



# Understanding Basics: NHSN MRSA Bacteremia & CDI LabID Event Reporting

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NHSN Training 2023

# OBJECTIVES

- *Apply LabID event reporting concepts as outlined in the NHSN PSC MDRO Chapter 12*
- *Recognize MRSA bacteremia and C. difficile events using NHSN definitions to provide events for reporting*
- *Correctly Report LabID Events and FacWideIN summary denominator data*

# MDRO & CDI Events Webpage

<https://www.cdc.gov/nhsn/acute-care-hospital/index.html>

The image shows a screenshot of the National Healthcare Safety Network (NHSN) website. On the left, a navigation menu lists various components, with 'MDRO & CDI Events' highlighted in a red box. The main content area is titled 'MDRO & CDI' and includes sections for 'Protocols' and 'Supporting Chapters'. Several links are highlighted with red boxes: 'Chapter 12: MDRO & CDI Module Protocol - January 2023', 'Chapter 15: CDC Location Labels and Location Descriptions - January 2023', and 'MDRO & CDI' under the 'FAQs' section. Two orange stars are placed next to the 'MDRO & CDI Training' and 'CMS Requirements' links on the right side of the page.

**ACH Modules & Events**

- AUR Module: Antimicrobial Use & Resistance Options
- BSI Events: Bloodstream Infections
- CLIP Events: Central Line Insertion Practice Adherence
- MDRO & CDI Events: Multidrug-Resistant Organism & *C. difficile* Infections**
- PedVAE: Pediatric Ventilator-associated Events
- PNEU Events: Pneumonia (PedVAP)
- SSI Events: Surgical Site Infection
- UTI Events: Urinary Tract Infection
- VAE: Ventilator-associated Events
- HCP Flu Vaccination: Healthcare Personnel
- HCP Exposure

**National Healthcare Safety Network (NHSN)**

CDC > NHSN Home > Patient Safety Component

- NHSN Home
- NHSN Login
- About NHSN
- Enroll Facility Here
- CMS Requirements
- Change NHSN Facility Admin
- Resources by Facility
- Patient Safety Component**
- Annual Surveys, Locations & Monthly Reporting Plans
- Analysis Resources
- Antimicrobial Use & Resistance
- BSI (CLABSI)
- CLIP
- MDRO & CDI**

## MDRO & CDI

[Print](#)

Multidrug-Resistant Organism & *Clostridioides difficile* (MDRO/CDI) Infection Surveillance and LabID Event Reporting Module

### Protocols

- Chapter 12: MDRO & CDI Module Protocol - January 2023** [PDF - 1 MB]
- 2023 Summary of Updates [PDF - 199 KB]

### Supporting Chapters

- Chapter 1: NHSN Overview - January 2023 [PDF - 350 KB]
- Chapter 3: Patient Safety Monthly Reporting Plan - January 2023 [PDF - 300 KB]
- Chapter 15: CDC Location Labels and Location Descriptions - January 2023** [PDF - 1 MB]
- Chapter 16: NHSN Key Terms - January 2023 [PDF - 300 KB]

- MDRO & CDI Training
- Educational Roadmap
- CMS Requirements
- FAQs**
- [MDRO & CDI](#)
- [Analysis](#)
- [Annual Surveys](#)
- [Locations](#)

# Key Concepts to LabID Event Reporting:

- FacWideIN LabID event reporting is based on patient **and location**. Include All inpatient units as well as ED/Observation locations in LabID event surveillance with an exception for *C. difficile* surveillance in baby-based locations {NICU, Nursery, et.al}.
- NHSN does NOT use patient 'status' for reporting. An 'inpatient' is a patient housed on an inpatient location. An 'outpatient' is a patient housed on an outpatient unit such as the ED or a dedicated 24-hour observation unit. Facility specific status designations such as 'observation', 'inpatient', 'outpatient', 'swing bed patient' or 'short stay patient' are not used for in NHSN reporting.

# Key Concepts to LabID Event Reporting:

- For NHSN reporting purposes, the 'date admitted to facility' is the calendar day the patient locates to an inpatient location. Time spent in the ED or on a dedicated 24-hour observation unit is outpatient hours.
- LabID event reporting includes a '14-day' rule which prohibits a 'new' LabID event to be submitted for the patient in the SAME location until 15 days has passed between positive specimens. This rule is organism and location specific. Reporting resets each time the patient moves to a 'new' location.

# Key Concepts to LabID Event Reporting:

- LabID Event reporting is based strictly on laboratory testing data without clinical evaluation of the patient, allowing for a much less labor intensive method to track *C. difficile* and MDROs, such as MRSA. Symptoms are NOT used in LabID event reporting. No clinical determination is included in LabID event reporting. *The first positive specimen for the patient in the location meeting definition is submitted as a LabID event.*
- These provide proxy infection measures of healthcare acquisition, exposure burden, and infection burden are based primarily on laboratory and limited admission data.

# Key Concepts to LabID Event Reporting:

- LabID Event reporting is by single facility; prior positives identified at a different facility will not influence reporting at your facility and are not considered in event categorization.
- The *'Transfer Rule'* does **NOT** apply to LabID event reporting
- LabID Events are attributable to the location where the positive specimen is collected. There is no time requirement for 'how long' the patient must be housed on the unit to be eligible for reporting.

# Knowledge Check 1

This patient presents to ED with sepsis and subsequently admits to ICU. Blood cultures collected in ICU are MRSA+. Which unit does the MRSA LabID event belong to?

- ED
- ICU
- Neither location, MRSA is present on admission and not an event



# CHECKLIST:

## Facility-wide {FacWideIN} LabID Event Reporting

- Review location options and map locations in NHSN as necessary.
- Review Monthly Reporting Plan(s) and update as necessary.
- Identify and enter all LabID events into NHSN by location.
- Enter denominator data for each month under surveillance.
- Resolve “Alerts”, if applicable.

# FacWideIN requires mapping of bedded inpatient locations for the facility, all EDs and dedicated 24-hour Observation units

NHSN - National Healthcare Safety Network

**NHSN Home**

- Alerts
- Reporting Plan ▶
- Patient ▶
- Event ▶
- Procedure ▶
- Summary Data ▶
- Import/Export
- Surveys ▶
- Analysis ▶
- Users ▶
- Facility** ▶
- Group ▶
- Logout

**Locations**

*Instructions*

- To **Add** a record, fill in the form with the required fields and any desired optional values. Then click on the *Add* button.
- To **Find** a record, click on the *Find* button. One or more fields can be filled in to restrict the search to those values.
- To **Edit** a record, perform a *Find* on the desired record. Click on the desired record to fill in its values into the form and edit the values. To save the changes, click on the *Save* button.
- To **Delete** one or more records, perform a *Find* on the desired record(s). Check the corresponding box(es), then click on the *Delete* button.
- Press the **Clear** button to start over with a new form.

