



# Antimicrobial Steward Call

## October 24, 2023

Tennessee Department of Health

Healthcare Associated Infections and Antimicrobial Resistance Program

**TN**

**Welcome**

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# Announcements

# US Antibiotic Awareness Week

**U.S. ANTIBIOTIC  
AWARENESS WEEK**

**November 18–24, 2023**

[www.cdc.gov/antibiotic-use](http://www.cdc.gov/antibiotic-use)



**BE  
ANTIBIOTICS  
AWARE**

SMART USE, BEST CARE



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# Updated Toolkits

- Includes:
  - Key messages
  - Social media messages
  - Graphics and videos
  - Antibiotic Stewardship resource bundles
- <https://www.cdc.gov/antibiotic-use/week/toolkit.html>
- <https://www.cdc.gov/drugresistance/pdf/USAAW-2023-toolkit-508.pdf>

# Planned Activities

- High Prescriber Notification using Diagnostic Data
- Normal Media Campaign
- Op-Ed on Antibiotic Use in Animals
- Light up the Nashville Bridge

# Planned Activities

- High Prescriber Notification using Diagnostic Data
  - To prescribers who prescribe more antibiotics for indications that don't require antibiotic therapy than their peers
    - Top 10% of Nurse Practitioners
    - Top 5% of Family Medicine, Internal Medicine, Pediatric, and Physician Assistant providers
  - Identified 1200 prescribers using IQVIA LRx/Dx data from 2022



Dear

I am writing to ask for your help in promoting appropriate antibiotic use to protect patients from harms caused by unnecessary antibiotic use and combat antibiotic resistance, one of the most urgent threats to the public's health.

Although antibiotics are life-saving medications that fight infections, use comes with potential side effects and leads to antibiotic resistance. Infections caused by antibiotic-resistant bacteria require extended hospital stays, additional follow-up visits, and treatments that are costly and potentially more toxic. Antibiotic use when not needed can cause more patient harm than good.<sup>1</sup>

According to the Centers for Disease Control and Prevention (CDC) Antibiotic Resistance and Patient Safety Portal, Tennessee has one of the highest rates of antibiotic prescribing in the country.<sup>2</sup> The Tennessee Department of Health (TDH) is working to combat the growing threat of antibiotic resistance and improve patient safety by participating in a CDC initiative to improve antibiotic prescribing. As part of this effort, TDH is notifying providers about their prescribing practices relative to other Tennessee providers for indications that do not require antibiotics.<sup>3</sup>

**You prescribe more antibiotics for indications that don't require antibiotic therapy than 90% of nurse practitioners in Tennessee.**

This analysis was based upon the number of antibiotic prescriptions dispensed from community pharmacies in 2022 and diagnosis codes associated with provider visits from data acquired from IQVIA, a research organization serving the combined industries of health information technologies and clinical research.<sup>4</sup> Office visits with infectious disease-related diagnoses were matched with antibiotic prescriptions filled within 7 days and analyzed for appropriateness. Diagnoses not requiring antibiotic therapy were included for this analysis as previously defined by the CDC.<sup>5</sup>

Consider taking the following actions and to optimize antibiotic prescribing for Tennesseans:

1. **Talk to your patients about why they don't need antibiotics for viral respiratory infections.** What to do to feel better, and when to seek care again if they don't feel better. <sup>6</sup> A CDC fact sheet is enclosed to use for patient communication: "Viruses or Bacteria: What's got you sick?"
2. **Display a personalized commitment poster** to communicate your commitment to using antibiotics appropriately with your patients.
3. **Take the CDC Training with CME credits on Antibiotic Stewardship** to learn more about appropriate antibiotic use.<sup>7</sup>

CDC's national campaign, *Be Antibiotics Aware*, aims to raise awareness about antibiotic resistance and the importance of appropriate antibiotic prescribing and use among healthcare providers, patients, and their families. We encourage you to visit the *Be Antibiotics Aware* campaign website to find resources that you can use to educate your patients about appropriate antibiotic use: [www.cdc.gov/antibiotic-use](http://www.cdc.gov/antibiotic-use).

Antibiotic prescribing is a complex issue, but there are simple changes that we can all make that will have the potential for big impact. We look forward to collaborating with you to improve patient safety and combat antibiotic resistance. If you have any questions about these data or antibiotic stewardship in Tennessee, please email us at [HAIHealth@tn.gov](mailto:HAIHealth@tn.gov).

