TN NHSN User Call

from the Tennessee Department of Health

TN

Monday April 21, 2025

Agenda

- Respiratory Illness Update
  - Ashley Gambrell, MPH
- NHSN Update
  - Vicky Lindsey, RN, CIC
- Annual Report Update
  - Ashley Gambrell, MPH, CPM
- Tennessee-Wide Infection Control Education (Twice)
  - Kate Moore, MSN, RN, CIC
- Dialysis Simulation-Memphis
  - Joshua Key, RN
- Screening for Patient Healthcare-Associated Infections (HAI) Module 2
  - Priscilla Pineda, MPH, CPH

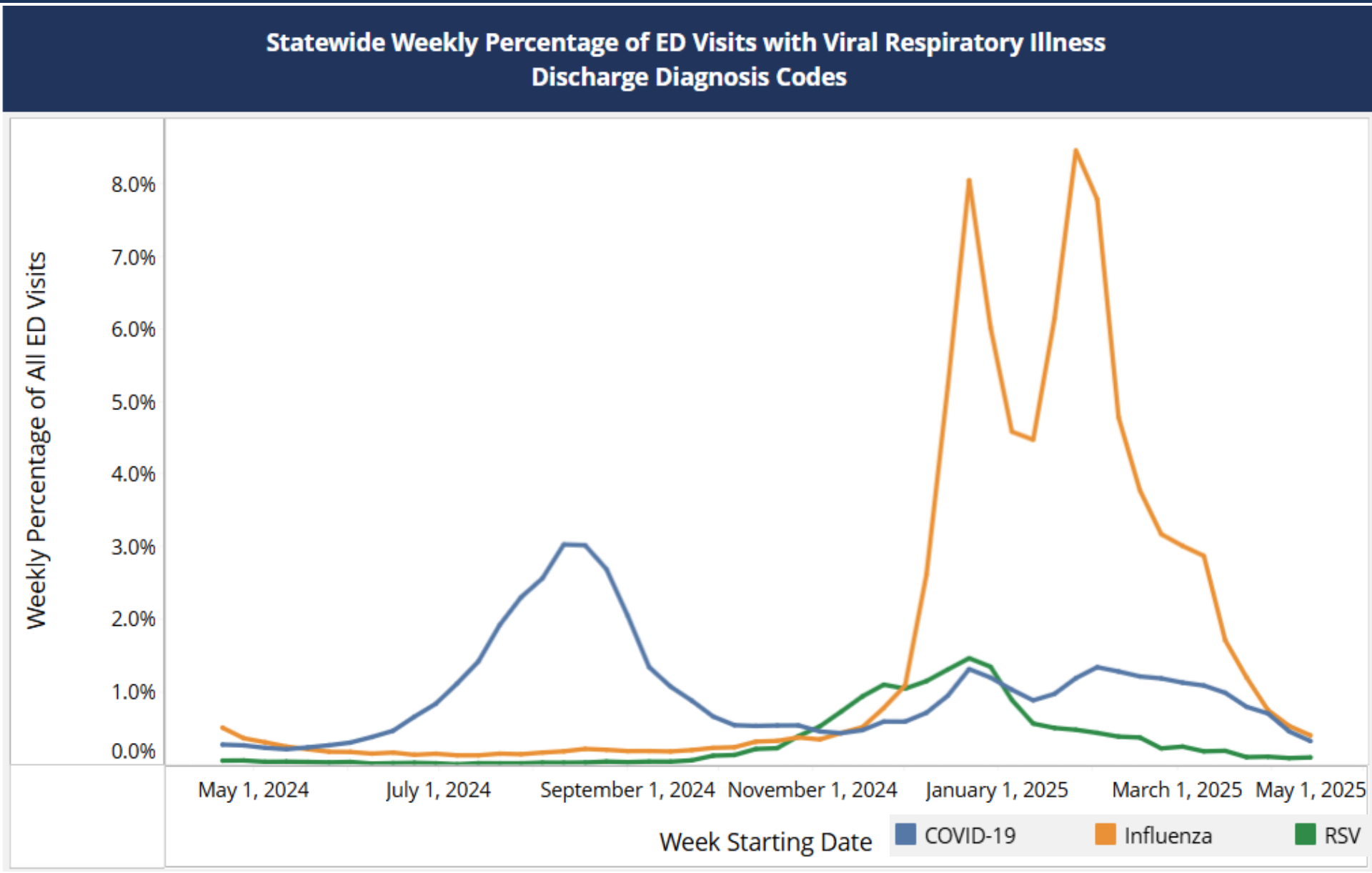
TDH NHSN Team

- **Ashley Gambrell, MPH**
  - **Senior NHSN Epidemiologist**
- **Vicky Lindsey, AAS, RN, CIC**
  - **Senior NHSN Public Health Nurse Consultant**
    - **Lead Technological Assistance**
  - **Infection Prevention and Control Specialist**
- **Marissa Turner, MPH**
  - **Assistant NHSN Epidemiologist**
- **Alex Kurutz, MPH**
  - **Dialysis Epidemiologist**
- **Jordan Morris, MPH**
  - **Assistant NHSN Epidemiologist**