Mandatory fields to "Add" or "Edit" a record marked with \*

Your Code \*:

Your Label \*:

CDC Location Description \*:

Status \*:

Bed Size:  A bed size greater than zero is required for most inpatient locations.

Customize Forms

Facility Info

Add/Edit Component

**Locations**

Surgeons

CDA Automation

# Find Locations:






Your Code \*:

Your Label \*:

CDC Location Description \*:

Status \*:

Bed Size \*:  A bed size greater than zero is required for most inpatient locations.

Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
<input type="checkbox"/>	Active	<a href="#">ED</a>	ED	Emergency Department	OUT:ACUTE:ED	1108-0	
<input type="checkbox"/>	Active	<a href="#">M-SWARD</a>	MED-SURG WARD	Medical/Surgical Ward	IN:ACUTE:WARD:MS	1061-1	15

[https://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions\\_current.pdf](https://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions_current.pdf)

# Knowledge Check 2

A swing bed patient is admitted as observation to an inpatient medical ward. Is this patient eligible for a LabID event?

- Yes
- No
- Maybe?

# CHECKLIST: FacWideIN LabID Event Reporting

- ✓ Review location options and map locations in NHSN as necessary.
- Review Monthly Reporting Plan(s) and update as necessary.
- Identify and enter all *C. difficile* LabID events into NHSN by location.
- Enter denominator data for each month under surveillance.
- Resolve “Alerts”, if applicable.

# Monthly Reporting Plan

The Monthly Reporting Plan informs CDC which modules a facility is participating in during a given month.

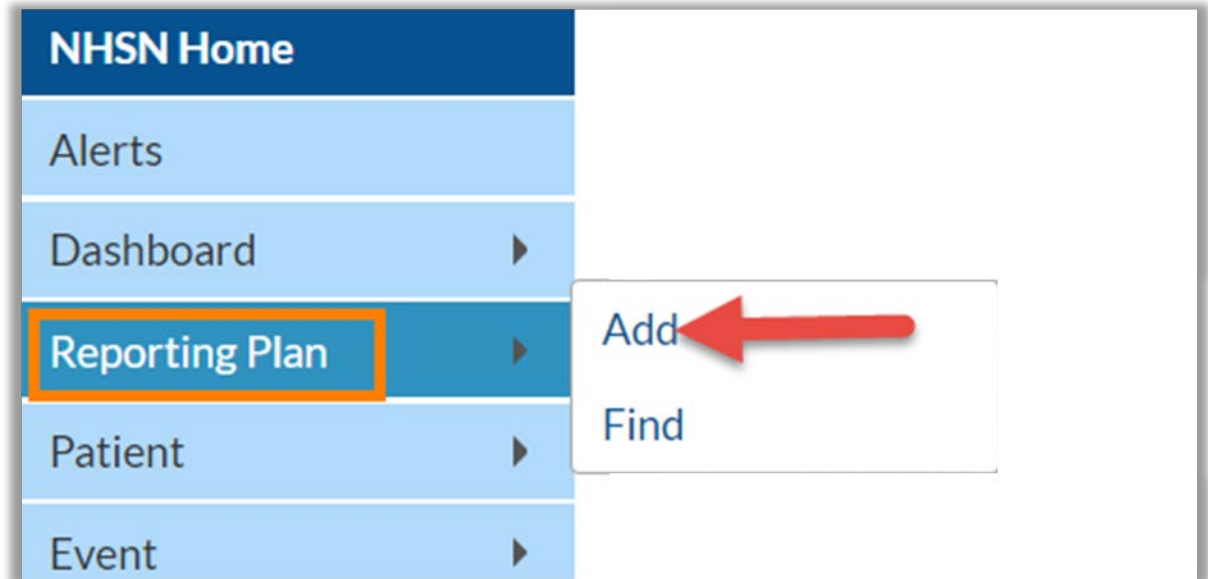
- Referred to as “In-Plan” data
- **A facility must enter a Plan for every month of the year.**
- Add facility-wide inpatient reporting for MRSA Bacteremia and *C. difficile* LabID events to your monthly reporting plan (MRP) using the “**FACWIDEIN**” location.
- Emergency departments and 24-hour observation locations **are** included in FacWideIN reporting. **NOTE:** These locations will ‘automatically’ be added to your monthly reporting plan if mapped in NHSN. Newly mapped EDs or OBS locations may require adding manually.

The screenshot displays the 'Multi-Drug Resistant Organism Module' interface. It features a search bar at the top right and a list of reporting sections. Each section includes a 'Process and Outcome Measure' table with columns for 'Inpatient', 'ED/ER', 'Outpatient', 'Nursing Home', 'Respite', 'LabID', and 'Bacteremia'. The sections shown are: FACWIDEIN - Facility-wide Inpatient FacilityID (IDP - C diff), ED-ER-ED-ER (IDP - C diff), OBS-24-HR-OBS (IDP - C diff), FACWIDEIN - Facility-wide Inpatient FacilityID (NSG - MRSA), ED-ER-ED-ER (NSG - MRSA), OBS-24-HR-OBS (NSG - MRSA), and I-IMP-ADULT-ED-ER (IDP - C diff). A page number '14' is visible in the bottom right corner.

# Creating a Monthly Reporting Plan

- On the left navigation bar, click on 'Reporting Plan' and then select 'Add'
- On the Add Monthly Reporting Plan page, select the Month and Year from each drop-down.'

**Note:** These drop-downs are required.

A screenshot of the 'Add Monthly Reporting Plan' form. The form has a light blue header with a medical professional icon and the title 'Add Monthly Reporting Plan'. Below the header, it says 'Mandatory fields marked with \*'. The form contains the following fields: 'Facility ID \*' with a dropdown menu, 'Month \*' with a dropdown menu, and 'Year \*' with a dropdown menu. A red arrow points to the 'Month' and 'Year' dropdowns. At the bottom, there is a checkbox labeled 'No NHSN Patient Safety Modules Followed this Month'.

