



# TN NHSN User Call

Monday, April 18th, 2022

10am CT

# Call Agenda

- **COVID-19 Update**
  - Magdalena Dorvil-Joanem, MD, MPH
- **NHSN Updates**
  - Vicky Reed, AAS, RN, CIC
- **AUR Updates/Introduction**
  - Christopher Evans, PharmD, BCPS
- **Multi-facility SIRs**
  - Simone Godwin, DVM, MPH, MS
  - Ashley Gambrell, MPH
- **Project Firstline**
  - Missy Travis, MSN, RN, CIC

# TDH NHSN Team

- **Simone Godwin, DVM, MPH, MS**
  - Senior NHSN Epidemiologist
  - Drug Diversion Team Epidemiologist
  
- **Vicky Reed, AAS, RN, CIC**
  - Senior NHSN Public Health Nurse Consultant
    - Lead Technological Assistance
  - Infection Prevention and Control Specialist
  
- **Tara Suhs, MPH**
  - Assistant NHSN Epidemiologist
  - MRSA Initiative Lead
  
- **Ashley Gambrell, MPH**
  - Assistant NHSN Epidemiologist



# **COVID-19 Update**

*from the Tennessee Department of Health*

**TN**

**Tennessee Department of  
Health**



**NHSN Updates**

# NHSN Flu Vaccination Summary

- Report data for the reporting period specified in the NHSN protocol, which is **October 1 through March 31** for the denominator
- HCP influenza vaccination summary data reports must be entered into NHSN no later than **May 15** for each influenza season
- Monthly reporting in NHSN is not required; entering a **single influenza vaccination summary report** at the end of the reporting period for the influenza season will meet the minimum data requirements for NHSN participation
  - You can select **any month** within the current influenza season

# Healthcare Personnel Safety Component

- **The defect that was identified in the NHSN application that prevented users from uploading .CSV files containing Weekly Influenza Vaccination Module data through the Healthcare Personnel Safety (HPS) Component, has been resolved. Users may resume use of .CSV upload for these data.**

# CMS Deadlines

- Q1 (Jan.-March): August 15
- Q2 (April-June): November 15
- Q3 (Jul.-Sept.): ~~February 15~~ March 18
- Q4 (Oct.-Dec.): May 15
  - Quality Reports to be sent later this week

(<https://www.cms.gov/files/document/2020-12-inpatient-quarter-3-2020-extension-listserve-final.pdf>) From 12/17/20





# AU/AR Updates

# Save the Date for the Next AU Users Call: April 26

- **The NHSN AUR Team will be hosting the next AU Option Users Call on Tuesday, April 26 from 3:00-4:00pm ET.**
  - This call is open to any facility submitting AU Option data and health departments. We encourage you to invite relevant members of your stewardship team to listen in and participate in the discussion.
  - During this call, we plan to discuss the updates made to the AU Option in recent NHSN releases.
  - Please register in advance for this webinar: [https://cdc.zoomgov.com/webinar/register/WN\\_pah4NPOBQVGhizusCgGGtQ](https://cdc.zoomgov.com/webinar/register/WN_pah4NPOBQVGhizusCgGGtQ)



# A Guide to Creating Multi-Facility SIRs

# Review of the SIR

- **Standardized Infection Ratio**

$$SIR = \frac{\text{Observed (O) HAIs}}{\text{Predicted (P) HAIs}}$$

- **Observed HAIs based on hospital reporting**
- **Predicted HAIs calculated using**
  - Logistic regression model (SSI)
  - Negative binomial regression model (VAE, CAUTI, CLABSI, MRSA, CDI, LabID)
- **Note: SIRs are not calculated when the number of predicted infections is less than 1**
  - Predicted infections are still calculated and visible in SIR report

# Review of the SIR

- **Interpretation of the SIR**

- **SIR >1**

- More HAIs observed than expected

- **SIR =1**

- Observed HAIs equal to expected HAIs

- **SIR <1**

- Fewer observed HAIs than expected

- **P-value**

- **$p \leq 0.05$  indicates the number of observed infections is statistically significantly different than the predicted number**

- **95% Confidence Interval**

- **If the confidence interval does not include 1, the SIR is significantly different than 1**

# Potential Applications of Multi-Facility SIR

- **SIRs for entire hospital systems**
- **Incorporate satellite or associated facilities into your metrics**
  - e.g, outpatient rehabilitation facilities, dialysis centers, etc.
- **Examine certain locations across multiple facilities**
  - e.g., SIRs for all ICUs within a system
- **Allows for facilities or locations where no SIR is calculated to be accounted for**

# Calculating the Multi-facility SIR

$$SIR = \frac{O_1 + O_2 + O_3 + \dots + O_i}{P_1 + P_2 + P_3 + \dots + P_i}, \text{ where}$$

$I_i$  = Observed Infections for facility  $i$

$P_i$  = Predicted infections for facility  $i$

$i$  = Number of facilities

- The values for observed infections and predicted infections are within your NHSN SIR data reports
  - Even for facilities with predicted HAIs < 1

# Calculating the Multi-facility SIR

- **Most calculations can be done in Excel**
  - Exception: determining significance of SIR when compared to a nominal value
    - Usually 0.8 or 1
- **SAS program for entire process available**
  - Calculating the SIR
    - Can be provided by us
  - Comparison Macros
    - SIR to nominal value
    - SIR to SIR
    - Provided by CDC
      - <https://www.cdc.gov/nhsn/ps-analysis-resources/index.html>





**Demonstration**

# Questions?

- **Additional questions or requests regarding the SIR calculation**
  - **Simone Godwin, DVM, MPH, MS**
    - [simone.godwin@tn.gov](mailto:simone.godwin@tn.gov)
  - **Ashley Gambrell, MPH**
    - [ashley.gambrell@tn.gov](mailto:ashley.gambrell@tn.gov)

# PROJECT FIRSTLINE IS FOR YOU



PROJECT  
FIRSTLINE

CDC's National Training Collaborative  
for Healthcare Infection Prevention & Control

CS320316-A



## Topic 4: How Viruses Spread From Surfaces to People

# Next NHSN User Call

- **Monday, May 16<sup>th</sup>, 2022**
  - **10am CT**
- **NHSN Related**
  - [Vicky.Reed@tn.gov](mailto:Vicky.Reed@tn.gov)
- **Infection Prevention**
  - [HAI.Health@tn.gov](mailto:HAI.Health@tn.gov)
- **General / Other**
  - [Simone.Godwin@tn.gov](mailto:Simone.Godwin@tn.gov)
  - [Christopher.D.Wilson@tn.gov](mailto:Christopher.D.Wilson@tn.gov)