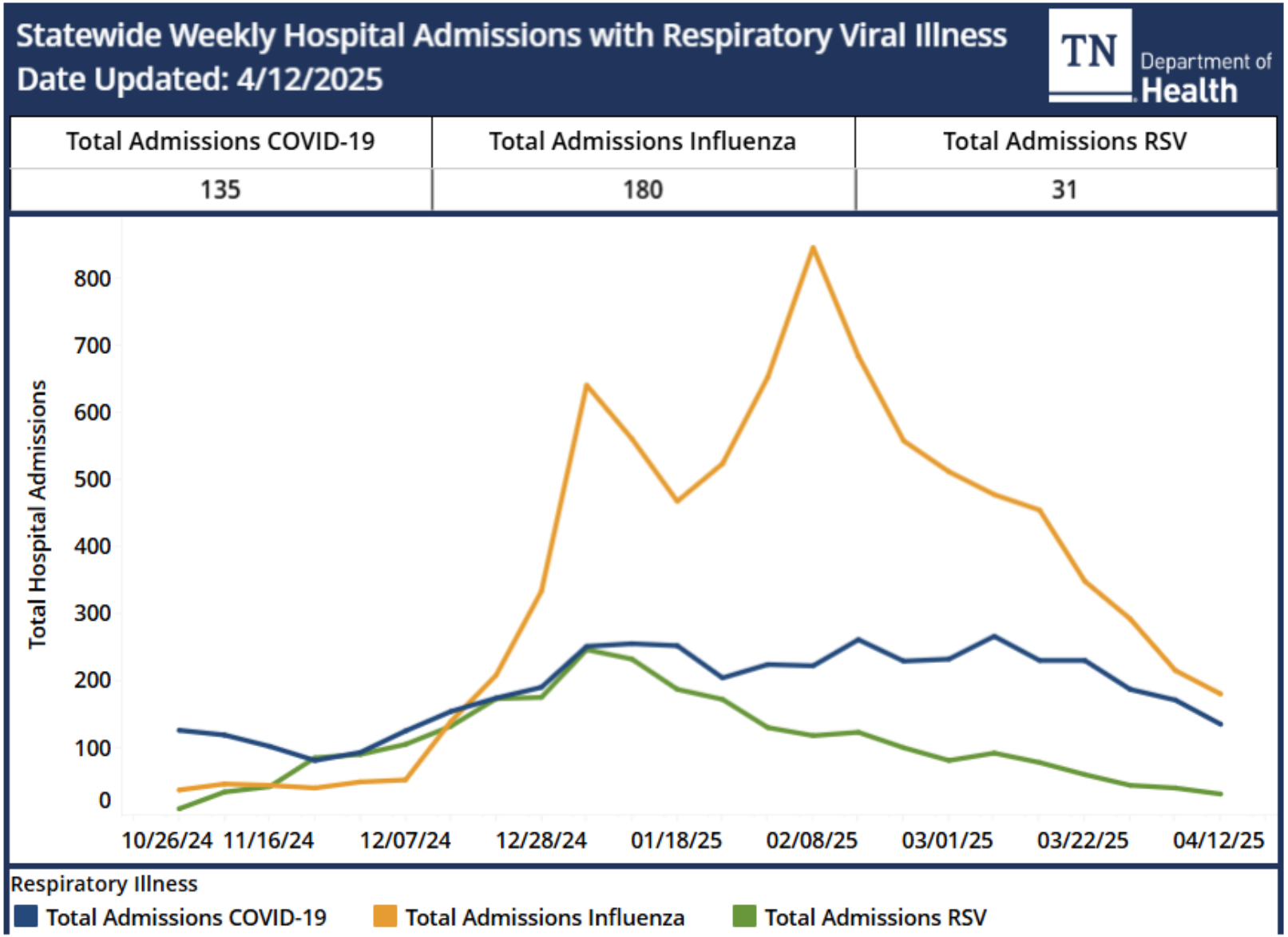
Respiratory Illness Update

TN Department of Health

Syndromic Surveillance of ED Visits



Statewide Weekly Hospital Admissions



Respiratory Illnesses Data Channel

Overall respiratory illness activity in **Tennessee**

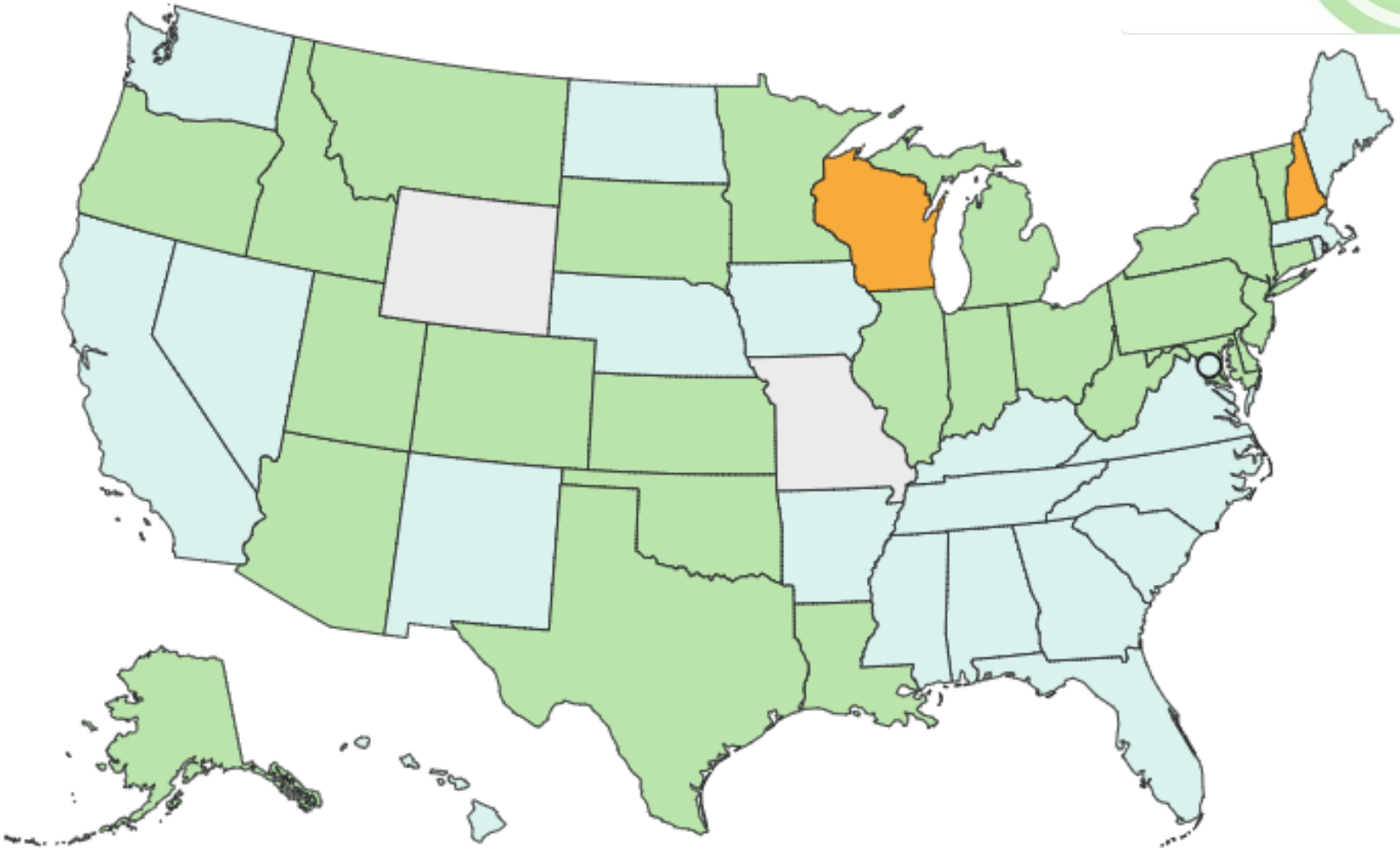
Very Low

Emergency department visits in **Tennessee**

COVID-19	Flu	RSV
Very Low Decreasing ↘	**Low** Decreasing ↘	**Low** Decreasing ↘

Bottom Line

Nationally,
Respiratory Illness
causing people to seek healthcare is



U.S. Territories

AS GU PR VI

Acute Respiratory Illness

Minimal | Low | Moderate | High | Very High | Data Unavailable

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NHSN Updates

Vicky Lindsey, RN, CIC| Tennessee Department of Health | Communicable and Environmental Diseases and Emergency Preparedness

NHSN – Dialysis

- **CMS revised the End-Stage Renal Disease (ESRD) statement of work in September 2024.**
  - **The revisions included removal of reporting requirements to NHSN for monthly patient COVID-19 vaccination and monthly healthcare personnel (HCP) influenza vaccination data reporting.**
- **The reporting of HCP COVID-19 Vaccination, as required by the CMS End-Stage Renal Disease Quality Incentive Program (ESRD QIP), remains in place and is <u>not</u> affected by the ESRD statement of work.**
  - **Facilities participating in ESRD-QIP must report COVID-19 vaccination data among HCP monthly (one week per month; facilities can select any week to report).**

NHSN – Dialysis

- This data is due according to the ESRD-QIP deadlines, which are approximately 3 months after the last week of a reporting quarter.
- Data for the reporting period for Q1 2025 (January-March 2025) are due by June 30, 2025.
- All NHSN data submission deadlines for calendar year 2025 can be found here: NHSN Submission Deadlines for Calendar Year 2025 ESRD QIP Data | My CROWN Web.

