



LTCH QRP Provider Training



***Using NHSN for
Multidrug-Resistant
Organism (MDRO) &
C. Difficile LabID
Event Reporting***

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Centers for Disease Control & Prevention

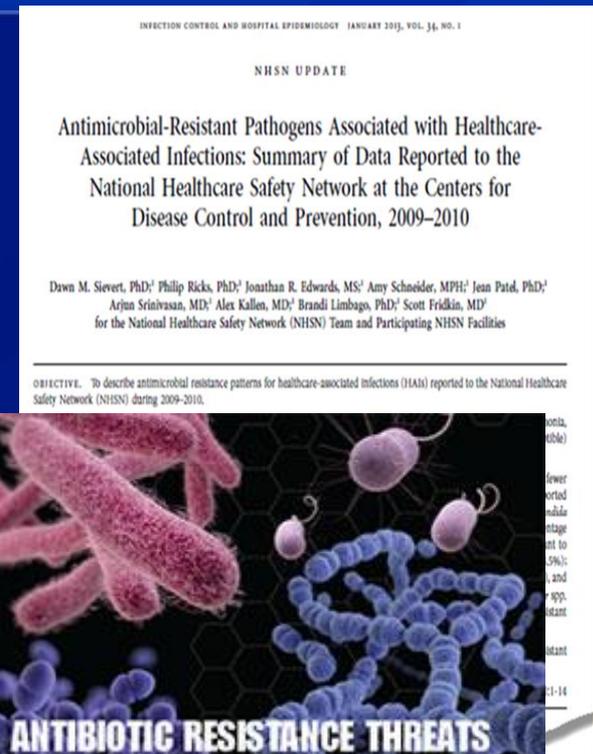
November 20, 2015

For Today, Our Goals Are:

- Understand why surveillance for MRSA bacteremia and *C. difficile* infections is important.
- Understand requirements for LabID Event reporting to CMS via NHSN.
- Describe how to correctly set-up monthly reporting plan for MRSA bacteremia and *C. difficile* LabID Event reporting.
- Understand MRSA bacteremia and *C. difficile* LabID Event definitions and protocols.
- Describe how to correctly enter MRSA bacteremia and *C. difficile* LabID Event data into NHSN.
- Describe how to correctly enter denominator data for LabID Event reporting into NHSN.

Why is MRSA Bacteremia Surveillance Important?

- Serious threat level, requiring prompt and sustained action.
- Staph bacteria, including MRSA, are one of the most common causes of healthcare-associated infections.
- CDC estimates >80,000 invasive MRSA infections and >11,000 related deaths occurred in 2011.
- Despite a slight decrease in the percentage of *S. aureus* resistant to Oxacillin (MRSA), MRSA continues to dominate among pathogens.



Why is *C. difficile* Surveillance Important?

- *C. difficile* infections contribute to approximately 14,000 deaths/year
 - ≈ 90% elderly
 - 400% increase, 2000-07
- Hospital stays from CDI tripled in the last decade

Vital Signs: Preventing *Clostridium difficile* Infections

Abstract

Background: *Clostridium difficile* infection (CDI) is a common and sometimes fatal health-care-associated infection; the incidence, deaths, and excess health-care costs resulting from CDIs in hospitalized patients are all at historic highs. Meanwhile, the contribution of nonhospital health-care exposures to the overall burden of CDI, and the ability of programs to prevent CDIs by implementing CDC recommendations across a range of hospitals, have not been demonstrated previously.

Methods: Population-based data from the Emerging Infections Program were analyzed by location and antecedent health-care exposures. Present-on-admission and hospital-onset, laboratory-identified CDIs reported to the National Healthcare Safety Network (NHSN) were analyzed. Rates of hospital-onset CDIs were compared between two 8-month periods near the beginning and end of three CDI prevention programs that focused primarily on measures to prevent intrahospital transmission of *C. difficile* in three states (Illinois, Massachusetts, and New York).

Results: Among CDIs identified in Emerging Infections Program data in 2010, 94% were associated with receiving health care; of these, 75% had onset among persons not currently hospitalized, including recently discharged patients, outpatients, and nursing home residents. Among CDIs reported to NHSN in 2010, 52% were already present on hospital admission, although they were largely health-care related. The pooled CDI rate declined 20% among 71 hospitals participating in the CDI prevention programs.

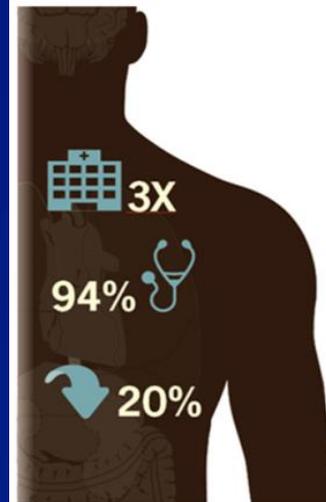
Conclusions: Nearly all CDIs are related to various health-care settings where predisposing antibiotics are prescribed in control.

Making Health Care Safer

Stopping *C. difficile* Infections

VitalSigns[™] CDC
are antibiotic hospitals. State can prevent

March 2012



On this Page

- Introduction
- Problem
- Who's at Risk?
- What Can Be Done
- Science Behind this Issue
- Related Links
- Social Media
- Read Associated MMWR

People getting medical care can catch serious infections called [health care-associated infections \(HAIs\)](#). While most types of HAIs are declining, one – caused by the germ *C. difficile* – remains at historically high levels. *C. difficile* causes diarrhea linked to 14,000 American deaths each year. Those most at risk are people, especially older adults, who take antibiotics and also get medical care. When a person takes antibiotics, good germs that protect against infection are destroyed for several months. During this time, patients can get sick from *C. difficile* picked up from contaminated surfaces or spread from a health care provider's hands. About 25% of *C. difficile* infections first show symptoms in hospital patients; 75% first show in nursing home patients or in people recently cared for in doctors' offices and clinics. *C. difficile* infections cost at least \$1 billion in extra health care costs annually.

[™]*Clostridium difficile* (kloh-STRID-ee-um DIFF-i-seel)

Risk Factors: Key Prevention Targets

- Antimicrobial exposure
- Acquisition of *C. difficile*
- Advanced age
- Underlying illness
- Immunosuppression
- Tube feeds
- Gastric acid suppression?

**Main modifiable
risk factors**

Online Resources

<http://www.cdc.gov/nhsn/ltach/cdiff-mrsa/index.html>

NHSN Login		Surveillance for C. difficile, MRSA, and other Drug-resistant Infections	
About NHSN	+		
Enroll Here	+	Resources for NHSN Users Already Enrolled	
Materials for Enrolled Facilities	-	> Training 	<div data-bbox="1433 502 1754 568" data-label="Section-Header"><h3>New Users - Start Here</h3></div> <div data-bbox="1452 582 1734 802" data-label="Image"></div> <ul style="list-style-type: none">• Step 1: Enroll into NHSN• Step 2: Set up NHSN• Step 3: Report <p>Click here to enroll</p>