Sincerely,

Callyn Wren, PharmD, BCIDP  
Antimicrobial Stewardship Pharmacist  
Tennessee Department of Health

Christopher Wilson, MD, MPH  
Medical Director, HAI Program  
Tennessee Department of Health

Christopher Evans, PharmD  
Antimicrobial Stewardship Pharmacist  
Tennessee Department of Health

# Planned Activities

- Normal Media Campaign
  - Daily email communication on antibiotic stewardship and antibiotic use to TDH partners
  - Press release and by-line on antibiotic use during the holiday season
  - Social Media Campaign
  - Governor’s Proclamation

Antibiotic Awareness Week Nov. 18-24, 2023  
Commentary template for SHEA Antimicrobial Stewardship Committee

## Holiday and Virus Season Rings in Reminder to Preserve Benefits of Antibiotics

By Chris Evans

As the holiday season approaches with its usual festivities, travel, and time indoors, respiratory viruses will inevitably appear and spread through households. So, this is a good time to address the common misconception that antibiotics are the cure for such ailments. The truth is that antibiotics do not treat viruses, and using them for common colds, which are caused by viruses, could cause harm to our individual well-being and the health of the larger community. With Antibiotic Awareness Week approaching, healthcare providers are drawing attention to the nuances of antibiotic use.

Antibiotics are, no doubt, lifesaving. Because of antibiotics, people are less likely to die from simple wounds that become infected. Childbirth is much safer, advances like transplants and cancer treatments are possible, and fewer people die from communicable diseases around the world. Since penicillin was first discovered nearly 100 years ago, antibiotics have played a huge role in improving the quality of our lives and in extending life expectancy by nearly a quarter of a century.

But antibiotics are not magic pills that can cure every infection. Antibiotics do not defend against viruses, which means they are ineffective against colds, runny noses, most sore throats, COVID-19, and the flu. Even some bacterial infections that cause sinus infections and ear infections will get better on their own without antibiotics. Taking an antibiotic “just in case” can be counterproductive and even harmful.

Using antibiotics when they are not needed or using the wrong antibiotic can contribute to a phenomenon called antibiotic resistance. When bacteria are exposed to these powerful drugs, they can develop mutations that render them resistant to the drug. As vulnerable bacteria are killed off, resistant ones are left behind to grow and spread. When this happens, illnesses caused by these resistant bacteria are harder to treat.

The bottom line is that antibiotic resistance has multiple causes and solutions, including some actions you can take to make a difference. Steps you can take to protect your health and combat antibiotic resistance:



# Planned Activities

- Korean War Veterans Memorial Bridge goes Purple!
  - November 18, 2023



Go Purple for USAAW by:

- Wearing purple
- Lighting up buildings and landmarks in purple for the week
- Bringing purple to your online presence
  - Sharing your purple pictures on your social media, tagging **#AntimicrobialResistance** or **#USAAW23**
  - Highlighting USAAW on your website
- Reaching out through your network and encourage others to participate!

# Join the Conversation

- Follow @CDC\_AR, engage throughout the week, and jump into X (formerly Twitter) chats using #AntimicrobialResistance, #USA AW23, or #WAAW:



Tuesday, November 14, 8-9 p.m. EST – Use #AbxEquity and #USA AW23 to join a live chat on optimal antibiotic use and health equity with:

- Society of Infectious Diseases Pharmacists
- CDC's Antimicrobial Resistance Coordination and Strategy Unit
- The Society for Healthcare Epidemiology of America
- American College of Clinical Pharmacy Infectious Diseases Practice and Research



Thursday, November 16, Global X (formerly Twitter) Storm, 10-11a.m. EST – Join @CDC\_AR in sharing messages about improving antibiotic use and combating antimicrobial resistance, using #AntimicrobialResistance and #WAAW.

# Annual HRSA Webinar



## NHSN AU Option: Using Data for Action in Critical Access Hospitals

Tuesday, November 14, 2023  
3–4 PM ET

CS340788-A



[https://cdc.zoomgov.com/webinar/register/WN\\_FDSZh8hdR7KzmSpMN1b1tw](https://cdc.zoomgov.com/webinar/register/WN_FDSZh8hdR7KzmSpMN1b1tw)

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# Other Reminders



Nationwide, approximately half of all patients admitted to a hospital will receive an antibiotic during their stay. In a ten state study of healthcare-associated infections and antibiotic use published in the Journal of the American Medical Association in 2014, Tennessee had the highest hospital antibiotic prescribing rates.<sup>1</sup> Minimizing unnecessary exposure to antibiotics will reduce the pressure for development of multidrug-resistant organisms with few available treatment options and substantial associated morbidity or mortality.