- Additionally, NHSN still supports the voluntary submission of dialysis patient COVID-19 vaccination and HCP influenza vaccination reporting.

NHSN – Dialysis- Up to date Definition

- **The Up to Date definition for Q1 2025 should be used beginning with the first reporting week in 2025 (December 30, 2024-January 5, 2025, for HCP or January 1-January 7, 2025, for patients).**

- **Beginning the first week of reporting for Q1 2025 (December 30, 2024 – March 30, 2025), individuals aged 65 years and older are Up to Date when they have received 2 doses of the 2024-2025 COVID-19 vaccine or received 1 dose of the 2024-2025 COVID-19 vaccine in the past 6 months.**

- **There is no change to the Up to Date definition for individuals younger than 65 years. Therefore, individuals younger than 65 years are Up to Date when they have received 1 dose of the 2024-2025 COVID-19 vaccine (any time since it was approved in August 2024).**

NHSN – Reporting Deadline CMS QRP –Q4

- **May 15, 2025, Q4 Data**
  - **Acute Care Hospitals,**
  - **Cancer Hospitals,**
  - **Inpatient Rehabilitation Facilities,**
  - **Long-term Acute Care Facilities (Long-term Care Hospitals),**
  - **Skilled Nursing Facilities,**
  - **Inpatient Psychiatric Facilities,**
  - **Ambulatory Surgery Centers**

- **Healthcare Personnel Influenza Vaccination**
  - **Q4 & Q1 data**

Annual Report Announcements

- We are working on the Annual Report for this year!
  - Will include 2023 and 2024 data
  - Will include facility specific pages

- New Format
  - Previously:
    - Release Statewide Report and Facility-Specific Tables together
  - Now:
    - Would like to Release Preliminary Facility-Specific Tables in June 2025
      - Dependent on participation from you!
    - Will follow up with Statewide Report in late summer 2025

- We need your help!