# Creating a Monthly Reporting Plan

- Select FacWideIn as the 'location' and specific organism by type {such as C. Difficile or MRSA}

Multi-Drug Resistant Organism Module

Locations		Specific Organism Type	
<input type="checkbox"/>	FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	<input type="checkbox"/>	ACINE - MDR-Acinetobacter
<input type="checkbox"/>		<input type="checkbox"/>	CDIF - C. difficile
<input type="checkbox"/>		<input type="checkbox"/>	CEPHRKLEB - CephR-Klebsiella
<input type="checkbox"/>		<input type="checkbox"/>	CRE - CRE (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella)
<input type="checkbox"/>		<input type="checkbox"/>	MRSA - MRSA
<input type="checkbox"/>		<input type="checkbox"/>	MRSA/MSSA - MRSA with MSSA
<input type="checkbox"/>		<input type="checkbox"/>	VRE - VRE

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

- Repeat for individual locations {rehab, psych, ICU} as desired

- Add rows for each different organism monitored

Multi-Drug Resistant Organism Module

Locations		Specific Organism Type	
<input type="checkbox"/>	EDI - EDI	<input type="checkbox"/>	CDIF - C. difficile
<input type="checkbox"/>	FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	<input type="checkbox"/>	CDIF - C. difficile

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

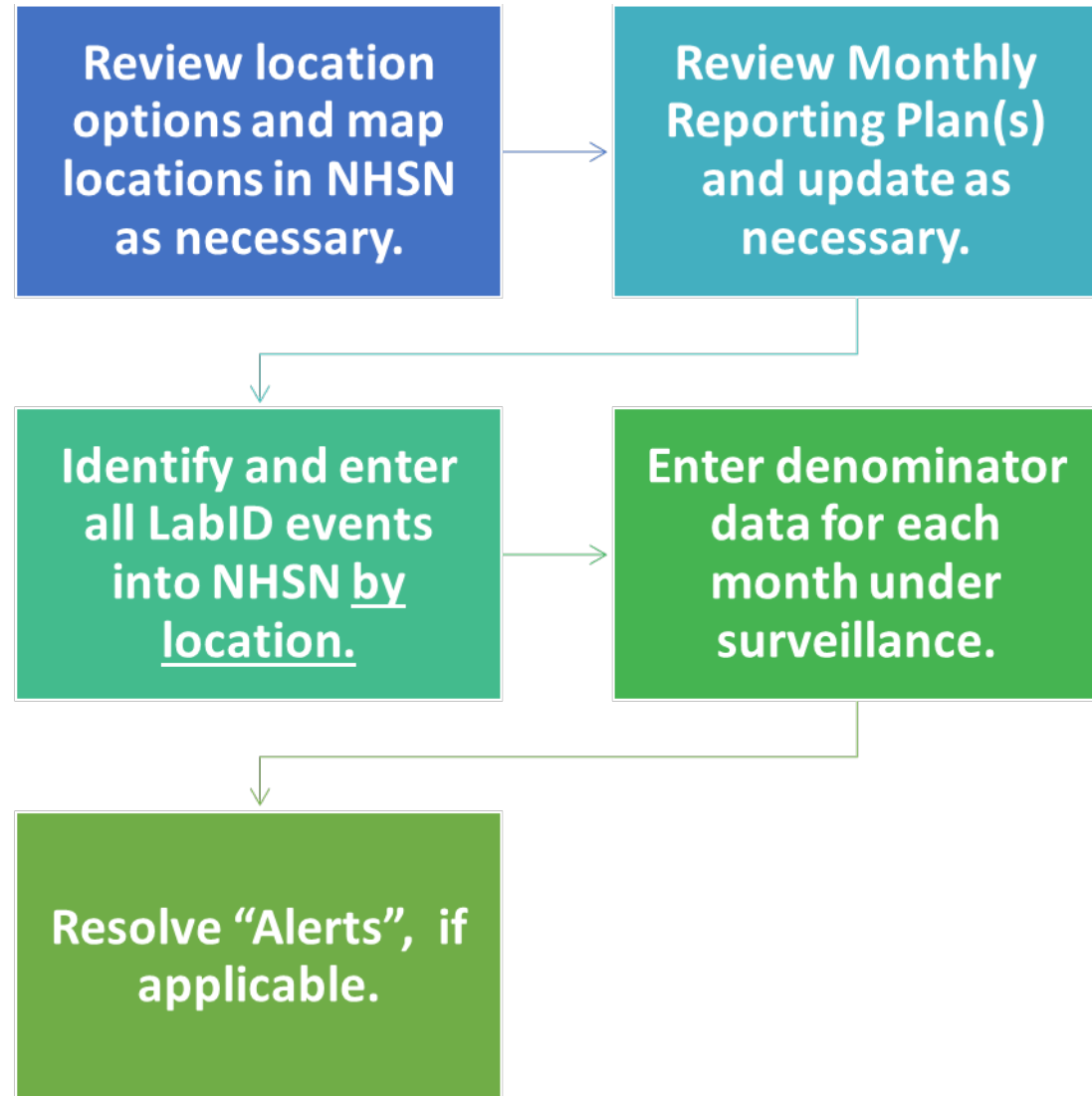


# Knowledge Check 3

Do I conduct both *C. difficile* LabID event monitoring and MRSA bacteremia LabID event monitoring for my facility?

- Yes
- No
- It depends on the selections noted on the monthly reporting plan

# CHECKLIST: FacWideIN LabID Event Reporting



# LabID Event Protocol Standard Guidance

- LabID Events are identified using the proxy measure of a positive lab finding [without clinical consideration].
- The first lab positive finding for the patient in a location qualifies as a LabID event. Following this submission, no additional LabID events are submitted into NHSN for this location until there is a > 14-day gap in positive findings.
- Events are reported by patient AND location. Each location change for the patient resets reporting.
- LabID Events are attributable to the location where the positive specimen is collected.

# Definition: *C. difficile* LabID Event

*C. difficile* testing  
only on unformed stool samples!!  
Stool should conform to shape of  
container.

## *C. Difficile*-positive laboratory assay

- A positive laboratory test result for *C. difficile* toxin A and/or B, (includes molecular assays[PCR] and/or toxin assays) tested on an unformed stool specimen (must conform to the container).
- A toxin-producing *C. difficile* organism detected by culture or other laboratory means performed on an unformed stool sample (must conform to the container).

### NOTE:

When using a multi-step testing algorithm for CDI on the same unformed stool specimen, the finding of the last test performed will determine if the CD(+) lab assay definition is met.