Online Resources: CMS Related Info

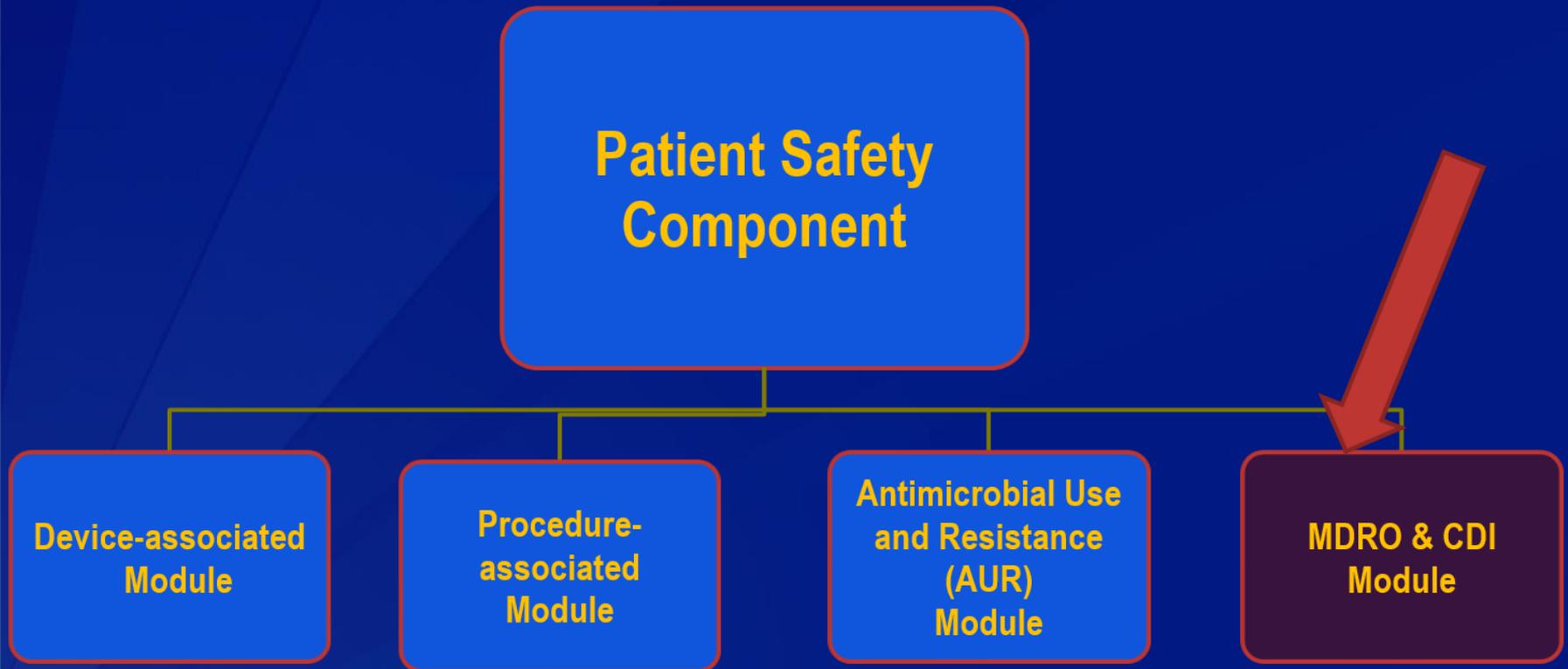
▼ CMS Supporting Materials

- [Operational Guidance for Long Term Care Hospitals to Report Facility-Wide Inpatient \(FacWideIN\) Methicillin-Resistant Staphylococcus aureus \(MRSA\) Blood Specimen \(Bacteremia\) Laboratory-Identified \(LabID\) Event Data to CDC's NHSN for the Purpose of Fulfilling CMS's Long Term Care Hospital Quality Reporting Requirements November 2014](#)  [PDF - 153 KB]
- [Operational Guidance for Long Term Care Hospitals to Report Facility-Wide Inpatient \(FacWideIN\) Clostridium difficile Infection \(CDI\) Laboratory-Identified \(LabID\) Event Data to CDC's NHSN for the Purpose of Fulfilling CMS's Long Term Care Hospital Quality Reporting Requirements November 2014](#)  [PDF - 157 KB]
- [Healthcare Facility HAI Reporting Requirements to CMS via NHSN Current and Proposed Requirements September 2015](#)  [PDF - 105 KB]
- [Reporting Requirements and Deadlines in NHSN per CMS Current Rules September 2015](#)  [PDF - 161 KB]
- [How to Set Up NHSN Reporting for Facility-Wide Inpatient MRSA Bacteremia and C. difficile LabID events for the CMS Inpatient Quality Reporting Program December 2014](#)  [PDF - 505 KB]
- [Helpful Tips for FacWideIN MRSA Bacteremia LabID Event Reporting for the Centers for Medicare and Medicaid Services' Long Term Care Hospital Quality Reporting Program December 2014](#)  [PDF - 28 KB]
- [Helpful Tips for FacWideIN C. difficile LabID Event Reporting for the Centers for Medicare and Medicaid Services' Long Term Care Hospital Quality Reporting Program December 2014](#)  [PDF - 28 KB]
- [Using the "Rate Table - MRSA Blood LabID Data for LTCH PPS" Output Option January 2015](#)  [PDF - 159 KB]

CMS Requirements: LabID Events

	Acute Care Hospital	Long Term Acute Care (LTAC)
Effective	January 1, 2013	January 1, 2015
Required Locations	FacWideIN as defined in MDRO & CDI protocol	FacWideIN as defined in MDRO & CDI protocol
Data Collection	CDC NHSN - MDRO/CDI Module (LabID Event)	CDC NHSN - MDRO/CDI Module (LabID Event)
Organisms	Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) / <i>Clostridium difficile</i> (<i>C. difficile</i> / CDI)	Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) / <i>Clostridium difficile</i> (<i>C. difficile</i> / CDI)
Required Data	Non-duplicate MRSA blood / <i>C. diff</i> toxin positive results tested on unformed stool	Non-duplicate MRSA blood / <i>C. diff</i> toxin positive results tested on unformed stool

Patient Safety Component 4 Modules



Reporting Requirements and Options

Active participants must choose main reporting method

Infection Surveillance
(MDRO / CDI)

LabID Event Reporting
(MDRO / CDI)

additional options then become available

Prevention Process Measures:

- Adherence to Hand Hygiene
- Adherence to Gown and Glove Use
- Adherence to Active Surveillance Testing (for MRSA / VRE Only)

Outcome Measures:

- AST Prevalence / Incidence (for MRSA/VRE Only)

Long Term Care Hospital* CMS Quality Reporting (LTCHQR) Program.....

***MRSA* Bacteremia and *C. difficile*
LabID Events are reported at
Facility-wide Inpatient (FacWideIN)
level**

*NOTE: Long Term Care Hospitals (LTCH) are referred to as Long Term Acute Care Hospital (LTACH) in NHSN

Definitions

- ❑ MRSA: *S. aureus* testing oxacillin, ceftazidime, or methicillin resistant; or positive from molecular testing for mecA and PBP2a
- ❑ C. difficile: A positive result for a laboratory test for C. difficile toxin A and/or B (e.g., enzyme immunoassay, or EIA test), OR a toxin-producing C. difficile organism detected in the stool specimen by culture or other laboratory means (e.g., nucleic acid amplification testing by polymerase-chain reaction, or PCR).
- ❑ MSSA: *S. aureus* testing oxacillin, ceftazidime, or methicillin intermediate or susceptible; or negative from molecular testing for mecA and PBP2a
- ❑ VRE: *Enterococcus faecalis*, *Enterococcus faecium*, or *Enterococcus* species unspecified (only those not identified to the species level) testing resistant to vancomycin

Definitions

- ❑ MDR-Acinetobacter: Any *Acinetobacter* species testing non-susceptible (i.e., resistant or intermediate) to at least one agent in at least 3 antimicrobial classes of the following 6 antimicrobial classes:

Antimicrobial Class	Agents
β -lactams and β -lactam/ β -lactamase inhibitor combinations	Piperacillin, Piperacillin/tazobactam
Sulbactam	Ampicillin/sulbactam
Cephalosporins	Cefepime, Ceftazidime
Carbapenems	Imipenem, Meropenem, Doripenem, Ertapenem
Aminoglycosides	Amikacin, Gentamicin, Tobramycin
Fluoroquinolones	Ciprofloxacin, Levofloxacin

- ❑ CephR-Klebsiella oxytoca or *Klebsiella pneumoniae* testing intermediate or resistant to ceftazidime, ceftriaxone, cefotaxime, or cefepime
- ❑ CRE-Any *Escherichia coli*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, or *Enterobacter spp.* testing resistant to imipenem, meropenem, doripenem, or ertapenem. **Note: For in-plan CRE surveillance, facilities must conduct surveillance for all three organisms CRE-*E. coli*, CRE-*Enterobacter*, and CRE-*Klebsiella* (*Klebsiella oxytoca* and *Klebsiella pneumoniae*).**

Overview of Laboratory-identified (LabID) Event Reporting

Metrics in MDRO and CDI Module align with recommendations from published literature

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY OCTOBER 2008, VOL. 29, NO. 10

SHEA/HICPAC POSITION PAPER

Recommendations for Metrics for Multidrug-Resistant Organisms in Healthcare Settings: SHEA/HICPAC Position Paper

Adam L. Cohen, MD, MPH; David Calfee, MD, MS; Scott K. Fridkin, MD; Susan S. Huang, MD, MPH; John A. Jernigan, MD; Ebbing Lautenbach, MD, MPH, MSCE; Shannon Oriola, RN, CIC, COHN; Keith M. Ramsey, MD; Cassandra D. Salgado, MD, MS; Robert A. Weinstein, MD; for the Society for Healthcare Epidemiology of America and the Healthcare Infection Control Practices Advisory Committee

EXECUTIVE SUMMARY

Monitoring multidrug-resistant organisms (MDROs) and the infections they cause in a healthcare setting is important to detect newly emerging antimicrobial resistance profiles, to identify vulnerable patient populations, and to assess the need for and effectiveness of interventions; however, it is unclear which metrics are the best, because most of the metrics are

quantify the number of people whose MDRO acquisition is healthcare associated. In addition, healthcare facilities may want to calculate both the overall prevalence of carriage and

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INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY FEBRUARY 2007, VOL. 28, NO. 2

ORIGINAL ARTICLE

Recommendations for Surveillance of *Clostridium difficile*-Associated Disease

L. Clifford McDonald, MD; Bruno Coignard, MD, MSc; Erik Dubberke, MD; Xiaoyan Song, MD, MS; Teresa Horan, MPH; Preeta K. Kuty, MD, MPH; the Ad Hoc *Clostridium difficile* Surveillance Working Group

BACKGROUND. The epidemiology of *Clostridium difficile*-associated disease (CDAD) is changing, with evidence of increased incidence and severity. However, the understanding of the magnitude of and reasons for this change is currently hampered by the lack of standardized surveillance methods.

