NCDHHS Healthcare-Associated Infection Team ■ **North Carolina Antibiotic Stewardship Workgroup**

The NCDHHS Healthcare-Associated Infection Team works with health care providers, patients and communities to make sure antibiotics and other medicines are used safely and effectively. Using the right drug, in the right amount, for the right length of time helps protect everyone from infections that no longer respond to treatment.

North Carolina

Antibiotic Stewardship Digest

In this issue:

U.S. Antibiotic Awareness Week

U.S. Antibiotic Awareness Week (USAAW) is November 18-24. This week raises awareness of the importance of appropriate antibiotic and antifungal use and the threat antimicrobial resistance (AR) poses to people, animals, plants, and their shared environment. Check out how you can get involved!

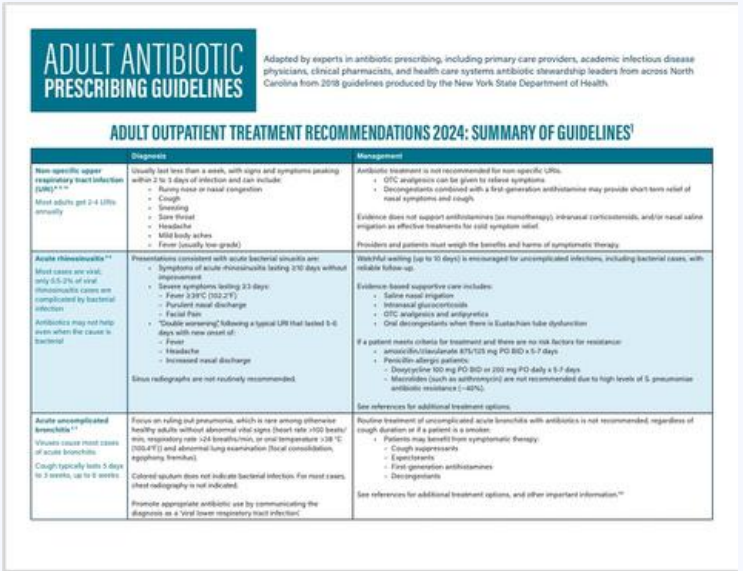
Interview with an Expert

Get to know Dr. Lisa E. Davidson and why she believes in fighting antimicrobial resistance.

Antibiotic Stewardship Resources

Check out North Carolina's Adult and Pediatric Prescribing Guidelines, CDC reports, and what we're reading about antibiotic stewardship!





U.S. Antibiotic Awareness Week

November 18-24

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Gov. Josh Stein proclaims Nov. 18-24 as NC Antibiotic Awareness week! Read the proclamation.

How to get involved:

Wear Purple

Show your support by wearing purple and encouraging others in your organization to do the same. You can decorate your office or clinic in purple too!

Post and repost social media

Follow NCDHHS social media accounts and repost Antibiotic Awareness Week materials. You can also use our social media toolkit found on our website to create your own posts.

Take North Carolina's Antibiotic Stewardship Pledge

We launched North Carolina's Antibiotic Stewardship pledge in fall 2025. If you haven't done so already, take the pledge and display your completion certificate at your place of work. You can also encourage others to take the pledge with helpful tools.

Attend Webinars

Register for webinars offered by CDC and the World Health Organization .

Share resources and tools with colleagues

You can find a list of resources at the end of this newsletter!

Interview with an Expert

Lisa E. Davidson, MD, MS, FIDSA

Medical Director of the Antimicrobial Support Network at Advocate Health-Greater Charlotte Market
Professor, Section on Infectious Diseases
Department of Internal Medicine, Wake Forest University School of Medicine



How does your work involve issues of antibiotic use?

As the Medical Director of Antimicrobial Stewardship for Advocate Health in the Charlotte Region, antibiotic use is at the center of my work. I collaborate with clinicians and health care leaders across our health system to ensure that antibiotics are prescribed only when needed, and that patients receive the right antibiotic, at the right dose, for the right duration.

On a day-to-day basis, I work with physicians, pharmacists, and other health care professionals to review antibiotic therapy and ensure patients are receiving the most appropriate treatment. At the health system level, I partner with infection prevention, microbiology, nursing, and quality leaders to develop and implement initiatives that improve antibiotic prescribing and reduce healthcare-associated infections.

The goal is always the same: providing the best possible care for patients today while preserving the effectiveness of these life-saving medications for future generations.

How has antibiotic use or antibiotic resistance affected your work?

Antibiotic resistance has made patient care increasingly complex. Many people assume that taking an antibiotic when it is not needed is harmless. But antibiotics are different from most medications because their use can have consequences beyond the individual patient. Inappropriate antibiotic use can contribute to the development and spread of resistant bacteria, affecting both patients and communities.