Only when the final report has specific test times attached to each of the individual testing methods (for example, antigen/toxin and PCR) can one make a valid determination of which test is performed first and which is performed last.

If there are no specific test times/ time stamps attached to each individual testing method on the final lab report, consider the tests as performed simultaneously and any positive finding is eligible for use.

# Event - Patient Information

NHSN - National Healthcare Safety Network

**Add Event**

Mandatory fields marked with \*  
Fields required for record completion marked with \*\*  
Fields required when in Plan marked with >

**Event** Add

Find Reassign Find Events for Patient

Last Name: \_\_\_\_\_  
Middle Name: \_\_\_\_\_  
Gender \*: \_\_\_\_\_  
Ethnicity: \_\_\_\_\_  
Race:  American Indian/Alaska Native  Asian  
 Black or African American  Native Hawaiian/Other Pacific Islander  
 White

**Event Information**  
Event Type \*: \_\_\_\_\_

**Custom Fields**  
BJ - Bone and Joint Infection  
BSI - Bloodstream Infection  
CLIP - Central Line Insertion Practices  
CNS - Central Nervous System  
CVS - Cardiovascular  
EENT - Eye, Ear, Nose and Throat  
GI - Gastrointestinal  
LABID - Laboratory-identified MDRO or CDI Event  
LRI - Lower Respiratory Infection  
PedVAE - Pediatric Ventilator-Associated Event  
PNEU - Pneumonia  
REPR - Reproductive Tract  
SSI - Surgical Site Infection  
SST - Skin and Soft Tissue  
USI - Urinary System Infection  
UTI - Urinary Tract Infection

**Comments**

Back

# Event Information- Specimens Collected from

## Outpatient Location

**Event Information**

Event Type \*: LABID - Laboratory-identified MDRO or CDI Event

Date Specimen Collected \*: 01/01/2022

Specific Organism Type \*: CDIF - C. difficile

→ Outpatient \*: Y - Yes

Specimen Body Site/Source \*: DIGEST - Digestive System

Specimen Source \*: STOOL - Stool specimen

Location \*:

Last physical overnight location of patient immediately prior to arriving into facility (applies to specimen(s) collected in outpatient setting or <4 days after inpatient admission):

Has patient been discharged from your facility in the past 4 weeks? \*: N - NO

Has the patient been discharged from another facility in the past 4 weeks?:

Documented evidence of previous infection or colonization with this specific organism type from a previously reported LabID Event in any prior month?:

VS.

## Inpatient Location

**Event Information**

Event Type \*: LABID - Laboratory-identified MDRO or CDI Event

Date Specimen Collected \*: 01/31/2022

Specific Organism Type \*: CDIF - C. difficile

→ Outpatient \*: N - No

Specimen Body Site/Source \*: DIGEST - Digestive System

Specimen Source \*: STOOL - Stool specimen

Date Admitted to Facility \*: 01/20/2022

Location \*:

Date Admitted to Location \*: 01/20/2022

Has patient been discharged from your facility in the past 4 weeks? \*: N - No

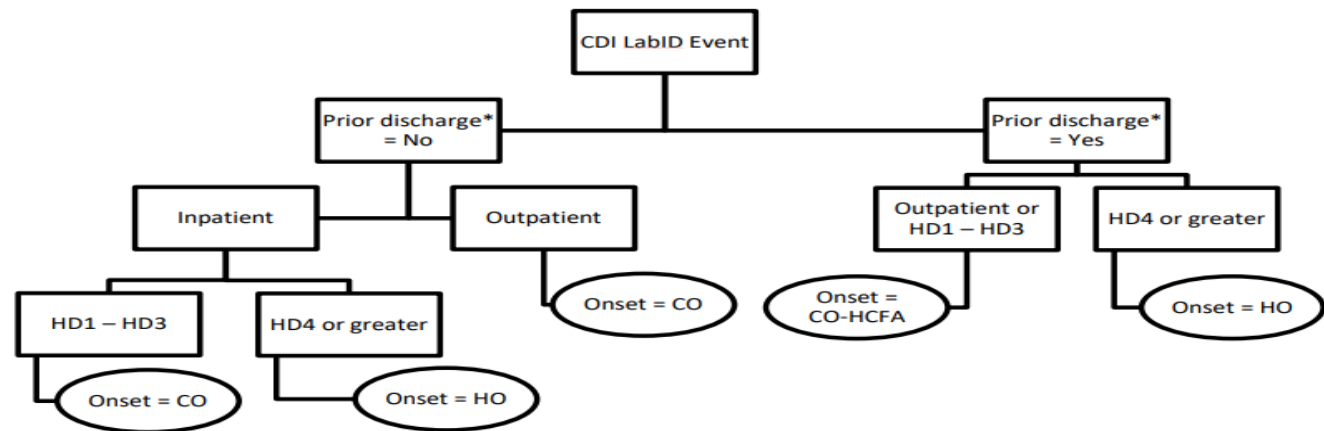
Has the patient been discharged from another facility in the past 4 weeks?:

Documented evidence of previous infection or colonization with this specific organism type from a previously reported LabID Event in any prior month?: N - No

\* Required Fields

# NHSN will Categorize *C. difficile* LabID Events Based on Location & Specimen Collection Date:

- **Community-Onset (CO):** LabID Event meeting one of the following criteria:
  - A) collected in an outpatient location in which the patient was not previously discharged from an inpatient location within the same facility less than or equal to 28 days prior to current date of specimen collection - B) collected in an inpatient location on HD 1 [day of admission], HD 2 or HD 3.
- **Community-Onset Healthcare Facility-Associated (CO-HCFA):** CO LabID Event collected from an inpatient or an outpatient location from a patient who was discharged from the facility less than or equal to 28 days prior to current date of stool specimen collection. The previous discharge must have been from an inpatient location within the same facility (in other words, an outpatient visit does not qualify as “admitted”, and therefore is not used to set the timeline for CO-HCFA).
- **Healthcare Facility-Onset (HO):** LabID Event collected from an inpatient location on or after HD 4 where HD 1 is day of admission.



\* Patient discharged from inpatient location within the same facility less than or equal to 28 days prior current event

## NHSN will Categorize *C. difficile* LabID Events Based on Location & Specimen Collection Date:

CDI LabID Events are further categorized by NHSN as **Incident** or **Recurrent**. Refer to the 'cdiAssay' variable in the NHSN Line List.