OBJECTIVE AND METHODS. An ad hoc *C. difficile* surveillance working group was formed to develop interim surveillance definitions and recommendations based on existing literature and expert opinion that can help to improve CDAD surveillance and prevention efforts.

DEFINITIONS AND RECOMMENDATIONS. A CDAD case patient was defined as a patient with symptoms of diarrhea or toxic megacolon combined with a positive result of a laboratory assay and/or endoscopic or histopathologic evidence of pseudomembranous colitis. Recurrent CDAD was defined as repeated episodes within 8 weeks of each other. Severe CDAD was defined by CDAD-associated admission to an intensive care unit, colectomy, or death within 30 days after onset. Case patients were categorized by the setting in which *C. difficile* was likely acquired, to account for recent evidence that suggests that healthcare facility-associated CDAD may have its onset in the community up to 4 weeks after discharge. Tracking of healthcare facility-onset, healthcare facility-associated CDAD is the minimum surveillance required for healthcare settings; tracking of community-onset, healthcare facility-associated CDAD should be performed only in conjunction with tracking of healthcare facility-onset, healthcare facility-associated CDAD. Community-associated CDAD was defined by symptom onset more than 12 weeks after the last discharge from a healthcare facility. Rates of both healthcare facility-onset, healthcare facility-associated CDAD and community-onset, healthcare facility-associated CDAD should be expressed as case patients per 10,000 patient-days; rates of community-associated CDAD should be expressed as case patients per 100,000 person-years.

Infect Control Hosp Epidemiol 2007; 28:140-145

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY MAY 2010, VOL. 31, NO. 5

SHEA-IDS A GUIDELINE

Clinical Practice Guidelines for *Clostridium difficile* Infection in Adults: 2010 Update by the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA)

Stuart H. Cohen, MD; Dale N. Gerding, MD; Stuart Johnson, MD; Ciaran P. Kelly, MD; Vivian G. Loo, MD; L. Clifford McDonald, MD; Jacques Pepin, MD; Mark H. Wilcox, MD

Since publication of the Society for Healthcare Epidemiology of America position paper on *Clostridium difficile* infection in 1995, significant changes have occurred in the epidemiology and treatment of this infection. *C. difficile* remains the most important cause of healthcare-associated diarrhea and is increasingly important as a community pathogen. A more virulent strain of *C. difficile* has been identified and has been responsible for more-severe cases of disease worldwide. Data reporting the decreased effectiveness of metronidazole in the treatment of CDAD are limited. The quantity of data available, areas of controversy still exist. This guideline updates and infection control and environmental management.

Infect Control Hosp Epidemiol 2010; 31(5):431-455

Important

LabID Event reporting allows laboratory testing data to be used without clinical evaluation of the patient, allowing for a much less labor intensive method to track *C. difficile* and MDROs, such as MRSA.

Advantages of LabID Event Reporting include.....

- Objective laboratory-based metrics that allow the following **without** extensive chart review:
 - Identify vulnerable patient populations
 - Estimate infection burden
 - Estimate exposure burden
 - Assess need for and effectiveness of interventions
- Standardized case definitions

Why are Standardized Case Definitions & Data Collection Methods Important?

- **Increases comparability between clinical settings.**
- **Guides implementation of interventions and monitors impact of such interventions.**

AND WE KNOW.....

- **Documentation of symptoms may differ between healthcare settings.**
- **Resources vary among facilities, which may result in unfair comparison.**
- **Completeness of medical record documentation and variances among facilities may influence how definitions are applied.**
- **Simplicity of auditing data to validate accuracy of submitted data.**

Facility-Wide Inpatient FacWideIN

Option for LabID Event reporting
only!

Includes inpatient locations*,
including observation patients
housed in an inpatient location

* See *C. difficile* LabID Event protocol for location exclusions

Getting Ready for LabID Event Reporting

“CHECKLIST”
**For Facility-wide Inpatient MRSA
Bacteremia &
C. difficile 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 MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- Enter denominator data for each month under surveillance.
- Resolve “Alerts”, if applicable.

Setting up and Reporting: LabID Events

	Acute Care Hospital	LTAC Hospital
Enrollment		Enroll as separate facility-HOSP-LTAC Will have a unique NHSN orgID
Locations	All inpatient locations must be mapped (see Locations guidance in Ch. 15). Additionally, outpatient ED and 24-hour observation locations must be mapped	Map each inpatient location to CDC-defined location type (LTAC ICU, LTAC Ward, LTAC Pediatric ICU or LTAC Pediatric Ward)
Monthly Reporting Plan	FacWideIN <u>and</u> outpatient ED & 24-hr OBS locations for same organism and LabID event	Facility-wide Inpatient (FacWideIN)
Numerator Data (LabID events)	Report LabID events separately for each inpatient unit, ED and 24-hour observation	Report LabID Events separately for each location
Denominator Data	FacWideIN and again excluding locations with separate CCNs . Location specific counts for each ED and 24-hour observation	FacWideIN

If participating in FacWideIN, must map each inpatient location in the facility



Department of Health and Human Services
Centers for Disease Control and Prevention

NHSN - National Healthcare Safety Network (ISD-CLFT-NHSN1)

[NHSN Home](#) | [My Info](#) | [Contact us](#) | [Help](#) | [Log Out](#)

NHSN Home

Logged into Pleasant Valley Hospital (ID 10312) as DSIEVERT.
Facility Pleasant Valley Hospital (ID 10312) is following the PS component.

Reporting Plan

Patient

Event

Procedure

Summary Data

Import/Export

Analysis

Surveys

Users

Facility

- Customize Forms
- Facility Info
- Add/Edit Component
- Locations
- Surgeons

Group

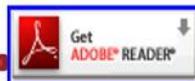
Log Out

NHSN Patient Safety Component Home Page

Use the Navigation bar on the left to access the features of the application.

Assurance of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

NHSN maintenance may occur nightly between 12am and 6am Eastern time.



[Get Adobe Acrobat Reader for PDF files](#)

Find Locations: All or Specific Search

Your Code^{***}:

Your Label^{***}:

CDC Location Description^{***}:

Status^{***}:

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

1

Location Table

[Display All](#) [Print Location List](#)

Page 1 of 1 10 View 1 - 1 of 1

Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
<input type="checkbox"/>	Active	[REDACTED]	[REDACTED]	LTAC Ward	IN:ACUTE:WARD:LTAC	1221-1	34

Page 1 of 1 10 View 1 - 1 of 1

2

Location Table

[Display All](#) [Print Location List](#)

Page 1 of 1 10 View 1 - 4 of 4

Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
<input type="checkbox"/>	Active	[REDACTED]	LTACH	LTAC Ward	IN:ACUTE:WARD:LTAC	1221-1	60
<input type="checkbox"/>	Active	[REDACTED]	LTACH	LTAC Ward	IN:ACUTE:WARD:LTAC	1221-1	20
<input type="checkbox"/>	Active	[REDACTED]	LTACH	LTAC Ward	IN:ACUTE:WARD:LTAC	1221-1	20
<input type="checkbox"/>	Active	[REDACTED]	LTACH	LTAC Ward	IN:ACUTE:WARD:LTAC	1221-1	20

Page 1 of 1 10 View 1 - 4 of 4

“CHECKLIST”

For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* LabID Event Reporting

- ✓ Review location options and map inpatient locations NHSN as necessary.
- Review Monthly Reporting Plan(s) and update as necessary.
- Identify and enter all MRSA bacteremia and *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
- ❑ The Plan also informs CDC which data can be used for aggregate analyses
 - This INCLUDES sharing applicable data with CMS!
- ❑ A facility must enter a Plan for every month of the year
- ❑ NHSN will only submit data to CMS for those *complete* months indicated on the monthly reporting plan

Monthly Reporting Plan FacWideIN

- ❑ Add facility-wide inpatient reporting for MRSA bacteremia and *C. difficile* LabID events to your monthly reporting plan (MRP) using the “FACWIDEIN” location.

