



This is an official
DHEC Health Advisory

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Increase in Ciprofloxacin- and Penicillin-Resistant Meningococcal Disease

Summary

The South Carolina Department of Health and Environmental Control (DHEC) is alerting clinicians in South Carolina to an increase in ciprofloxacin- and penicillin-resistant strains of invasive meningococcal disease caused by *Neisseria meningitidis* serogroup Y (NmY) in the counties bordering North Carolina.

Providers in the Upstate and Midlands Regions, particularly those counties bordering North Carolina should discontinue the use of ciprofloxacin for prophylaxis of close contacts of invasive meningococcal disease cases and prescribe rifampin, ceftriaxone, or azithromycin instead. Providers treating residents from Gaston, Lincoln, Iredell, Rowan, Mecklenburg, Cabarrus, or Union counties in North Carolina should also follow this guidance.

Background

The number of meningococcal disease cases caused by ciprofloxacin-resistant or ciprofloxacin- and penicillin-resistant NmY strains has increased nationwide. Although no instances of prophylaxis failure associated with ciprofloxacin resistance in the United States have been reported to date, use of ciprofloxacin as prophylaxis in areas with known ciprofloxacin resistance might increase the likelihood of failure.

Recently South Carolina has had one case of invasive meningococcal disease that was found to be resistant to ciprofloxacin and penicillin in York County. This combined with two cases in neighboring Mecklenburg County, NC meets the threshold to recommend discontinuing the use of ciprofloxacin for prophylaxis of close contacts per CDC's [updated guidance](#).

From February 2022 to February 2024, there have been 17 cases of invasive meningococcal disease reported in South Carolina; four cases in 2022, 12 cases in 2023 and one case so far in 2024.

Prevention and Control

Early identification and prompt public health follow up remain key to preventing further transmission of NmY. Based on CDC's updated guidance, the catchment area for this recommended change is as follows:

- South Carolina: Upstate and Midlands counties bordering North Carolina, particularly Chester, Lancaster, and York.
- North Carolina: Gaston, Lincoln, Iredell, Rowan, Mecklenburg, Cabarrus or Union.

Providers treating patients from the counties listed above should:

- **Discontinue use of ciprofloxacin for prophylaxis of close contacts.**
- Prescribe rifampin (4 oral doses in 48h hours) or ceftriaxone (single injection) for prophylaxis of close contacts. Note that azithromycin (single oral dose) is an alternative but is not recommended routinely because it is not as well studied for prophylaxis for close contacts. See the [Manual for the Surveillance of Vaccine-Preventable Diseases Meningococcal Disease Table 1](#) for details on recommended chemoprophylaxis regimen.
- Continue to follow updated prophylaxis guidance until notified by DHEC that a full 24 months have passed without any invasive meningococcal disease cases caused by ciprofloxacin-resistant strains having been reported in the catchment area.

All South Carolina providers should:

- Immediately [call the appropriate regional public health office](#), if meningococcal disease is suspected based on clinical findings or laboratory identification of gram-negative diplococci or *Neisseria meningitidis* from a normally sterile site.
- Coordinate with the regional public health office to send specimens/isolates for newly identified cases to the DHEC Public Health Lab for serogrouping.
- Continue to empirically treat cases of *N. meningitidis* infection per [CDC guidance](#). Providers should request antimicrobial susceptibility testing of *N. meningitidis* isolates at their medical facility's laboratory to help guide clinical treatment if testing is available.
- Ensure that all patients who are at increased risk for meningococcal disease are up to date on MenACWY vaccine. People at increased risk include people with HIV, those with functional or anatomic asplenia, people with sickle cell disease, anyone with complement deficiency, or people taking complement inhibitors. A MenACWY booster is recommended every five years for people with increased risk due to medical conditions.
- Continue to encourage routine administration of MenACWY vaccine in adolescents. A dose of MenACWY vaccine is required for children entering the seventh grade (or by 12 years of age) followed by a booster dose prior to entering 12th grade (or by 17 years of age). Adolescents and young adults (16 through 23 years old) may also receive a

serogroup B meningococcal vaccine. The preferred age for receipt is 16 through 18 years so adolescents have protection during the ages of increased risk.

Resources for Additional Information

- [CDC - Threshold for Changing Meningococcal Disease Prophylaxis Antibiotics in Areas with Ciprofloxacin Resistance](#)
- [CDC - Meningococcal Disease](#)
- [Meningococcal Vaccination: Information for Healthcare Professionals](#)
- [Vaccine-Preventable Diseases Reported in South Carolina, 2022](#)

DHEC contact information for reportable diseases and reporting requirements

Reporting of **Neisseria meningitis** is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2024 List of Reportable Conditions available at: <https://scdhec.gov/sites/default/files/Library/CR-005869.pdf>

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

<p>Regional Public Health Offices – 2024 Mail or call reports to the Epidemiology Office in each Public Health Region</p>			
MAIL TO:			
<p><u>Lowcountry</u> 3685 Rivers Avenue, Suite 201 N. Charleston, SC 29405 Fax: (843) 953-0051</p>	<p><u>Midlands</u> 2000 Hampton Street Columbia, SC 29204 Fax: (803) 251-3170</p>	<p><u>Pee Dee</u> 1931 Industrial Park Road Conway, SC 29526 Fax: (843) 915-6506</p>	<p><u>Upstate</u> 352 Halton Road Greenville, SC 29607 Fax: (864) 282-4373</p>
CALL TO:			
<p><u>Lowcountry</u> Allendale, Bamberg, Beaufort, Berkeley, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper, Orangeburg Office: (843) 441-1091 Nights/Weekends: (843) 441-1091</p>	<p><u>Midlands</u> Aiken, Barnwell, Chester, Edgefield, Fairfield, Kershaw, Lancaster, Lexington, Newberry, Richland, Saluda, York Office: (888) 801-1046 Nights/Weekends: (888) 801-1046</p>	<p><u>Pee Dee</u> Clarendon, Chesterfield, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, Williamsburg Office: (843) 915-8886 Nights/Weekends: (843) 409-0695</p>	<p><u>Upstate</u> Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, McCormick, Oconee, Pickens, Spartanburg, Union Office: (864) 372-3133 Nights/Weekends: (864) 423-6648</p>
<p><u>DHEC Bureau of Communicable Disease Prevention & Control</u> Division of Acute Disease Epidemiology 2100 Bull St • Columbia, SC 29201 Phone: (803) 898-0861 • Fax: (803) 898-0897 Nights / Weekends: 1-888-847-0902</p>			
<p>For information on reportable conditions, see https://www.scdhec.gov/ReportableConditions</p>			

Categories of Health Alert messages:

- Health Alert** Conveys the highest level of importance; warrants immediate action or attention.
- Health Advisory** Provides important information for a specific incident or situation; may not require immediate action.
- Health Update** Provides updated information regarding an incident or situation; unlikely to require immediate action.
- Info Service** Provides general information that is not necessarily considered to be of an emergent nature.