Facility Tasks: Data Confirmation

- By the end of April, facilities will receive an email requesting they view and approve their preliminary data
  - If data is correct, please reply as a confirmation
    - End of tasks
  - If data is incorrect, please reply with incorrect data details, and we will work with you to get the data corrected in NHSN for subsequent final report

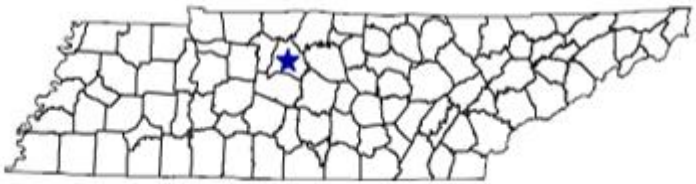
- Facilities will have one month to view and confirm their data for the release of the final report

Facility-specific Pages General Section

TDH Central, Nashville, Davidson County

Medical School Affiliation: Graduate teaching

Bed Size Category: 400+ beds



Section 1:

Facility information from the NHSN 2022 Annual Survey

Healthcare-Associated Infections (HAI) Summary

Standardized Infection Ratio (SIR) by Infection Type, 01/01/2014-12/31/2014

		Infections			Standardized Infection Ratio (SIR)		
HAI	Type/Unit	Observed	Predicted	Device Days/Procedures Performed/Patient Days	SIR*	95% CI	TN SIR
CLABSI	Adult/Pediatric ICU	6	7.0	5007	0.85	(0.34, 1.76)	0.46
	Neonatal ICU	1	10.3	4471	0.10	(0.01, 0.48)	0.34
CAUTI	Adult/Pediatric ICU	10	4.8	2139	2.05	(1.04, 3.66)	1.22
SSI	Colon surgery	3	9.5	272	0.31	(0.08, 0.86)	0.91
	Abdominal hysterectomy	5	2.5	404	1.93	(0.71, 4.28)	0.80
LabID	MRSA bacteremia	11	18.6	191987	0.59	(0.31, 1.03)	1.02
	C. difficile infection	113	154.1	165536	0.73	(0.61, 0.88)	0.78

Green highlighting indicates an SIR significantly LOWER than the national baseline (CLABSI, SSI - 2006-2008; CAUTI - 2009; LabID - 2010-2011)

Red highlighting indicates an SIR significantly HIGHER than the national baseline (CLABSI, SSI - 2006-2008; CAUTI - 2009; LabID - 2010-2011)

N/A: Data not shown for <50 device days or <20 procedures / SIR not calculated when <1 infection predicted

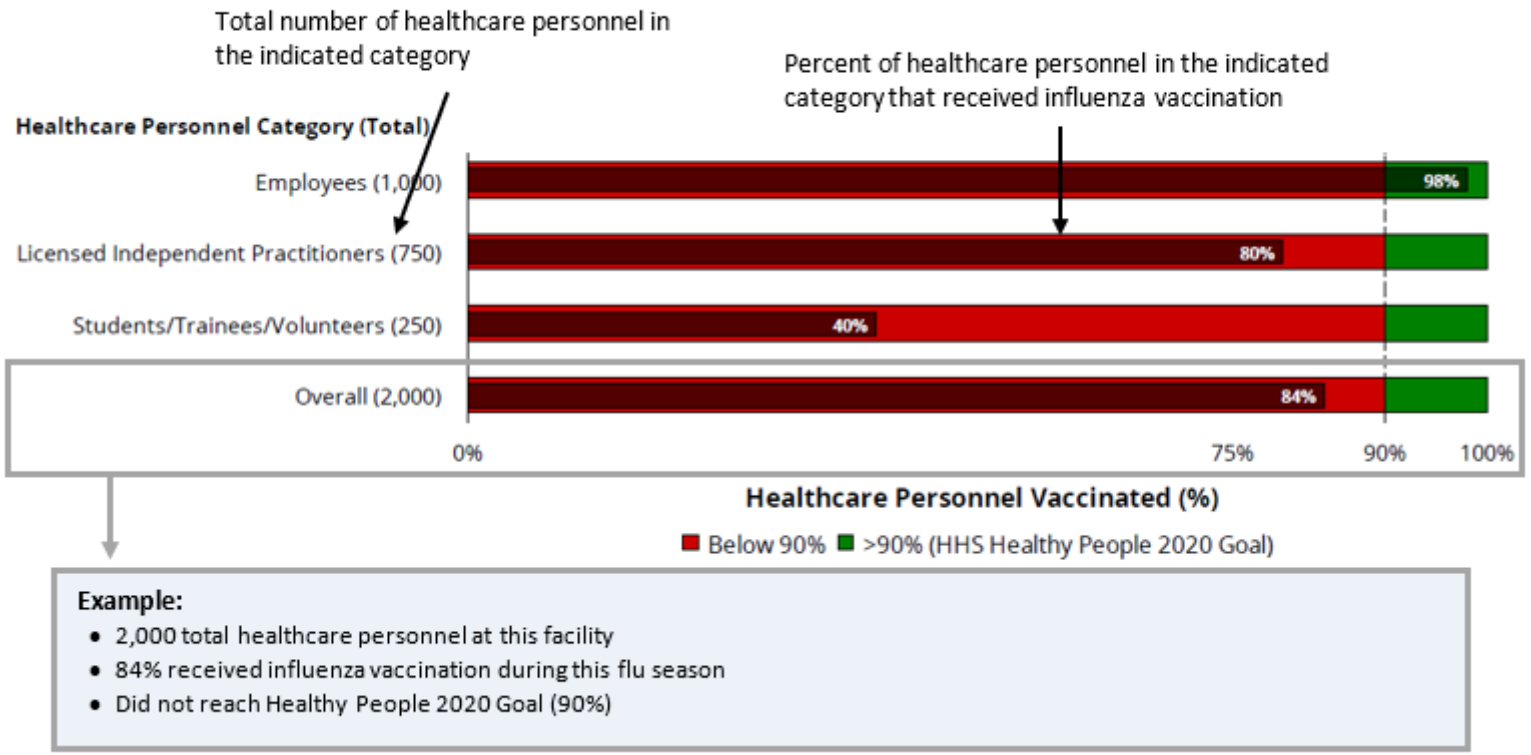
*Complex Admission/Readmission SIRs are presented for surgical site infections (SSI)