Creating a Monthly Reporting Plan

NHSN Home
Alerts
Reporting Plan
Add
Find
Patient
Event
Procedure
Summary Data
Import/Export
Analysis
Surveys
Users
Facility

Add Monthly Reporting Plan

✔ No data found for January, 2016

Mandatory fields marked with *

Facility ID*: [Redacted] ▼
Month*: January ▼
Year*: 2016 ▼
 No NHSN Patient Safety Modules Followed this Month

Multi-Drug Resistant Organism Module [HELP](#)

Locations	Specific Organism Type	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)								
20897 - ASH S								
21897 - ASH WE								
28097 - ASH B								
28197 - ASH WHG								

Add Rows Clear All Rows Copy from Previous Month

Multi-Drug Resistant Organism Module [HELP](#)

Locations	Specific Organism Type	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only	HH	GG
FACWIDEIN - Facili	ACINE - MDR-Acinetobacter							
Process and Outcom	CDIF - C. difficile							
Infection	CEPHRKLEB - CephR-Klebsiella							
Surveillance	CRE - CRE (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella)							
	MRSA - MRSA							
	MRSA/MSSA - MRSA with MSSA							
	VRE - VRE							

Add Rows Clear All Rows Copy from Previous Month

Monthly Reporting Plan FacWideIN

Multi-Drug Resistant Organism Module [HELP](#)

Locations

Specific Organism Type

FACWIDEIN - Facility-wide Inpat

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

FACWIDEIN - Facility-wide Inpat

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

Add Rows

Clear All Rows

Copy from Previous Month

Monthly Reporting Plan

- Alerts
- Reporting Plan
 - Add
 - Find
- Patient
- Event
- Procedure
- Summary Data
- Import/Export
- Analysis
- Surveys
- Users
- Facility
- Group
- Log Out

View Monthly Reporting Plan

Mandatory fields marked with *

Facility ID*: [REDACTED]
Month*: January
Year*: 2015

Device-Associated Module [HELP](#)

Locations	CLABSI	VAE	CAUTI	CLIP	PedVAP (<18 years)
20897 - [REDACTED]	X		X		
28097 - [REDACTED]	X		X		

Procedure-Associated Module [HELP](#)

Procedures SSI

Antimicrobial Use and Resistance Module [HELP](#)

Locations Antimicrobial Use Antimicrobial Resistance

Multi-Drug Resistant Organism Module [HELP](#)

Locations	Specific Organism Type							
FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	MRSA - MRSA							
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
					X			
FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)	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
					X			

“CHECKLIST”

For Facility-wide Inpatient MRSA Bacteremia & *C. difficile* 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 MRSA bacteremia and *C. difficile* LabID events into NHSN by location using the MDRO/CDI LabID Event protocols.
- Enter denominator data for each month under surveillance.
- Resolve “Alerts”, if applicable.

**MRSA Bacteremia and *C. difficile* LabID Event
Reporting in NHSN**

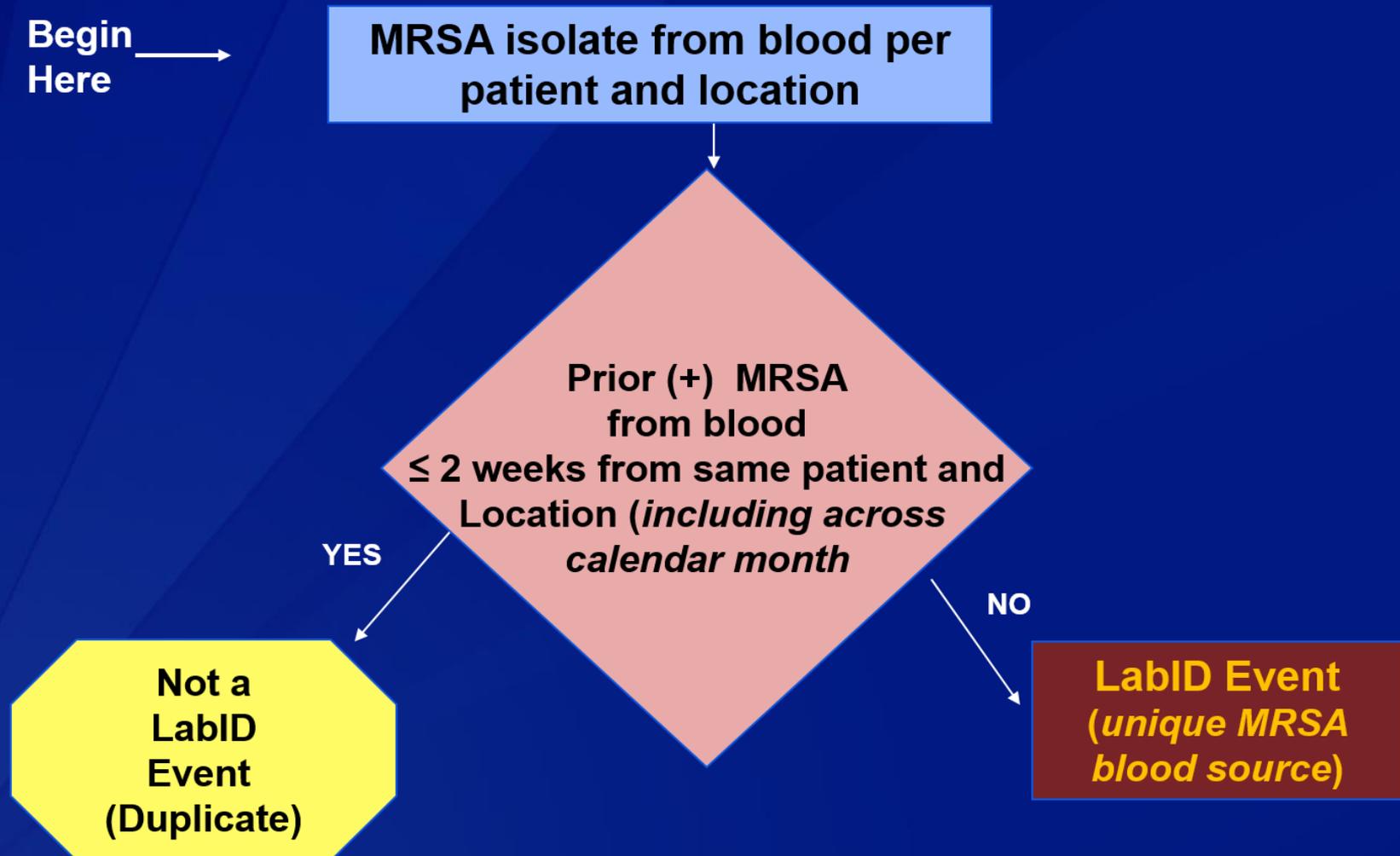
Definition

MRSA Bacteremia LabID Event

- Any MRSA blood specimen obtained for clinical decision making purposes (excludes screening cultures, such as those used for active surveillance testing “AST”)
- MRSA positive blood specimen for a patient in a location with no prior MRSA positive blood specimen result collected within **14 days** for the patient and location (*includes across calendar months for Blood Specimen Only reporting*)

Also referred to as non-duplicate LabID Events

MRSA Bacteremia LabID Event Reporting *Blood Specimen Only*



Definition

C. difficile LabID Event

- A (+) laboratory test result for *C. difficile* toxin A and/or B, (includes molecular assays [PCR] and/or toxin assays) **OR**
- A toxin-producing *C. difficile* organism detected by culture or other laboratory means performed on a stool sample

for a patient in a location with no prior *C. difficile* specimen result reported within 14 days for the patient and location