- **Incident** CDI LabID Event: Any CDI LabID Event from a specimen obtained more than 56 days after the most recent CDI LabID Event (or with no previous CDI LabID Event documented) for that patient. Note: the date of first specimen collection is considered day 1.
- **Recurrent** CDI LabID Event: Any CDI LabID Event from a specimen obtained more than 14 days and less than or equal to 56 days after the most recent CDI LabID Event for that patient. Note: the date of first specimen collection is considered day 1.
- **CdiAssay** will be unassigned, or “blank”, for any CDI LabID event collected less than or equal to 14 days after the most recent CDI LabID event for that patient.



## Let's Review *C. difficile* LabID Event Reporting

For FacWideIN, *C. difficile* toxin-positive specimens MUST be monitored for all inpatient locations within a facility (includes ED and 24-hour OBS locations) but not for predominately baby locations {Nursery, NICU, etal}.

All LabID Event(s) MUST be entered without regard to date of occurrence. Community-Onset (CO) or Healthcare facility-onset (HO).

Only unformed stools should be tested for *C. difficile*. Internal 'rejection' policies should be used to ensure appropriate testing.

A positive CD finding from unformed stool specimen qualifies as a LabID Event if there has not been a previous positive laboratory result for the patient in the location **within the previous 14 days**.

## Knowledge Check 4

Community Onset *C. difficile* LabID events are not required to be reported into NHSN?

- True
- False
- It depends on the selections noted on the monthly reporting plan

# Definition: MRSA bacteremia LabID Event

## MRSA identified from blood culture:

- Includes *S. aureus* cultured from a blood culture specimen that tests oxacillin-resistant, ceftazidime resistant, or methicillin-resistant by standard susceptibility testing methods, OR
- Any lab finding where MRSA is specifically identified (includes but not limited to PCR or other molecular based detection methods). Example: MRSA isolated
- **NOTE:** Applies to ALL inpatient locations [including locations known to predominately house babies] and Emergency Departments and 24-hour Observation locations.

# Event Information- Specimens Collected from

## Outpatient Location

Event Information

Event Type \*: LABID - Laboratory-identified MDRO or CDI Event

Date Specimen Collected \*: 01/31/2022 27

Specific Organism Type \*: MRSA - MRSA

→ Outpatient \*: Y - Yes

Specimen Body Site/Source \*: CARD - Cardiovascular/ Circulatory/ Lymphatics

Specimen Source \*: BLDSPC - Blood specimen

Location \*:

Last physical overnight location of patient immediately prior to arriving into facility (applies to specimen(s) collected in outpatient setting or <4 days after inpatient admission):

Has patient been discharged from your facility in the past 4 weeks? \*: N - No

Has the patient been discharged from another facility in the past 4 weeks?: N- NO

Documented evidence of previous infection or colonization with this specific organism type from a previously reported LabID Event in any prior month?:

VS.

## Inpatient Location

Event Information

Event Type \*: LABID - Laboratory-identified MDRO or CDI Event

Date Specimen Collected \*: 01/31/2022 27

Specific Organism Type \*: MRSA - MRSA

→ Outpatient \*: N - No

Specimen Body Site/Source \*: CARD - Cardiovascular/ Circulatory/ Lymphatics

Specimen Source \*: BLDSPC - Blood specimen

Date Admitted to Facility \*: 01/20/2022 27

Location \*:

Date Admitted to Location \*: 01/20/2022 27

Has patient been discharged from your facility in the past 4 weeks? \*: N - No

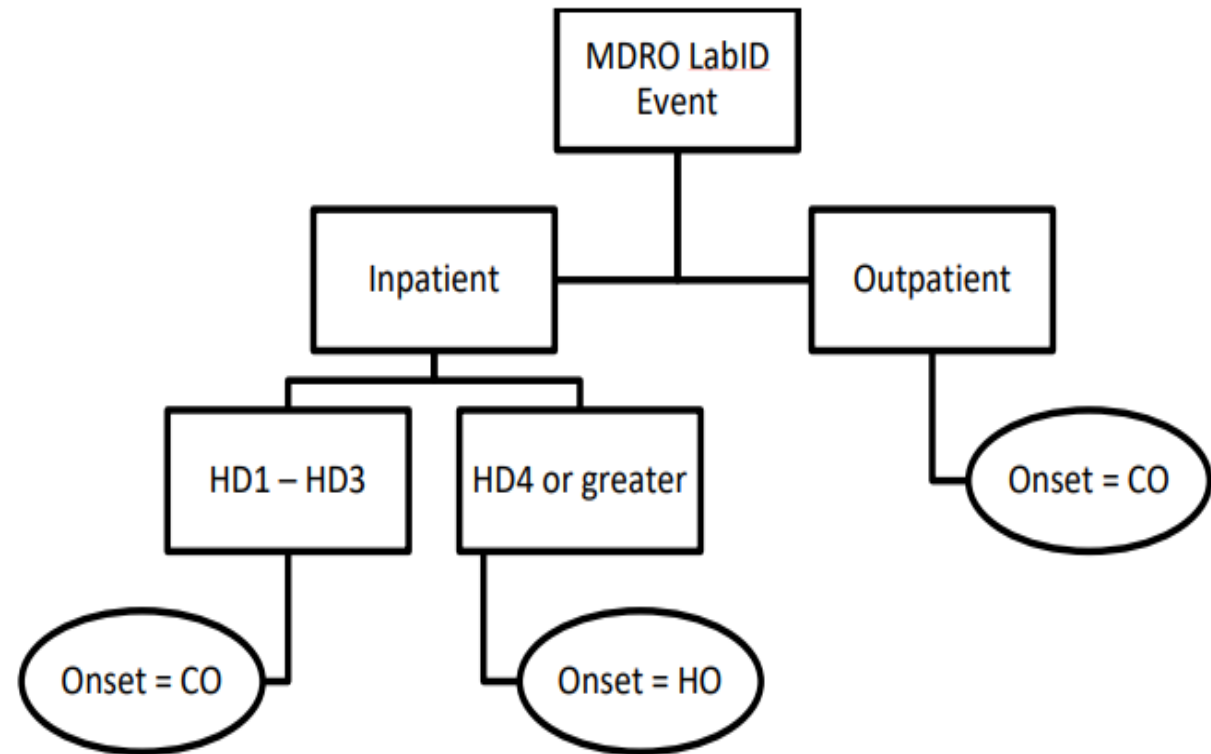
Has the patient been discharged from another facility in the past 4 weeks?:

Documented evidence of previous infection or colonization with this specific organism type from a previously reported LabID Event in any prior month?: N - No

\* Required Fields

# NHSN will Categorize MRSA bacteremia LabID Events Based on Location & Specimen Collection Dates

- Community-Onset (CO): LabID Event specimen collected in an outpatient location or an inpatient location on Hospital Day 1 [day of admission], HD 2 or HD 3.
- Healthcare Facility-Onset (HO): LabID Event specimen collected on or after Hospital Day 4 where HD 1 is day of admission. Thus, all HO LabID Events will have occurred more than 3 calendar days after admission.