We are seeing more infections caused by bacteria that no longer respond to commonly used antibiotics. This can limit treatment options, prolong hospital stays, increase health care costs, and lead to poorer patient outcomes.

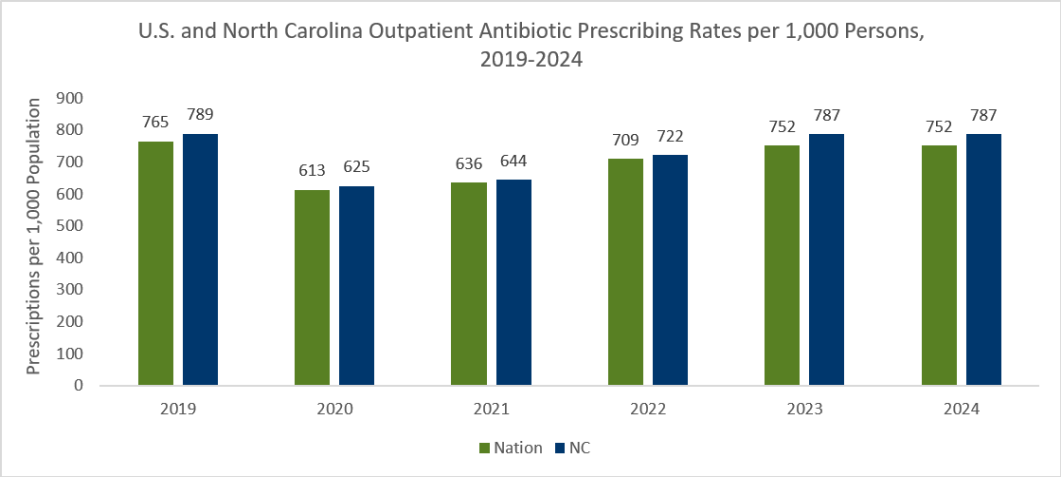
As a result, much of my work focuses on helping clinicians make evidence-based treatment decisions and implementing stewardship strategies that reduce unnecessary antibiotic use. Every antibiotic prescription matters, not only for the patient receiving it today but also for preserving treatment options for future patients.

What worries you most about antibiotic resistance as a professional and a person?

I worry most about the effectiveness of antimicrobials for future generations. Antibiotics have transformed modern medicine and made many of today's medical advances possible. Surgical procedures, cancer treatment, organ transplantation, and critical care all depend on having effective antibiotics available to prevent and treat infections. As resistance continues to increase, we risk losing the tools that have allowed us to safely perform these life-saving treatments.

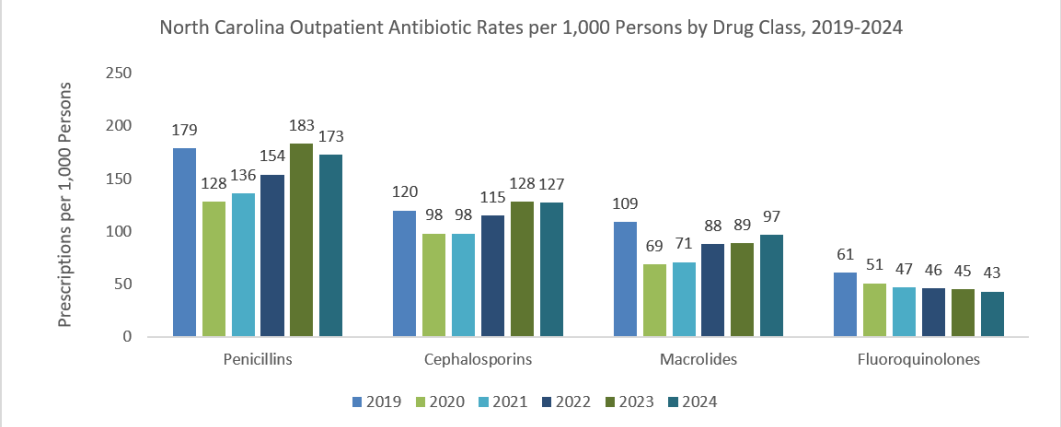
Addressing this challenge cannot be the responsibility of infectious disease specialists alone. Health care professionals, patients, and communities all have a role to play by using antibiotics wisely. The choices we make today will determine whether these medications remain effective for future generations.