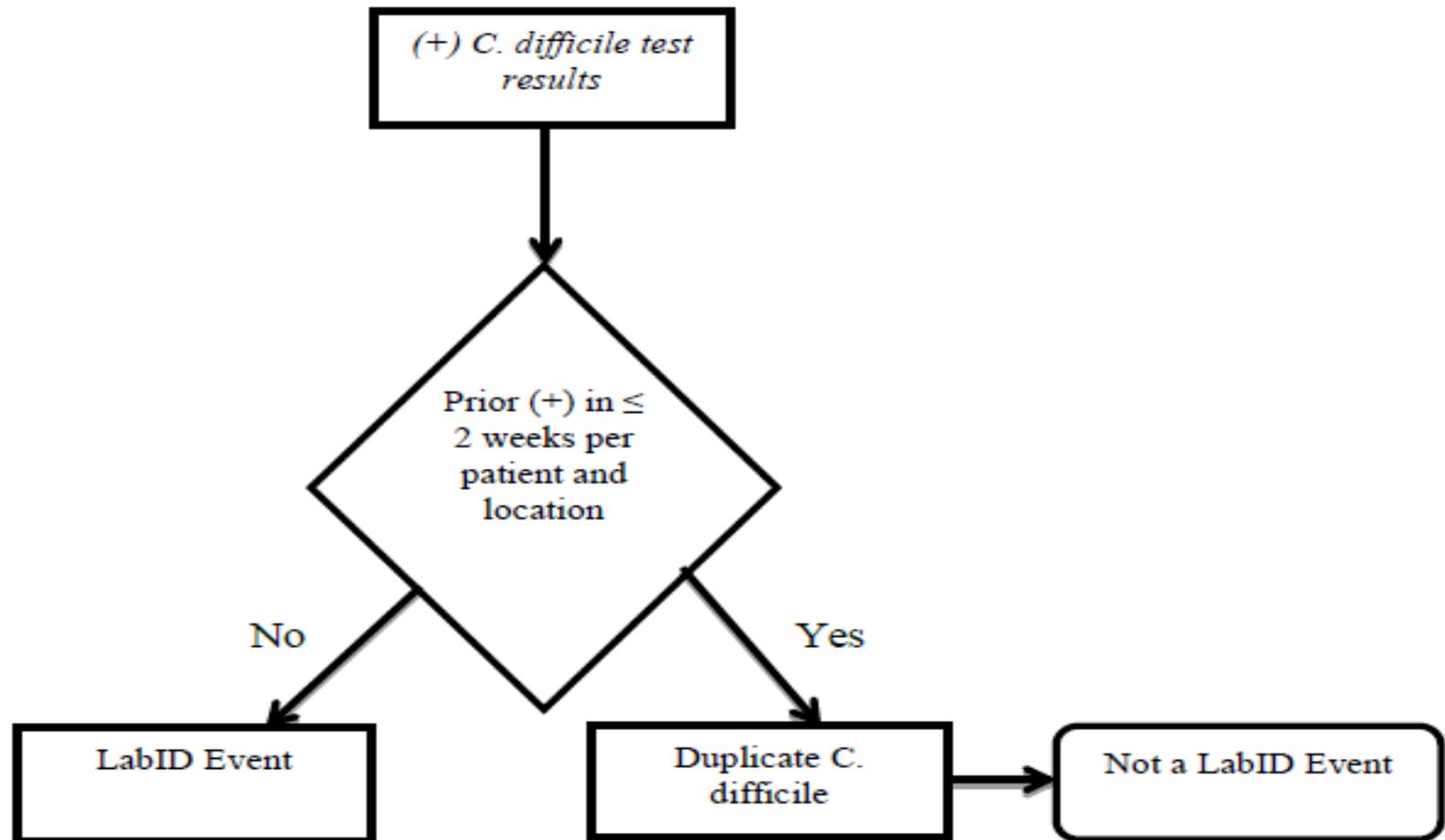
*excludes locations known to predominately house babies (NICU, Nursery, etc.)

C. difficile testing
only on
unformed stool
samples!!

Stool should
conform to
shape of
container

Identifying a *C. difficile* LabID Event

Figure 2. *C. difficile* test Results Algorithm for Laboratory-Identified (LabID) Events



**LabID Events are attributable
to the location where the
specimen was collected.**

Add Event Information

- Each month, facilities should use the MDRO/CDI Module protocol to identify LabID events. All identified LabID events must be entered into NHSN using the specific location where the patient was located at the time of specimen collection.
- Users will not be able to use the FacWideIN location when reporting individual LabID events.

Add Event

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

Patient Information @HELP

Facility ID*:

Patient ID*:

Secondary ID:

Last Name:

Middle Name:

Gender*:

Ethnicity:

Race: American Indian/Alaska Native Asian
 Black or African American Native Hawaiian/Other Pacific Islander
 White

Event #:

Social Security #:

Medicare #:

First Name:

Date of Birth*:

Event Information @HELP

Event Type*:

Date Specimen Collected*:

Specific Organism Type*:

Outpatient*:

Specimen Body Site/Source*:

Specimen Source*:

Date Admitted to Facility*:

Location*:

Date Admitted to Location*:

Has patient been discharged from your facility in the past 3 months?:

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

If yes, from where (Check all that apply): Nursing Home/Skilled Nursing Facility
 Other Inpatient Healthcare Setting (i.e., acute care hospital, IRF, LTAC, etc.)

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

Custom Fields @HELP

Comments @HELP

NHSN National Healthcare Safety Network

Form Approved OMB No. 0920-0656 Exp. Date: 12/31/2017 www.cdc.gov/nhsn

Laboratory-identified MDRO or CDI Event

Instructions for this form are available at: http://www.cdc.gov/nhsn/forms/instr/57_128.pdf *required for saving

Page 1 of 1

Facility ID:	Event #:
*Patient ID:	Social Security #:
Secondary ID:	Medicare #:
Patient Name, Last:	First:
*Gender: M F	*Date of Birth:
Ethnicity (Specify):	Race (Specify):

Event Details

*Event Type: LabID	*Date Specimen Collected:
*Specific Organism Type: (Check one)	
<input type="checkbox"/> MRSA <input type="checkbox"/> MSSA <input type="checkbox"/> VRE <input type="checkbox"/> C. difficile <input type="checkbox"/> CephR-Klebsiella <input type="checkbox"/> CRE-E. coli <input type="checkbox"/> CRE-Enterobacter <input type="checkbox"/> CRE-Klebsiella <input type="checkbox"/> MDR-Acinetobacter	
*Outpatient: Yes No	*Specimen Body Site/System: *Specimen Source:
*Date Admitted to Facility: _____	*Location: *Date Admitted to 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) (Check one):	
<input type="checkbox"/> Nursing Home/Skilled Nursing Facility <input type="checkbox"/> Personal residence/Residential care <input type="checkbox"/> Other Inpatient Healthcare Setting (i.e., acute care hospital, IRF, LTAC, etc.) <input type="checkbox"/> Unknown	
*Has patient been discharged from your facility in the past 3 months? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, date of last discharge from your facility: _____	
Has patient been discharged from another facility in the past 4 weeks? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If Yes, from where (Check all that apply):	
<input type="checkbox"/> Nursing Home/Skilled Nursing Facility <input type="checkbox"/> Other Inpatient Healthcare Setting (i.e., acute care hospital, IRF, LTAC, etc.)	

Custom Fields

Label	Label
_____ / / _____	_____ / / _____
_____ / / _____	_____ / / _____
_____ / / _____	_____ / / _____

Comments

Event Information

Specimens Collected from Inpatients

Event Information [HELP](#)

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

Date Specimen Collected*: 08/15/2015 

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*: 08/01/2015 

Location*:  ▼

Date Admitted to Location*: 08/01/2015 

location of specimen collection



Has patient been discharged from your facility in the **past 3 months**?*: N - No ▼

Has the patient been discharged from another facility in the past 4 weeks?: Y - Yes ▼

If yes, from where (Check all that apply):

Nursing Home/Skilled Nursing Facility

Other Inpatient Healthcare Setting
(i.e., acute care hospital, IRF, LTAC, etc.)

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

Auto-populated.
Based on
previous month
LabID Events

All LabID Events, including community-onset (CO), must be reported into NHSN so that the categorization of incidence and prevalence can be assigned correctly.

Knowledge Check !!

6/1: Lulu is transferred to the LTAC facility from hospital A. Upon arrival, she's noted to be hypotensive with altered mental status. She's immediately sent back to hospital A ED & admission is put on hold. Upon arrival to ED, pt. is slightly hypotensive, but otherwise normal. She complains of abdominal pain and experiences an episode of diarrhea. A loose stool specimen collected in the ED is later reported as toxin positive for *C. difficile*; Lulu is treated with fluids and discharged back to the LTAC with prescription for Flagyl.

**For FacWideIN LabID Event reporting,
can this result be entered as a LabID**

Event and if so, what location would be entered?

- A. No. The patient was not admitted.
- B. Yes. Location would be the ED since specimen was collected there.
-  C. No. ED is not a location for the LTAC.
- D. Yes. Location would be FacWideIN for LTAC.

NHSN will Categorize your MRSA Blood Specimen LabID Events as CO or HO

NHSN Application Categorizes* MRSA LabID Events As:

- Community-Onset (CO): LabID Event specimen collected in an outpatient location or in an inpatient location ≤ 3 **days** after admission to the facility (i.e., days 1 (admission), 2, or 3)
- Healthcare Facility-Onset (HO): LabID Event specimen collected > 3 **days** after admission to the facility (i.e., on or after day 4)

*Based on Inpatient Admission & Specimen Collection Dates

FAQ

What if a patient with no previous admission to your facility presents with symptoms of altered mental status and fever on admission, but blood culture is negative on admission and subsequently positive on day 4 of admission?