Hospital Day (HD)

# Let's Review MRSA bacteremia LabID Event Reporting

- For FacWideIN, MRSA + blood cultures are monitored for all inpatient locations within a facility , including ED and 24-hour OBS locations as well as predominately baby locations {Nursery, NICU, et.al}.
- All LabID Event(s) MUST be entered without regard to date of occurrence. Community-Onset (CO) or Healthcare facility-onset (HO).
- The first MRSA+ BC for the patient and the location qualifies as a LabID event. No additional MRSA LabID events are submitted for the patient in the location until there has been > 14 days from prior MRSA+ BC. This is a 'rolling' 14-day timeframe not specifically based on a previously submitted MRSA LabID event(s).
- Each location change resets reporting.

# Knowledge Check 5

The same MRSA+ BC can be used to identify a BSI event and a MRSA bacteremia LabID event?

- True
- False
- It depends on the selections noted on the monthly reporting plan

# CHECKLIST:

## FacWideIN LabID Event Reporting

1

Review location options and map locations within NHSN as necessary.

2

Review Monthly Reporting Plan(s) and update as necessary.

3

Identify and enter all LabID events into NHSN by location.

4

Enter denominator data for each month under surveillance.

5

Resolve “Alerts”, if applicable.



# Entering Denominator Data in NHSN Application

- On the left navigation bar, click on **'Summary Data'** and then select **'Add'**
- On the Add Patient Safety Summary Data page, from the Summary Data Type dropdown menu (see screenshot), select **'MDRO and CDI Monthly Denominator –All Locations'**.

**Note:** This is a different form than the one you use to report summary data for CLABSI and CAUTI.

The screenshot displays the NHSN application interface. At the top, the CDC logo and text 'Centers for Disease Control and Prevention' are visible. Below this is the NHSN - National Healthcare Safety Network header. The left navigation bar includes 'NHSN Home', 'Alerts', 'Reporting Plan', 'Patient', 'Event', 'Procedure', 'Summary Data', 'Import/Export', 'Surveys', and 'Analysis'. The 'Summary Data' menu item is highlighted with a red box and a red circle '1'. A dropdown menu is open under 'Summary Data', showing 'Add' (highlighted with a red box and a red circle '2'), 'Find', 'Incomplete', and 'Delete AUR Data'. The main content area is titled 'Add Patient Safety Summary Data'. It features a dropdown menu for 'Summary Data Type' with 'MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring' selected. Below the dropdown are 'Continue' and 'Back' buttons. A red arrow points to the 'Continue' button with a red circle '3'.

# Denominator Data: FacWideIN

On the summary data entry screen, select **FACWIDEIN** as the location for which you are entering the summary data.

After selecting the FACWIDEIN Location Code, **Month**, **Year**, and the **six summary data fields** will become required.

The screenshot shows the 'MDRO and CDI Monthly Denominator Form' interface. At the top, there is a header with a logo and the title. Below the header, a note states 'Mandatory fields marked with \*' and a 'Print Form' link is visible. The form contains several dropdown menus: 'Facility ID \*', 'Location Code \*' (set to 'FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)'), 'Month \*' (set to 'January'), and 'Year \*' (set to '2022'). Below these is a 'General' section with a blue tab. It contains three lines of data entry instructions. Line 1: 'Setting: Inpatient Total Facility Patient Days \*' and 'Total Facility Admissions \*', both with yellow input boxes. Line 2: Instructions for subtracting counts for CMS-certified rehab units (IRF) or psych units (IPF), with a formula 'Counts= [Total Facility - (IRF + IPF)]' and two yellow input boxes for 'Patient Days \*' and 'Admissions \*'. Line 3: Instructions for subtracting counts for CMS-certified IRF, IPF, NICU, or Well Baby Units, with a formula 'Counts= [Total Facility - (IRF + IPF + NICU + Well Baby Unit)]' and two yellow input boxes for 'Patient Days \*' and 'Admissions \*'.

# Denominator Data

Select **CDI Test type quarterly** (last month of each calendar-year quarter – March; June; September; December)


**NOTE:** ‘Other’ **should not be used** to name specific laboratories, reference laboratories, or the brand names of *C. difficile* tests; most methods can be categorized accurately by selecting from the options provided

For this quarter, what is the **primary testing method for *C. difficile*** used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed?  
Note: PCR testing should be indicated by selecting NAAT \*

Report No Events	CephR-Kleb	Report No Events	CRE-Ecoli	Report No Events	CRE-Enteroc	Report No Events	CRE-Kleb	Report No Events	MDR-Acine	Report No Events	VRE	Report No Events
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dropdown menu options:

- EIA - Enzyme immunoassay (EIA) for toxin
- Cyto - Cell cytotoxicity neutralization assay
- NAAT - Nucleic acid amplification test (NAAT)
- NAATEIA - NAAT plus EIA, if NAAT positive (2-step algorithm)
- GDH - Glutamate dehydrogenase (GDH) antigen plus EIA for toxin
- GDHNAAT - GDH plus NAAT
- GDHEIA - GDH plus EIA for toxin, followed by NAAT for discrepant results
- ToxiCul - Toxigenic culture
- OTH - Other (specify)

 A red 'X' mark is placed over the 'OTH - Other (specify)' option in the dropdown menu, with a blue arrow pointing to it from the left.

