommends</u> discontinuing ciprofloxacin use when, in a rolling 12-month period, two or more invasive meningococcal disease cases caused by ciprofloxacin-resistant strains have been reported, and cases caused by ciprofloxacin-resistant strains account for at least 20% of all reported invasive meningococcal disease cases. These criteria have been met in Maryland at this time. Therefore, **MDH** recommends that clinicians discontinue use of ciprofloxacin as prophylaxis for invasive meningococcal disease and instead prescribe <u>rifampin</u>, <u>ceftriaxone</u>, or <u>azithromycin</u>. If the *N. meningitidis* case is known to be non-serogroup Y, or known to be cipro-sensitive, typically ciprofloxacin may continue to be used for prophylaxis, but please discuss with your local health department first.

For <u>treatment</u>, empirical therapy for suspected meningococcal disease is an extended-spectrum cephalosporin, such as cefotaxime or ceftriaxone. Treatment with penicillin or ampicillin requires susceptibility testing. For details, see <u>CDC's Clinical Guidance for Meningococcal Disease</u>.

### **Recommendations for Clinicians**

- Maintain a high index of suspicion for invasive meningococcal disease in patients with clinically compatible illness.
  - Typical meningitis symptoms include: sudden onset of fever, headache, stiff neck, altered mental status, nausea, vomiting, or photophobia.
  - Patients with meningococcal bloodstream infection may present with: cold hands and feet, diarrhea or nausea with or without vomiting, fatigue, fever and chills, rapid breathing, severe aches or pain in the muscles, joints, chest, or abdomen.
  - See CDC's <u>Clinical Guidance for Meningococcal Disease</u> for additional information about diagnosis and treatment.
- Immediately notify your <u>local health department</u> if meningococcal disease is suspected based on clinical findings or laboratory results of gram-negative diplococci or *N.* meningitidis from a normally sterile site.
- Upon findings of *N. meningitidis*, request testing for antibiotic (including ciprofloxacin) susceptibilities, if available. Ensure a specimen is sent to MDH Laboratory immediately as well.
- In individuals identified as close contacts of a person diagnosed with invasive meningococcal disease, prompt administration of prophylaxis is important to prevent illness and death.
  - Suspend use of ciprofloxacin as antibiotic prophylaxis, and instead prescribe rifampin, ceftriaxone, or azithromycin.
  - See the below Table for details on dosing and administration.
- Ensure that all patients who are at increased risk for meningococcal disease are up to date on <u>recommended meningococcal vaccines</u>.

Recommended Antibiotic Prophylaxis Regimens for Close Contacts									
Drug	Age	Dosage	Duration	Efficacy (%)	Precautions				
Ceftriaxone	<15 years	125 mg, intramuscularly	Single Dose	90-95	To decrease pain at injection site, dilute with 1% lidocaine.				
	≥15 years	250 mg, intramuscularly							
Rifampin	<1 month	5 mg/kg per dose, orally, every 12 h	2 days	90-95	Discussion with an expert for infants <1 month				

	≥1 month	10 mg/kg (maximum 600 mg), orally, every 12 h			Can interfere with efficacy of oral contraceptives and some seizure prevention and anticoagulant medications; may stain soft contact lenses.  Not recommended for pregnant patients.
Azithromycin		10 mg/kg (maximum 500mg)	Single Dose	90	Not recommended routinely.  Equivalent to rifampin for eradication of Neisseria meningitidis from nasopharynx in one study.

#### https://www.cdc.gov/meningococcal/php/communication-resources/index.html

Source: American Academy of Pediatrics. Red Book: 2021–2024 Report of the Committee on Infectious Diseases By: Committee on Infectious Diseases, American Academy of Pediatrics, David W. Kimberlin, MD, FAAP, Elizabeth D. Barnett, MD, FAAP, Ruth Lynfield, MD, FAAP, Mark H. Sawyer, MD, FAA

For questions, please contact MDH's Infectious Disease Epidemiology and Outbreak Response Bureau (IDEORB) at 410-767-6700, or your <u>local health department</u>.

Thank you,

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Deputy Secretary, Public Health Services