See page 2 for more detailed Information about HAIs at TDH Central

Section 2:

Facility-Specific Standardized Infection Ratios (SIRs) by HAI from January – December 2022

How to Read Facility Influenza Vaccinations



Example:

- 2,000 total healthcare personnel at this facility
- 84% received influenza vaccination during this flu season
- Did not reach Healthy People 2020 Goal (90%)

How to Read Facility-specific SIRs

Figure 5: How to Read Facility-Specific Standardized Infection Ratio Figure

OBS = Number of infections observed
PRED = Number of infections predicted based on NHSN national baseline data

Reporting year

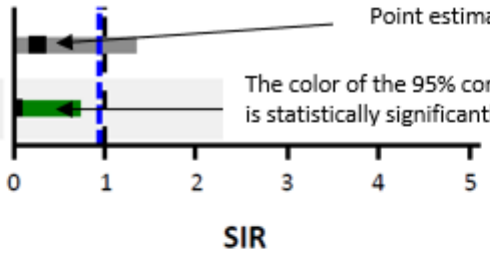
Number of procedures performed

Standardized Infection Ratio (SIR)

$$SIR = \frac{\text{Number of infections observed}}{\text{Number of infections predicted}}$$

- SIR=1.3 means **30% more** infections than predicted
- SIR=0.5 means **50% fewer** infections than predicted

YR	OBS	PRED	PROC	SIR
2021	1	3.6	110	0.3
2022	0	4.0	120	0.0



Example:

In 2021, this facility:

- Performed 110 procedures (**PROC**)
- Observed 1 infections (**OBS**)
- Based on NHSN national baseline data, 3.6 infections were predicted (**PRED**)

This Facility's Standardized Infection Ratio (SIR)

- Not statistically significantly different from the NHSN SIR of 1
- SIR=0.3 (1 observed infections/3.6 predicted infections)
- 70% fewer infections than predicted

Our Asks to You

By May 30, 2025:

1. Please review your facility data
2. Please reply to original data-containing email to confirm:
    1. Data is correct and no further actions are needed, OR
    2. Data is NOT correct, further actions will be needed to fix within NHSN

Measles TNHAN

Ashley Gambrell, MPH | Tennessee Department of Health | Communicable and Environmental Diseases and Emergency Preparedness

Measles

- With increased reports of measles across the United States, the Tennessee Department of Health urges clinicians to identify, isolate, and inform regarding suspected measles cases. Immediately report cases to TDH at 615-741-7247.
  - Suspect measles in unvaccinated patients with fever and rash, especially with travel history.
  - Isolate suspected cases immediately and use airborne precautions.
  - Contact TDH before specimen collection; testing available with prior approval.
  - Thank you for protecting public health.

TN Health Alert Network (TNHAN) Archive

Tennessee-Wide Infection Control Education (TWICE)

Kate Moore, MSN, RN, CIC| Tennessee Department of Health | Communicable and Environmental Diseases and Emergency Preparedness

Tennessee-Wide Infection Control Education

- May 1, 2025
- 8:30 am
- Humboldt Medical Center
- 6.75 Contact Hours
- FREE program
- Light breakfast and lunch provided
- Questions?
  - Kate.moore@tn.gov