- A. I can over-ride NHSN and categorize the event as community-onset since patient was symptomatic on admission.
- B. NHSN will categorize as community-onset (CO).
-  C. NHSN will categorize as healthcare facility-onset (HO)

LabID Events are categorized based on the date of specimen collection and the date of admission

Signs and Symptoms are NOT applicable to LabID Event reporting – Date of Event will always be the date of specimen collection

NHSN will Categorize *C. difficile* LabID Events Based on Inpatient Admission & Specimen Collection Dates

- Community-Onset (CO): LabID Event specimen collected in an outpatient location or in an inpatient location ≤ 3 days after admission to the facility (i.e., days 1 (admission), 2, or 3)
- Healthcare Facility-Onset (HO): LabID Event specimen collected > 3 days after admission to the facility (i.e., on or after day 4)
- Community-Onset Healthcare Facility-Associated (CO-HCFA): CO LabID Event collected from a patient who was discharged from the facility ≤ 4 weeks prior to the date current stool specimen was collected.

LabID Events categorized as CO-HCFA are simply an additional level and subset of the categorized CO events.

Healthcare facilities are NOT penalized for CO-HCFA LabID Events

FAQ

Will a patient in my facility still be categorized as CO-HCFA if he/she spent time in another healthcare facility between admissions to my facility?

YES. Although the patient could have spent time at another facility in the time between previous discharge and the new admission, this additional information is not utilized because of burden for searching outside of one's own facility.

Assume this event is the first LabID event for the patient for your facility. How will NHSN categorize this LabID Event?

Event Information [HELP](#)

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

Date Specimen Collected*: 08/15/2015  ← collection date

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*: 08/01/2015  ← admit date

Location*: 

Date Admitted to Location*: 08/01/2015 

Has patient been discharged from your facility in the past 3 months?: N - No

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

If yes, from where (Check all that apply):

- Nursing Home/Skilled Nursing Facility
- Other Inpatient Healthcare Setting (i.e., acute care hospital, IRF, LTAC, etc.)

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

Auto-populated. Based on previous month LabID Events

- ✓ A. Healthcare-facility onset (HO)
- B. Community onset (CO)
- C. Community onset healthcare-facility associated (CO-HCFA)

NHSN will Further Categorize
***C. difficile* LabID Events based on current**
Specimen Collection Date & date of previous
***C. difficile* LabID event within the same facility**

- **Incident CDI Assay**: Any CDI LabID Event from a specimen obtained **> 8 weeks** after the most recent CDI LabID Event (or with no previous CDI LabID Event documented) for that patient.
- **Recurrent CDI Assay**: Any CDI LabID Event from a specimen obtained **> 2 weeks and ≤ 8 weeks** after the most recent CDI LabID Event for that patient.

How will NHSN categorize this LabID Event?

Event Information [HELP](#)

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

Date Specimen Collected*: 08/15/2015  ← collection date

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*: 08/01/2015  ← admit date

Location*:  ▾

Date Admitted to Location*: 08/01/2015 

Has patient been discharged from your facility in the past 3 months?*: N - No ▾

Has the patient been discharged from another facility in the past 4 weeks?: Y - Yes ▾

If yes, from where (Check all that apply):

- Nursing Home/Skilled Nursing Facility
- Other Inpatient Healthcare Setting (i.e., acute care hospital, IRF, LTAC, etc.)

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

Auto-populated. Based on previous month LabID Events

- A. CO-HCFA - Incident assay for FacWideIN
- ✓ B. HO - Incident assay
- C. Community onset
- D. CO – Incident assay for FacWideIN only

CMS Reporting



Department of Health and Human Services
Centers for Disease Control and Prevention

NHSN - N

Logged in
Facility A

- NHSN Home
- Alerts
- Reporting Plan
- Patient
- Event
- Procedure
- Summary Data
- Import/Export
- Analysis
- Surveys
- Users
- Facility Group
- Log Out

NHSN Notification Message

HPS

PS

Important Message (Expires 15-Nov-2015)

*****Please Read - Important Notification on Upcoming CMS Reporting Deadline*****

Attention: For facilities that take part in certain CMS quality reporting programs (QRPs), the Q3 (Jul - Sept) 2015 data outlined below must be entered into NHSN by November 15.

[The CMS reporting information is ONLY intended for the facilities listed below.]

Long-term Acute Care Facilities (LTACs/LTCHs) that take part in the LTCH QRP:

Q3 CLABSI and CAUTI data from all bedded inpatient care locations
Q3 MRSA Bacteremia and C.difficile LabID data (FacWideIN, all healthcare onset and community onset)

For additional guidance on ensuring your data are accurately sent to CMS for Quality Reporting purposes, please visit our website and navigate to the appropriate section(s) for your facility type:

<http://www.cdc.gov/nhsn/cms/index.html>.

For questions, please email the NHSN Helpdesk: NHSN@cdc.gov.

OK

Home

em that would perm
stated, and will not
Public Health Service

CMS Measures for Long-Term Acute Care Hospitals



MDRO and CDI Module

Table 2. Measures Delivered to CMS For Facilities Participating in Quality Reporting Programs: MRSA Bacteremia and *C.difficile* LabID Events

<u>Facility Type</u>	<u>CMS Quality Reporting Program</u>	<u>MRSA Bacteremia LabID Event Measure Sent to CMS</u>	<u><i>C.difficile</i> LabID Event Measure Sent to CMS</u>
General Acute Care Hospitals	Inpatient Quality Reporting Program	MRSA Bloodstream Infection SIR (FacWideIN)	Facility CDI Incidence SIR (FacWideIN)
Long Term Care Hospitals (referred to as Long Term Acute Care Hospitals in NHSN)	Long Term Care Hospital Quality Reporting Program	MRSA Bloodstream Infection Incidence Density Rate (FacWideIN)	Facility CDI Healthcare Facility-Onset Incidence Rate (FacWideIN)

What LabID event data are reported to CMS for Long-Term Acute Care Hospitals?

FacWideIN HO MRSA bacteremia and CDI incidence rates.

MRSA:

http://www.cdc.gov/nhsn/pdfs/cms/ltac/cms_ltch_pps_mrsa_ratetable.pdf

C.diff:

http://www.cdc.gov/nhsn/pdfs/cms/ltac/cms_ltch_pps_cdi_ratetable.pdf

CMS Reporting

Patient Safety Component
Analysis Output Options [HELP](#)

Navigation Menu:
Patient
Event
Procedure
Summary Data
Import/Export
Analysis
Surveys
Users
Facility
Group
Log Out

Expand All **Collapse All**

- Device-Associated (DA) Module
- Procedure-Associated (PA) Module
- HAI Antimicrobial Resistance (DA+PA Modules)
- MDRO/CDI Module - Infection Surveillance
- MDRO/CDI Module - LABID Event Reporting
- MDRO/CDI Module - Process Measures
- MDRO/CDI Module - Outcome Measures
- Antimicrobial Use and Resistance Module
- CMS Reports
 - Acute Care Hospitals (Hospital IQR)
 - Inpatient Rehabilitation Facilities (IRFQR)
 - Long Term Acute Care Hospitals (LTCHQR)
 - CDC Defined Output
 - SIR - CLAB Data for CMS LTCH PPS
 - SIR - CAU Data for CMS LTCH PPS
 - Rate Table - CLAB Data for CMS LTCH PPS
 - Rate Table - CAUTI Data for CMS LTCH PPS
 - Rate Table - MRSA blood LabID Data for LTCH PPS
 - Rate Table - CDI LabID Data for LTCH PPS
 - PPS-Exempt Cancer Hospitals (PCHQR)
 - TAP Reports
 - Advanced

Callouts:
1: Points to the 'Analysis' menu item.
2: Points to the 'Log Out' menu item.
3: Points to the 'CMS Reports' folder.
4: Points to the 'Long Term Acute Care Hospitals (LTCHQR)' folder.
5: Points to the 'CDC Defined Output' folder.
6: Points to the 'Rate Table - MRSA blood LabID Data for LTCH PPS' item.

Let's Review

MRSA Bacteremia LabID Events for FacWideIN

- ✓ MRSA blood specimens **MUST** be monitored throughout all inpatient locations within a facility.
- ✓ All MRSA blood LabID Event(s) **MUST** be entered whether community-onset (CO) or healthcare facility-onset (HO).
- ✓ A blood specimen qualifies as a LabID Event if there has not been a previous positive laboratory result for the patient and location within the previous 14 days.