Because Tennessee has among the highest antibiotic prescribing rates in the United States, mandating NHSN Antibiotic Use reporting by acute care hospitals is one crucial step towards optimizing antibiotic prescribing as part of the state's mission to protect, promote and improve the health of people in Tennessee. Mandatory reporting can be a key driver of quality improvement as was demonstrated in Tennessee by a 53% reduction in central line-associated bloodstream infections over five years and a 20% reduction in catheter-associated urinary tract infections over two years.

veillance software system. The process, including necessary validation, can take anywhere from **6 to 18 months**.

**We understand that, due to the COVID-19 outbreak, many facilities have dedicated resources away from antibiotic use reporting. To accommodate the COVID-19 response by facilities, we have modified the following phased-in approach for mandating hospital AU reporting into the NHSN AU Option:**

- **Acute Care Hospitals with a total bed size of >250: First month submitted by January 1, 2022 (Previously January 1, 2021)**
- **Acute Care Hospitals with a total bed size between 100–250: First month submitted by January 1, 2023 (Previously January 1, 2022)**
- **Acute Care Hospitals with a total bed size of < 100 and Critical Access Hospitals: First month submitted by January 1, 2024 (Previously January 1, 2023)**

**Resources:**

- Acute Care Hospitals with a total bed size > 100: Already Required
- Acute Care Hospitals with a total bed size of < 100 and Critical Access Hospitals: First month submitted by Jan 2024
- CMS Promoting Interoperability: AU AND AR for CY 2024

# AU Reports

- Deadline for Q3 data – 10/31/2023
  - AU Quality Report
  - SAAR Report
  - AU PP Survey

# Stewardship Risk Score

- **Survey has been sent out to all stewards in Tennessee, Colorado, and Virginia**
  - Results to help guide the workgroup
  - Please check email from YESTERDAY for a reminder
- Recruiting for workgroup of subject matter experts to help determine
  - Quantify value of each stewardship intervention listed in the NHSN Annual Hospital Survey

# Survey Questions

- For each stewardship intervention:
  - On a scale of 1 to 7, with 1 being non-essential and 7 being absolutely essential, how essential is this intervention to the success of your antimicrobial stewardship program?
  - On a scale of 1 to 7, with 1 being not-effective and 7 being extremely effective, how effective is this intervention at driving antimicrobial use at your facility?

# Current Status

- The Redcap is ready for Distribution this month

**LEADERSHIP SUPPORT PAGE 1 OF 2**

How **ESSENTIAL** is each intervention below to the success of your antimicrobial stewardship program? (1 being non-essential and 7 being absolutely essential)

	1	2	3	4	5	6	7
Providing stewardship program leader(s) dedicated time to manage the program and conduct daily stewardship interventions. <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
							reset
Allocating resources (for example, IT support, training for stewardship team) to support antibiotic stewardship efforts. <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
							reset
Having a senior executive that serves as a point of contact or "champion" to help ensure the program has resources and support to accomplish its mission. <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
							reset
Presenting information on stewardship activities and outcomes to facility leadership and/or board at least annually. <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
							reset
Ensuring the stewardship program has an opportunity to discuss resource needs with facility leadership and/or board at least annually. <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**LEADERSHIP SUPPORT PAGE 2 OF 2**

How **EFFECTIVE** is each intervention below at driving antimicrobial use at your facility? (1 being not effective and 7 being extremely effective)

	1	2	3	4	5	6	7
Providing stewardship program leader(s) dedicated time to manage the program and conduct daily stewardship interventions. <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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# NHSN SAAR Re-baselining Plans

- 2022 AU Option Data Report outreach completed

## Tentative SAAR Re-Baseline Plans

- Late 2023:
  - Meet with subject-matter experts and begin prep work
- Early 2024:
  - AU data quality review; AUR Team will perform outreach to facilities
- Summer 2024:
  - Begin modeling work
  - Calendar year 2023 will be used as the baseline year
  - Plan to assess data for SAARs for new location types and potentially revised drugs within SAAR categories

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**IDWeek in Review**

- Slides removed at request of speaker.
- Please refer to the video for more information.

# Next Steps

- **Next Call**
  - December 12 2pm Eastern/1pm Central Time
  - Topic: Targeted Assessment for Antimicrobial Stewardship
  - Topic: Stewardship Risk Score Survey Results
  
- **Feedback always appreciated**
  - [Christopher.evans@tn.gov](mailto:Christopher.evans@tn.gov)