## Denominator Data: Inpatient Rehab or Inpatient Psych units

- On the summary data entry screen, use the 'Location Code' drop down menu to select the Rehab or Psych unit included as separate row on your monthly reporting plan {in addition to FacWideIN}.
- After selecting the appropriate unit, month, and year, complete **2** required fields

**MDRO and CDI Monthly Denominator Form**

Mandatory fields marked with \*

Facility ID \*: NHSN MEMORIAL HOSPITAL

Location Code \*: 5 EAST – ADULT REHAB

Month \*: January

Year \*: 2022

**General**

Setting: Inpatient Total Patient Days:  Total Admissions:

# Denominator Data: Emergency Department / 24-hour observation

- On the summary data entry screen, use the ‘Location Code’ drop down menu to select ED or 24-hour observation as the location for which you are entering the summary data.
- After selecting the appropriate unit, month, and year, one summary data field will become required (Total Encounters). Repeat steps for 24-hour observation locations. **1 visit = 1 encounter**

**MDRO and CDI Monthly Denominator Form**

Mandatory fields marked with \*

Facility ID \*: [dropdown]

Location Code \*: ED-ER - ED-ER [dropdown]

Month \*: January [dropdown]

Year \*: 2022 [dropdown]

**General**

Setting: Outpatient Total Encounters \*: [input field]

**Organism Selection/Confirmation of No Events**

Specific Organism Type	Report		Report		Report		Report		Report		Report		MDR-Acine
	MRSA	No Events	CDIF	No Events	MSSA	No Events	CephR-Kleb	No Events	CRE-Ecoli	No Events	CRE-Entero	No Events	
Infection Surveillance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LabID Event (All specimens)	<input type="checkbox"/>	<input type="checkbox"/>	*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LabID Event (Blood specimens only)	*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**MDRO and CDI Monthly Denominator Form**

Mandatory fields marked with \*

Facility ID \*: [dropdown]

Location Code \*: OBS - 24-HR OBS [dropdown]

Month \*: January [dropdown]

Year \*: 2022 [dropdown]

**General**

Setting: Outpatient Total Encounters \*: [input field]

**Organism Selection/Confirmation of No Events**

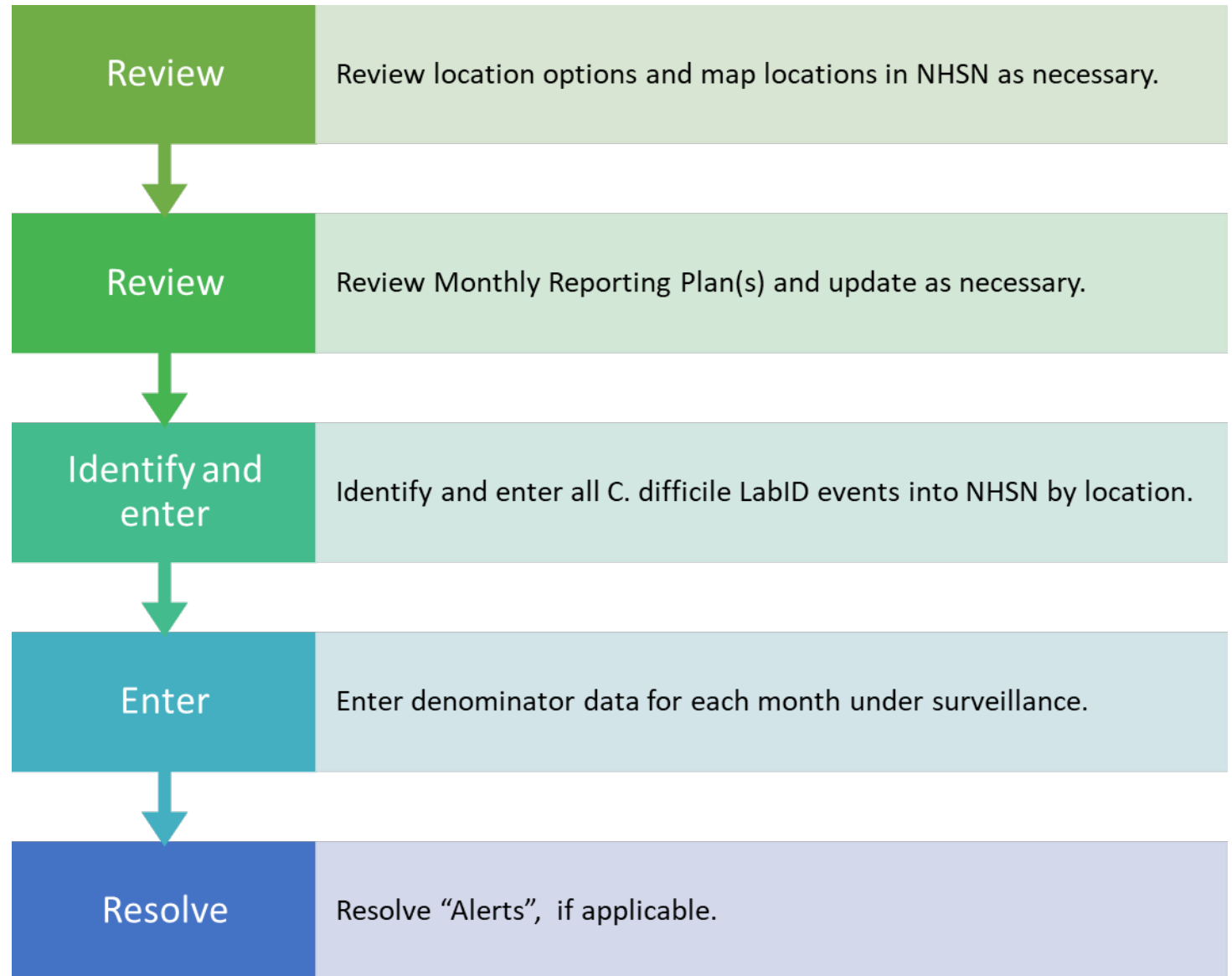
Specific Organism Type	Report		Report		Report		Report		Report		Report		MDR-Acine
	MRSA	No Events	CDIF	No Events	MSSA	No Events	CephR-Kleb	No Events	CRE-Ecoli	No Events	CRE-Entero	No Events	
Infection Surveillance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LabID Event (All specimens)	<input type="checkbox"/>	<input type="checkbox"/>	*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LabID Event (Blood specimens only)	*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Knowledge Check 6

The C. difficile testing method used by the facility is required to be provided by the facility on the FacWideIN denominator field on the last month of each quarter?

- True
- False
- Once per year is good enough

# CHECKLIST: FacWideIN LabID Event Reporting



# Denominator Data: Report No Events

- If you have reported any LabID events during the month, you are **finished** with your reporting for the month and can skip this step.
- If you have no LabID events for the specific month of reporting, you must indicate this on the summary data record to complete your reporting efforts.
- On the MDRO and CDI Module summary data form, checkboxes for “Report No Events” are found underneath the patient day and admission count fields, as seen in the screenshot below.