Let's Review

C. difficile LabID Event Reporting

- ✓ For FacWideIN, *C. diff* toxin-positive specimens **MUST** be monitored for all inpatient locations within a facility.
- ✓ All LabID Event(s) **MUST** be entered whether community-onset (CO) or healthcare facility-onset (HO).
- ✓ Only loose stools should be tested for *C. difficile*.
- ✓ A toxin positive loose stool specimen qualifies as a LabID Event if there has not been a previous positive laboratory result for the patient and location **within the previous 14 days for the patient and location.**

Identify the LabID Events

	Pt	Admit Date/ Location	Specimen Collection Date/Loc	Specimen Source	Lab Result	LabID Event? Location?	Explanation
1	Rose	2/2/15 ICU	2/2/15 ICU	Blood	MRSA	YES/ICU	1 st MRSA blood for location
2	Rose	2/2/15 ICU	2/6/15 ICU	Blood	MRSA	NO	≤ 14 days previous specimen/location
3	Rose	2/2/15 ICU	2/9/15 ICU	Stool	C. diff +antigen = toxin	NO	Must be toxin + **+PCR = toxin +
5	Rex	2/2/15 M/S	2/5/15 M/S	Blood	MRSA	YES M/S	1 st MRSA blood for location
6	Rex	2/5/15 ICU	2/5/15 ICU	Blood	MRSA	YES/ICU	1 st MRSA blood for location

Assume FacWideIN and all specimens collected are shown

“CHECKLIST”
For Facility-wide Inpatient MRSA
Bacteremia &
C. difficile LabID Event Reporting

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

LabID Event Reporting Denominator Data

Entering Denominator Data in NHSN Application

- ❑ Click on 'Summary Data' and then 'Add' on the left-hand navigation bar.
- ❑ Select 'MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring' from the Summary Data Type dropdown menu (see screenshot below). 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 left is the CDC logo. To its right, the text reads: "Department of Health and Human Services" and "Centers for Disease Control and Prevention". Below this is a navigation bar with "NHSN - National Healthcare Safety Network" on the left and "NHSN Home | My Info" on the right. A user status bar indicates: "Logged into DHQP Memorial Hospital (ID 10000) as MAGGIE. Facility DHQP Memorial Hospital (ID 10000) is following the PS component." The main content area is titled "Add Patient Safety Summary Data". Below the title is a dropdown menu for "Summary Data Type" with the selected option "MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring". At the bottom of the form are two buttons: "Continue" and "Back". A red arrow points to the "Add" option in the left-hand navigation bar, and another red arrow points to the "Continue" button.

CDC
Department of Health and Human Services
Centers for Disease Control and Prevention

NHSN - National Healthcare Safety Network | NHSN Home | My Info

Logged into DHQP Memorial Hospital (ID 10000) as MAGGIE.
Facility DHQP Memorial Hospital (ID 10000) is following the PS component.

Add Patient Safety Summary Data

Summary Data Type: MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring

Continue Back

Knowledge Check:

What data should be entered in the box?

MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring

HELP

Mandatory fields marked with *

Print

Facility ID*: 10401 (DHQP Memorial Annex)

Location Code*: FACWIDEIN - Facility-wide Inpatient (FacWIDEIn) ▼

Month*: November

Year*: 2015

What data should be entered here??

General

Setting: Inpatient Total Facility Patient Days *: Total Facility Admissions *:

Setting: Outpatient Total Facility Encounters :

If monitoring MDRO in a FACWIDE location, then subtract all counts from patient care units with unique CCNs(IRF and IPF) from Totals:

MDRO Patient Days*: MDRO Admissions*: MDRO Encounters:

If monitoring *C. difficile* in a FACWIDE location, then subtract all counts from patient care units with unique CCNs(IRF and IPF) as well as NICU and Well Baby counts Totals:

CDI Patient Days*: CDI Admissions*: CDI Encounters:

- A. Total number of patient days for all facility inpatient units for November
- B. Total patient days for all inpatient & outpatient units in the facility for November
- C. Total patient days for MDRO or CDI patients in the facility

Knowledge Check:

What data should be entered in the box?

Mandatory fields marked with *

Facility ID*: 10000 (DHQP Memorial Hospital)

Location Code*: FACWIDEIN - Facility-wide Inpatient (FacWIDEIn)

Month*: February

Year*: 2015

General

Setting: Inpatient Total Facility Patient Days *: Total Facility Admissions *:

Setting: Outpatient Total Facility Encounters:

If monitoring MDRO in a FACWIDE location, then subtract all counts from patient care units with unique CCNs (IRF and IPF) from Totals:

MDRO Patient Days*: MDRO Admissions*: MDRO Encounters:

If monitoring *C. difficile* in a FACWIDE location, then subtract all counts from patient care units with unique CCNs (IRF and IPF) as well as NICU and Well B:

Totals:

CDI Patient Days*: CDI Admissions*: CDI Encounters:

- ✓ A. Total patient days for all inpatient units combined for February
- B. Total patient days for all inpatients with an MDRO
- C. Patient days for all inpatient & outpatient units in the facility

Knowledge Check:

What data should be entered in the box?

General

Setting: Inpatient Total Facility Patient Days *: Total Facility Admissions *:

Setting: Outpatient Total Facility Encounters :

If monitoring MDRO in a FACWIDE location, then subtract all counts from patient care units with unique CCNs(IRF and IPF) from Totals:

MDRO Patient Days*: MDRO Admissions*: MDRO Encounters:

If monitoring *C. difficile* in a FACWIDE location, then subtract all counts from patient care units with unique CCNs(IRF and IPF) as well as NICU and Well Baby counts from Totals:

CDI Patient Days*: CDI Admissions*: CDI Encounters:

What data should be entered here?

- A. Total number of patients admitted with CDI
- B. Total patient days for all inpatient units
- ✓ C. Total number of admissions for all inpatient locations

“CHECKLIST”
For Facility-wide Inpatient MRSA
Bacteremia &
C. difficile 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 MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- ✓ Enter denominator data for each month under surveillance.
- ✓ Resolve “Alerts”, if applicable.

Denominator Data: Report No Events

- ❑ If you have identified and reported both MRSA bacteremia and *C. difficile* LabID events during the month, you are finished with your reporting for the month and can skip this step.
- ❑ If you have not identified any LabID events for MRSA bacteremia or *C. difficile* at the end of a month, you must indicate this on the summary data record in order for your data to be sent with CMS.
- ❑ 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.

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

Specific Organism Type	MRSA	Report No Events	VRE	Report No Events	MDR- Acinetobacter	Report No Events	<i>C. difficile</i>	Report 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"/>
LabID Event (All specimens)	<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"/>
LabID Event (Blood specimens only)	* <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

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.

Denominator Data

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

**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? (check one)

- Enzyme immunoassay (EIA) for toxin
- Cell cytotoxicity neutralization assay
- Nucleic acid amplification test (NAAT) (e.g., PCR, LAMP)
- Glutamate dehydrogenase (GDH) antigen plus EIA for toxin (2-step algorithm)
- GDH plus NAAT (2-step algorithm)
- GDH plus EIA for toxin, followed by NAAT for discrepant results
- Toxigenic culture (*C. difficile* culture followed by detection of toxins)
- Other (specify): _____

("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. Please ask your laboratory or conduct a search for further guidance on selecting the correct option to report.)

CDI LabID Event: Laboratory Testing

Diagnostic Test	Demonstrates Evidence of Toxigenic Strain		Comments
	YES	NO	
Glutamate dehydrogenase (GDH) antigen		X	Detects antigen in both toxin and non-toxin producing strains
Toxin enzyme immunoassay (EIA)	X		<ul style="list-style-type: none"> <i>C. difficile</i> toxin A and/or B GDH plus EIA for toxin (2-step algorithm)
Nucleic acid amplification test [NAAT](e.g., PCR, LAMP)	X		<ul style="list-style-type: none"> <i>C. difficile</i> toxin B gene GDH plus NAAT (2-step algorithm) GDH plus EIA for toxin, followed by NAAT for discrepant results
Cell cytotoxicity neutralization assay (CCNA)	X		<ul style="list-style-type: none"> Requires tissue culture
Toxigenic (cytotoxic) <i>C. difficile</i> culture	X ⁺		+Requires use of second test for toxin detection

More about CDI Test Type...

- ❑ Important to select correct CDI test type for future risk adjustment.
- ❑ If “Other” is selected when a more appropriate response is available on the form, your facility’s data will not be risk-adjusted to the most appropriate level.
- ❑ “Other” should not be used to name specific laboratories, reference laboratories, or the brand names of *C. difficile* tests; most test methods can be categorized accurately by selecting from the options provided.