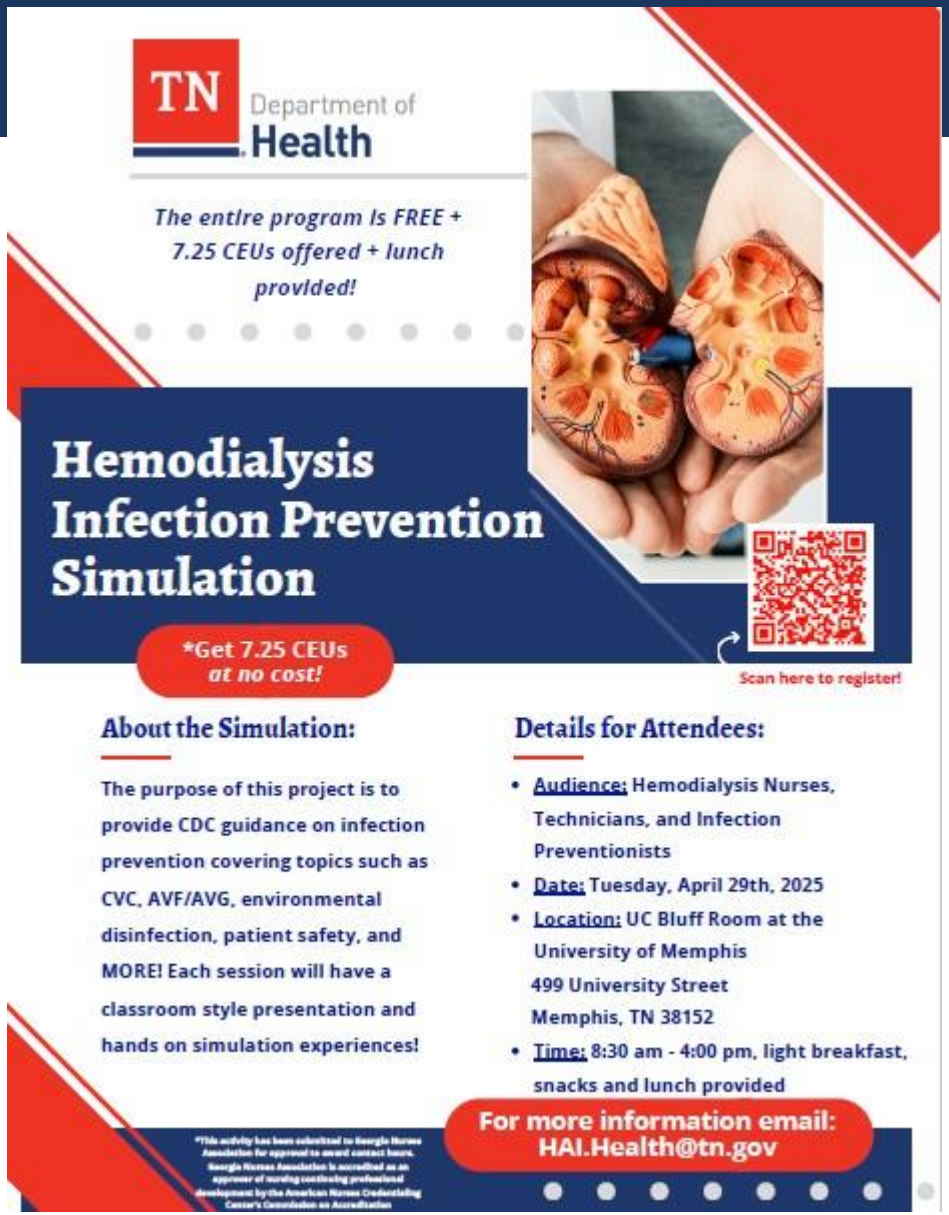
- TWICE May 1, 2025

Dialysis Simulation-Memphis

Joshua Key, RN| Tennessee Department of Health | Communicable and Environmental Diseases and Emergency Preparedness

Dialysis Simulation

- Tuesday, April 29th
- UC Bluff Room at the University of Memphis
  499 University Street
  Memphis, TN 38152
- 8:30am to 4:00pm
  - Light breakfast and lunch provided
- Scan QR code to register!



Screening for Resistant Healthcare-Associated Infections Learning Series

Colonization Screening for Multidrug-Resistant Organisms in Healthcare Facilities

Priscilla Pineda, HAI/AR Epidemiologist I

APHL Learning Series

Module 1: Overview and Importance of Screening for Multidrug-Resistant Organisms, or MDROs

Module 2: Carbapenemase-producing Organisms Colonization Screening

Module 3: *Candida auris* Colonization Screening

Module 4: Packaging and Shipping for Colonization Screening

For full modules:

https://www.aphl.org/programs/infectious_disease/Pages/Colonization_Screening_for_Healthcare_Facilities.aspx

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Module 2

Carbapenemase-Producing Organisms (CPOs) Colonization Screening

Screening for Resistant Healthcare-Associated Infections

Learning Objectives

DEFINE

What carbapenemase-producing organisms (CPOs) are and why they are a public health concern.

EXPLAIN

The various logistical considerations that are involved in conducting screenings.

DISCUSS

The test methods used and the possible results obtained in CPO screening.

DESCRIBE

Where to find additional resources to help with prevention and containment strategies for MDROs.

What is a CPO?

Carbapenemase-Producing Organisms (CPO)

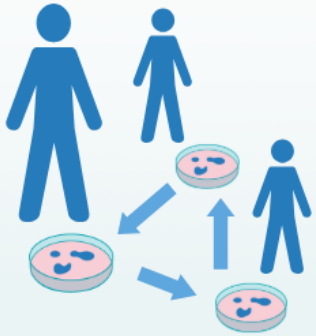
- Multidrug-resistant
- Contain carbapenemase genes that breakdown carbapenem antibiotics

'The Big Five'

  - KPC
  - NDM
  - VIM
  - IMP
  - OXA-48-like

Why are CPOs a Major Concern?

CPOs are multidrug-resistant organisms, meaning that it is resistant to multiple antibiotics commonly used to treat infections.



Patients can be asymptomatically colonized, which can progress to invasive infections.