Antibiotic Use and Stewardship in North Carolina



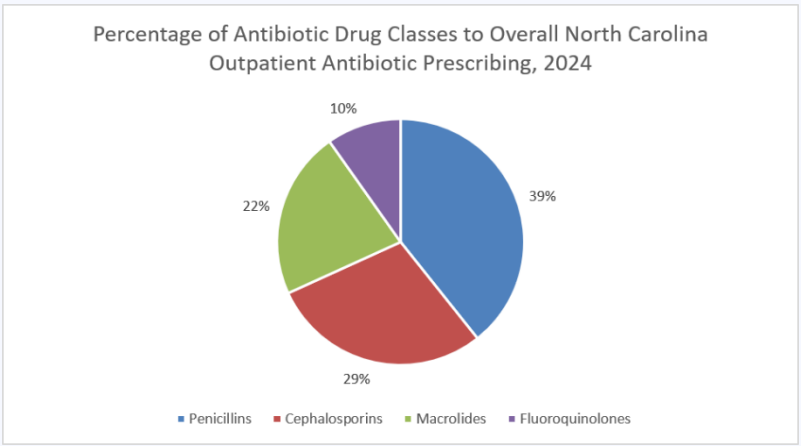
Like the national trend, overall outpatient antibiotic prescribing rates in North Carolina decreased from 2019 to 2020, falling 20% in the first year of the COVID-19 pandemic. Overall, rates began increasing in 2021 and approached pre-pandemic levels by 2023.

Source: https://arpsp.cdc.gov/psp/listing/geography/profile/nc



The rate of prescribing for penicillins, cephalosporins, and macrolides increased in 2023, while prescribing rates for fluoroquinolones decreased slightly. Both penicillins and fluoroquinolones have shown a decrease in prescribing rates for 2024.

Source: https://arpsp.cdc.gov/psp/listing/geography/profile/nc



Penicillins were the highest prescribing drug class in 2024.

Source: https://arpsp.cdc.gov/psp/listing/geography/profile/nc

Antibiotic Stewardship Resources and Tools

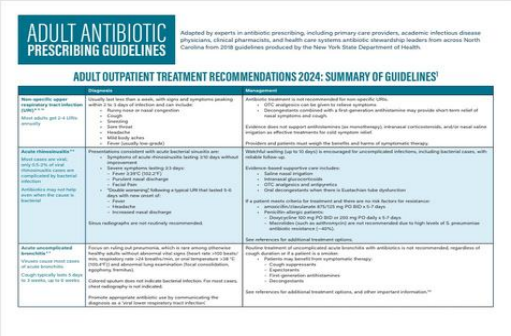
Below you will find helpful tools and resources for practicing antibiotic stewardship. For these resources and more, please visit NCDHHS' Antibiotic Stewardship Resources webpage.

North Carolina's Antibiotic Prescribing Guidelines

Click on each link below to download a PDF of the guidelines.

- Adult Antibiotic Prescribing Guidelines
- Adult Antibiotic Prescribing Guidelines Brochure
- Adult Antibiotic Prescribing Guidelines (Mobile-Friendly)

- Pediatric Antibiotic Prescribing Guidelines
- Pediatric Antibiotic Prescribing Guidelines Brochure
- Pediatric Antibiotic Prescribing Guidelines (Mobile-Friendly)



CDC Antibiotic Stewardship Resources

- CDC's 2026 Antimicrobial Resistance Threat Report
- CDC Antimicrobial Resistance Homepage
- CDC Antibiotic Stewardship Training Courses
- CDC Antibiotic Prescription and Use Information for Professionals Webpage

What We're Reading

Baghdadi, J. D., et. al. Using Probability of Community-Acquired Pneumonia to Tailor Antimicrobials Among Inpatients: A Pragmatic, Randomized Trial, Clinical Infectious Diseases, 2026;, ciag126, doi: 10.1093/cid/ciag126
In this proof-of-concept study, antimicrobial stewardship-guided interpretation of laboratory tests for viral infection using a simple template safely decreased unnecessary antibiotic use for hospitalized adults with community-acquired respiratory illness.

Centers for Disease Control and Prevention. (2026, July 1). Antibiotic stewardship strategies: Outpatient dental settings. https://www.cdc.gov/antibiotic-use/media/pdfs/Core-Elements-Outpatient-Dental-508.pdf
This document provides strategies for the safe prescribing of antibiotics in outpatient dental settings.

Savage TJ, et. al. Amoxicillin-Clavulanate vs Amoxicillin for Acute Sinusitis in Adults. JAMA. 2026 May 19;335(19):1694-1705. doi: 10.1001/jama.2025.26902.
This study supports standard-dose amoxicillin as a preferred empiric choice for adults younger than 65 years with uncomplicated acute sinusitis for whom an antibiotic is indicated.

Don't forget to save the date for North Carolina's 2027 Antibiotic Stewardship Conference!
Register by Dec. 21, 2026.