LabID Event Calculator

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

MDRO Lab ID Calculator

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](#)

Enter a Reporting Plan...

Choose an organism to track

- MRSA
- MSSA
- VRE
- CephR-Klebsiella
- CRE-Ecoli
- CRE-Klebsiella
- MDR-Acinetobacter
- CDIF-C. difficile

All Specimen Types: All Blood Specimens Only

Use Generic Locations: No Type In Your Own

Choose a reporting month

Choose a reporting year

Next...

MDRO & CDI LabID Event Calculator

- MDRO & CDI LabID Event Calculator (must have javascript enabled)
Operates based upon the currently posted (January 2015) LabID Event protocols in the NHSN MDRO & CDI Module.

Case Studies

Case 1: How do I identify the LabID event?

- 5/1: Karen, a ? year old female is admitted to the LTAC unit A with history of ventilator dependency, sepsis and UTI.
- 5/2: Pt. complains of lower abdominal cramps and two episodes of diarrhea, relieved with medication.
- 5/3: Patient develops fever of 38.6°C with complaints of worsening lower abdominal pain. BM with loose unformed stool. Urine & blood cultures collected; *C. diff* toxin ordered, but not collected.
- 5/4: Patient continues to complain of lower abdominal pain and loose stools. Patient transferred to Unit B for additional care and after transfer, a loose stool specimen is collected which returns positive for *C. difficile* toxin. Urine & blood culture results positive for MRSA.

Case 1

For **FacWideIN** LabID reporting, should this be entered as a *C. difficile* LabID Event?

- A. No. Her symptoms started on admission to the hospital.
-  B. Yes. This is the first toxin positive *C. difficile* isolate collected for this patient and location (*no previous positive within 14 days for location*).

Case 1

What Location is the LabID Event Attributed?

- A. Unit A
- ✓ B. Unit B
- C. Lab
- D. FacWideIN

**Remember - There is no thought process or subjective decisions allowed for location attribution for LabID event reporting. Events are attributed to the location where the specimen is collected.

NHSN “transfer rule” does **NOT apply for LabID Events

Case 1

How Will this Event be Categorized?

(Hint: admission on 5/1; specimen collection on 5/4)

- A. Community-Onset (CO)
-  B. Healthcare Facility-Onset (HO)
- C. Community-Onset Healthcare Facility-Associated (CO-HCFA)
- D. As a Traumatic Experience

If a patient is admitted with diarrhea, but the stool is not tested for *C. difficile* until hospital day 4, the Event is categorized as healthcare facility-onset (HO)

***symptoms do NOT apply to LabID event reporting.*

Case 1

What about that MRSA+ Blood Culture?

For **FacWideIN** LabID reporting,
should the MRSA blood result be entered as a MRSA
bacteremia LabID Event?

- A. No. Her symptoms started on admission to the hospital.
-  B. Yes. First MRSA positive blood specimen collected for this patient and location (*no previous positive within 14 days for location*).
- C. No. The specimen was collected <4 days after admission

Case 1

How Will the MRSA bacteremia LabID Event be Categorized?

(Hint: admission on 5/1; specimen collection on 5/3)

- ✓ A. Community-Onset (CO)
- B. Healthcare Facility-Onset (HO)
- C. Community-Onset Healthcare Facility-Associated (CO-HCFA)

Is this MRSA LabID Event attributed to Unit A or Unit B?

- ✓ A. Unit A
- B. Unit B

Rule: LabID events are attributed to the location where the positive specimen is collected.

Case 2

Location vs. Age

- 6/15: Leslie, a 9 year old patient is admitted to inpatient unit, 1E-Peds, from rehab facility. The patient was discharged from your facility 2-weeks ago after a long hospitalization related to a diving injury.
- Upon admission to 1E-Peds, patient is noted to have foul loose stools.
- 6/16: After three episodes of loose stools over the course of 24 hours, an unformed specimen was collected and tested positive for *C. difficile* toxin.

Case 2

For FacWideIN LabID reporting Should this be entered into NHSN as a LabID Event?

 A. YES. Specimen was collected from 1E-Peds inpatient location.

B. NO. Pediatrics are excluded from CDI LabID Event reporting.

C. NO. There is no event to report.



***Remember – LabID event is location not age based!

Case 2

How will NHSN Categorize the CDI Event?

- A. Community-onset (CO)
- B. Healthcare-Facility onset (HO)
-  C. Community-Onset Healthcare Facility-Associated (CO-HCFA)
- D. NHSN will not categorize the event, the user will need to make the decision

Specimen was collected less than 4 days after admission to the facility

AND

This patient was previously discharged from your facility \leq 4 weeks prior to current date of stool specimen collection

Case 3

LabID Event or CLABSI?

- 5/15: Tim is admitted to the LTAC from an outlying hospital with Foley & central line in place status post-MVA.
- 5/18: Pt. spikes a fever of 101⁰F with cloudy urine draining to bedside bag. A urine culture is collected & antibiotic treatment begun.
- 5/19: Urine culture results are positive for *E. coli* and MRSA.
- 5/21: Patient continues to have fever of 101.4F - Blood cultures collected from peripheral IV site.
- 5/22: Two of two blood cultures are positive for MRSA.

Case 3

Since your facility participates in MRSA bacteremia LabID Event Reporting for FacWideIN, would you report this positive blood culture as a LabID Event?

- A. No. Since the patient already has a (+) urine culture with MRSA for this month and location, the MRSA blood is considered a duplicate.
-  B. Yes. This is considered a unique blood source.
- C. No. This is a CLABSI !!

Case 3

What if the patient had a positive MRSA blood culture collected 5/18 ?

- ✓ A. This would be a duplicate MRSA isolate and NOT a MRSA bacteremia LabID Event.
- B. I would report as a MRSA bacteremia LabID Event.
- C. I would report as an Infection Surveillance Event

Case 4

Is an AST a LabID event?

6/9: Debby, a local soccer player, is admitted to the LTAC after a long hospitalization related to a head injury sustained while head-kicking an underinflated soccer ball. Upon admit to the unit, a surveillance nasal screen tested positive for MRSA.

Case 4

Should this positive MRSA nasal screen be entered into NHSN as a MRSA LabID Event?

- ✓ A. NO
- B. YES

Case 4

What if blood cultures were also collected and tested positive for MRSA?

- A. NO. I would not consider this to be a MDRO LabID Event since the patient had a MRSA positive nasal screen.
-  B. YES. Since the blood culture was obtained for clinical decision making, I would report this as a MRSA bacteremia LabID Event if no MRSA blood was reported for this patient and location in previous 14 days.

Case 5

Can I apply the transfer rule?

- 5/1: Laura is admitted to Unit A from an outlying facility. She has no previous admissions to your facility.
- 5/3 @ 7am: Laura transfers to Unit B where she complains of abdominal pain & has a single episode of what is documented as “diarrhea”. MD orders *C. difficile* testing as well as transfer back to Unit A for private room. The lab rejects the specimen for CD testing as it did not meet testing parameters (conforms to shape of collection container)
- 5/3 @ 1pm: Laura arrives to Unit A. She continues with loose stool and a new CD order is given. Specimen collected & is accepted for testing. Results = toxin positive for CDI

Case 5

Should the specimen collected on 5/3 be entered as a LabID Event if participating in FacWideIN reporting?

- ✓ A. YES. Location = Unit
A
- B. YES. Location = Unit
B
- C. NO
- D. Too hard to determine



***Remember –
LabID events are
attributable to the
location where the
specimen is
collected*

Case 5

How will NHSN categorize this LabID Event?

- ✓ A. Community Onset
- B. Community Onset - Healthcare Facility Associated (CO-HCFA)
- C. Healthcare Onset



Community-Onset (CO):
LabID Event specimen
collected in an inpatient
location ≤ 3 days after
admission to the facility (i.e.,
days 1 (admission), 2, or 3)

Summary:

- ✓ Understand why surveillance for MRSA bacteremia and C. difficile infections is important.
- ✓ Understand requirements for LabID Event reporting to CMS via NHSN.
- ✓ Describe how to correctly set-up monthly reporting plan for MRSA bacteremia and C. difficile LabID Event reporting.
- ✓ Understand MRSA bacteremia and C. difficile LabID Event definitions and protocols.
- ✓ Describe how to correctly enter MRSA bacteremia and C. difficile LabID Event data into NHSN.
- ✓ Describe how to correctly enter denominator data for LabID Event reporting into NHSN.

THANK YOU!

Questions?



Questions: Email user support: nhsn@cdc.gov
NHSN website: <http://www.cdc.gov/nhsn/>