CPOs can spread rapidly in healthcare facilities and can cause large and difficult to control outbreaks.

Coordination and Communication with Public Health

Discuss Process and Develop Plan

Resources to Support Screening

Timing

Communication with the Patient

SCREENING PROCESS

SPECIMEN COLLECTION PROCESS

Order Specimen Collection and Shipping Supplies

- Supplies are provided through the AR Lab Network
- Request supplies through HAI/AR Epidemiologist at State Health Department
- Quantity of supplies is decided during the planning stages of screening
- Order tests through the ARLN Lab Web Portal
  - Advanced registration
  - Training

Collection Day: Supplies

- Wear proper Personal Protective Equipment (PPE)



- Specimen Collection


- Packaging and shipping

Collection Day: Specimen Collection

CRE and CRPA Colonization Screening

- Requires a rectal swab

CRAB

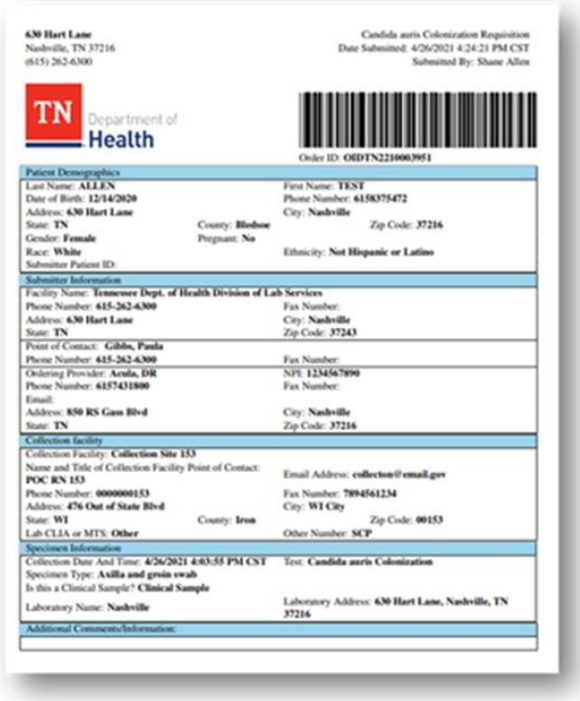
- Multiple collection sites possible
  - Axilla/groin
  - Rectal
  - Wound
  - Tracheal tube/sputum

Submitting Test Requisition Forms

Specimen tube MUST be clearly labeled with:

- Patient's full name
- Date of birth
- Date of specimen collection (MM/DD/ YYYY)
- Time of specimen collection
- Specimen Source
- Initials of person collecting the swab

PATIENT NAME : John Doe
DOB: 01/01/2001
DATE OF SPECIMEN COLLECTION: 04/01/2024
TIME OF SPECIMEN COLLECTION: 1:00 PM
SPECIMEN SOURCE: Axilla/Groin


630 Hart Lane
Nashville, TN 37216
(615) 262-6300

Candida auris Colonization Requisition
Date Submitted: 4/26/2021 4:24:21 PM CST
Submitted By: Shane Allen

TN Department of Health

Order ID: OIDTN2210003951

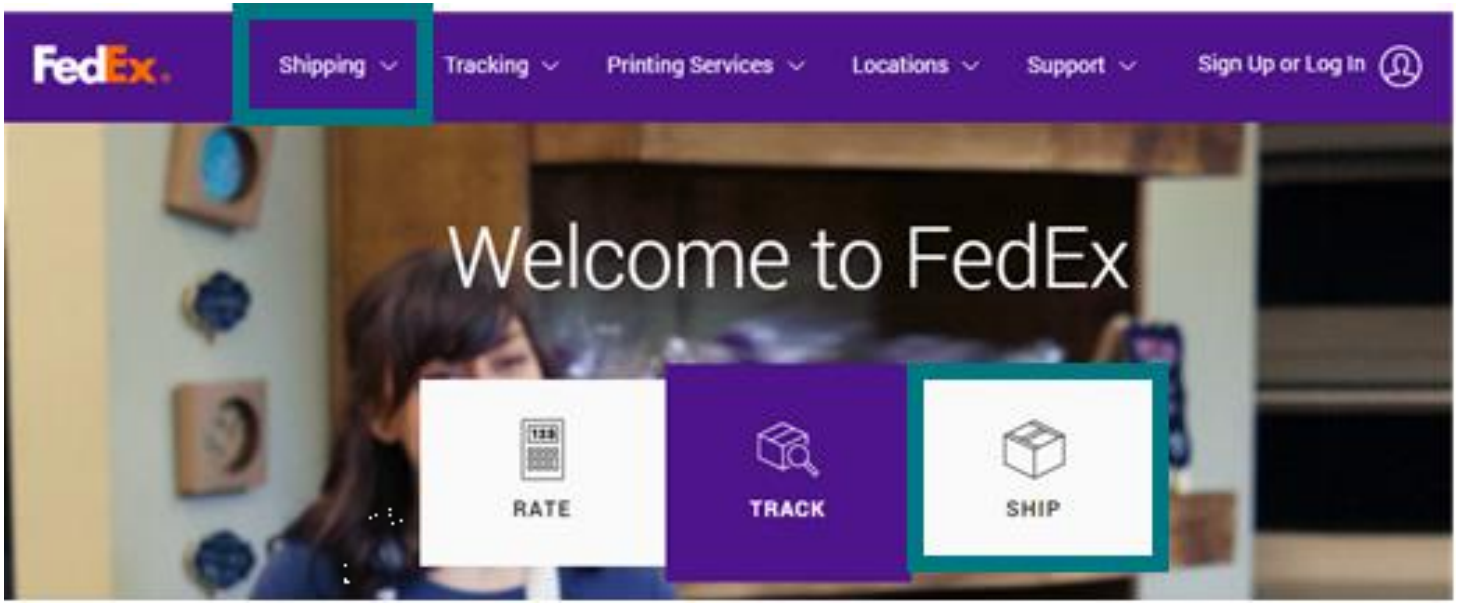
Patient Demographics
Last Name: ALLEN
First Name: TEST
Date of Birth: 12/14/2020
Phone Number: 6158375472
Address: 630 Hart Lane
City: Nashville
State: TN
County: Bledsoe
Zip Code: 37216
Gender: Female
Pregnant: No
Race: White
Ethnicity: Not Hispanic or Latino
Submitter Patient ID:

Submitter Information
Facility Name: Tennessee Dept. of Health Division of Lab Services
Phone Number: 615-262-6300
Fax Number:
Address: 630 Hart Lane
City: Nashville
State: TN
Zip Code: 37243
Point of Contact: Gibbs, Paula
Phone Number: 615-262-6300
Fax Number:
Ordering Provider: Acula, DR
NPI: 1234567890
Phone Number: 6157431800
Fax Number:
Email:
Address: 850 RS Gass Blvd
City: Nashville
State: TN
Zip Code: 37216

Collection facility
Collection Facility: Collection Site 153
Name and Title of Collection Facility Point of Contact: POC RN 153
Email Address: collector@email.gov
Phone Number: 0000000153
Fax Number: 7894561234
Address: 476 Out of State Blvd
City: WI City
State: WI
County: Iron
Zip Code: 00153
Lab CLIA or MTS: Other
Other Number: SCP

Specimen Information
Collection Date And Time: 4/26/2021 4:03:55 PM CST
Test: Candida auris Colonization
Specimen Type: Axilla and groin swab
Is this a Clinical Sample? Clinical Sample
Laboratory Name: Nashville
Laboratory Address: 630 Hart Lane, Nashville, TN 37216
Additional Comments/Information:

Specimen Collection: Shipping Specimens



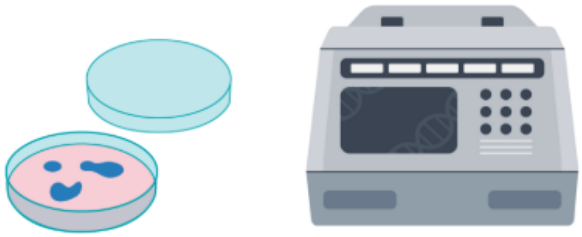
CPO Test Method

Detection of common carbapenemases

- PCR test

Detection of OXA carbapenemases in CRAB

- May vary by testing laboratory
- Culture-based and PCR tests



CPO Screening Results

Positive Result (of any kind)

Indicates the patient is colonized with a **CPO**

- PCR result alone
- PCR and culture result
- Culture result alone

Negative Result

- No evidence of colonization found during the test
- There is still a chance the patient may be colonized
- Should not be used as tests of cure

Next Steps

If screening identifies colonized patients:

Ensure appropriate infection control measures are in place

HAI/AR epidemiologist will help determining next steps

Next steps depend on many factors including:

Which patients are positive and their location in the facility

Which MDRO was identified

The patient's level of care

The purpose for the screening

Containment Strategy

- If you have a positive CPO result, it is important to implement a containment strategy
- Facility representatives and HAI/AR epidemiologists should work together to address next steps

Summary

- CPOs are multidrug-resistant organisms which can spread rapidly and cause large and difficult to control outbreaks in healthcare facilities
- Patients should be screened to limit the transmission of CPOs in healthcare facilities
- The HAI/AR epidemiologist is available to assist with:
  - Coordinating schedules for screening
  - Providing resources
  - Interpreting results
- Proper specimen collection, labeling and packaging is crucial for receiving timely and accurate results
- CDC Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-Resistant Organisms(MDROs) describes recommendations to be taken during the investigation

Resources

Carbapenemase-Producing Organisms (CPOs) Colonization Screening

Screening for Resistant Healthcare-Associated Infections

Thank you for your participation!

Screening for Resistant Healthcare-Associated Infections (HAI): Colonization Screening for Healthcare Facilities - APHL Learning Center

Resources

APHL Learning Series

Module 1: Overview and Importance of Screening for Multidrug-Resistant Organisms, or MDROs

Module 2: Carbapenemase-producing Organisms Colonization Screening

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Questions?

Priscilla.Pineda@tn.gov

ARLN.Health@tn.gov

References

- Association of Public Health Laboratories. (2024). *Overview and Importance of Screening for Multidrug-Resistant Organisms, or MDROs* [slideshow]. Carbapenemase-Producing Organisms (CPOs) Colonization Screening

Next NHSN User Call

- **Monday May 19 , 2025**
  - **10am CT / 11am ET**

- **NHSN Related**
  - **Vicky.Lindsey@tn.gov**
  - **Ashley.Gambrell@tn.gov**

- **AU/AR Module**
  - **Christopher.Evans@tn.gov**

- **Infection Prevention**
  - **HAI.Health@tn.gov**