MDRO & CDI Infection Surveillance or LabID Event Reporting				
Specific Organism Type	MRSA	Report No Events	VRE	Report No Events
Infection Surveillance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LabID Event (All specimens)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LabID Event (Blood specimens only)	* <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MDRO & CDI Infection Surveillance or LabID Event Reporting			
MDR- Acinetobacter	Report No Events	C. difficile	Report No Events
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	* <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		

**If no LabID events are submitted for the month, these boxes should be “checked” for each event you are following “in-plan”. If these boxes are not checked, your data is not complete and will not be submitted to CMS.**

If you identify and enter LabID events for an organism after you’ve already checked the “Report No Events” box, the “Report No Events” check will automatically be removed in the NHSN database.



# LabID Event Calculator:

<https://www.cdc.gov/nhsn/labid-calculator/index.html>.

- Available for use with *C. difficile* and MRSA LabID Event reporting
- Aids in decision making around the 14-day rule
- External calculator

The screenshot shows the 'Denominator Form' section with links to the 'MDRO and CDI Monthly Denominator Form - January 2021' (PDF - 60 KB), a 'Customizable form' (DOCX - 40 KB), and a 'Table of Instructions' (PDF - 200 KB). Below this is the 'Supporting Forms' section with links to 'Annual Facility Surveys' and 'Monthly Reporting Plan'. The 'Analysis Resources' section includes links to 'Analysis Resources', 'Analysis Quick Reference Guides', and 'How to see "Create" and "Modify" dates within NHSN' (PDF - 400 KB). A 'Top of Page' link is also visible.

**MDRO & CDI LabID Event Calculator**  
[MDRO & CDI LabID Event Calculator](#)  
(must have javascript enabled)  
Operates based upon the currently posted LabID Event protocols in the NHSN MDRO & CDI Module.

**Analysis Resources**  
[How to see "Create" and "Modify" dates within NHSN](#) [PDF - 400 KB]  
[Troubleshooting MRSA and CDI LabID Event SIR](#) [PDF - 220 KB]  
[More on the page below](#)

The screenshot shows the main interface of the LabID Event Calculator. It features the CDC logo and the text 'Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™'. Below this is the 'National Healthcare Safety Network (NHSN)' header. The main heading is 'MDRO & CDI LabID Event Calculator'. A welcome message states: 'Welcome to the Multidrug-resistant Organism and Clostridium difficile LabID Event Calculator (LabID Calculator) which implements the National Healthcare Safety Network (NHSN) MDRO and C. difficile surveillance definitions. The calculator is designed as a learning tool for understanding the [...more](#)'. The 'Enter a Reporting Plan...' section includes a dropdown menu for 'Choose an organism to track:' with options: MRSA, MSSA, VRE, CephR-Klebsiella, CRE-Ecoli, CRE-Klebsiella, MDR-Acinetobacter, and CDIF-C. difficile. There are radio buttons for 'All Specimen Types' and 'Blood Specimens Only', and 'Use Generic Locations' (selected) and 'Type In Your Own'. At the bottom, there are dropdowns for 'Choose a reporting month:' and 'Choose a reporting year:', and a 'Next...' button.

## Links to Analysis:

- SIR Guide, to learn more about the SIR & how it's calculated [updated 2/21]:

<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>

- Introduction to NHSN Analysis:

<https://www.cdc.gov/nhsn/pdfs/training/2019/intro-nhsn-analysis-508.pdf>

- Analyzing LabID Event Data in NHSN:

<https://www.cdc.gov/nhsn/pdfs/training/2020/labid-update-508.pdf>

## Checkpoint – Case Study learning assessment:

- 2/1: Pt. to ED from home unresponsive with significant low BP, fluid resuscitation initiated. Blood cultures collected in ED. Intubated and transferred to ICU. Antibiotics, TPN and Lipids are started.
- 2/4: 2/1 BC result as MRSA. New BC collected to document 'clearance'.
- 2/4: Diarrhea noted - temp to 104<sup>0</sup> F.
- 2/5: Diarrhea continues, Rectal Tube inserted.
- 2/6: Diarrhea worsens per documentation. Liquid stool from rectal bag submitted for *C. difficile* testing with 'Toxin positive' finding noted.
- 2/7: Temp to 105 F, BC collected, pt. has cardiac arrest & expires.
- 2/8: BC from 2/7 reported as MRSA+

# Learning Assessment

This facility has selected FacWideIN MRSA bacteremia and C. difficile LabID event monitoring on the monthly reporting plan, are there events for reporting?

- A) Yes
- B) No
- C) I'm not Sure
  
- *How many events are reportable?*
  - A) 1
  - B) 2
  - C) 3

## Checkpoint – learning assessment:

- 2/1: Pt. to ED from home unresponsive with significant low BP, fluid resuscitation initiated. **Blood cultures collected in ED**. Intubated and transferred to ICU. Antibiotics, TPN and Lipids are started.
- 2/4: 2/1 BC result as MRSA. **ICU collects ‘new’ BC** to document ‘clearance’.
- 2/4: Diarrhea noted - temp to 104 F. Rectal Tube inserted.
- 2/5: Lab calls with MRSA+ BC result for 2/4 BC.
- 2/6: Diarrhea worsens per documentation. Liquid stool from rectal bag submitted **for *C. difficile* testing** with ‘Toxin positive’ finding noted.
- 2/7: Temp to 105 F, **BC collected**, pt. has cardiac arrest & expires.
- 2/8: BC from 2/7 reported as MRSA+

# What are the dates of each event?

- LabID events:
  - (1) 2/1 MRSA LabID event for ED
  - (2) 2/4 MRSA LabID event for ICU
  - (3) 2/6 CD LabID event for ICU
  - (4) All of the above

\*\* HINT:

There must be > 14 days between MRSA+ BC in a location before a second event can be submitted for the patient in the same location.

## BONUS

How are these events categorized - CO or HO?

(1) 2/1 MRSA LabID event is **CO** as the +BC are collected in the ED – an outpatient location for the facility

(2) 2/4 MRSA LabID event in ICU is **HO** as it occurs on HD 4 [2/1 is HD1 day of admission]

(3) 2/6 CD LabID event in ICU is **HO** as the event occurs on HD 6

Thank you for your time and attention!

**For questions,**

**contact the NHSN Helpdesk at [nhsn@cdc.gov](mailto:nhsn@cdc.gov)**

**For more information please contact Centers for Disease Control and Prevention**

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

