

Using NHSN for Multidrug Resistant Organism and *Clostridium difficile* Infection (MDRO/CDI) Laboratory-Identified (LabID) Event Reporting

National Center for Emerging and Zoonotic Infectious Diseases

Place Descriptor Here



Objectives

- Review the structure of the Multidrug-Resistant Organism & Clostridium *difficile* Infection (MDRO/CDI) Module within the Patient Safety Component of NHSN
- Describe the rationale for monitoring MDROs and CDI
- Review requirements for MRSA Bacteremia and CDI LabID Event reporting to CMS through NHSN
- Describe the methodology, protocols, and definitions used in data collection and reporting under the MDRO/CDI LabID Event Reporting in NHSN
- Review the correct method for entering MRSA Bacteremia and CDI LabID Events into NHSN
- Apply knowledge through case studies

Patient Safety Component 5 Modules

Patient Safety Component

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graph TD; A[Patient Safety Component] --> B[Device-associated Module]; A --> C[Procedure-associated Module]; A --> D[Antimicrobial Use and Resistance (AUR) Module]; A --> E[MDRO & CDI Module]; A --> F[Vaccination Module];
```

Device-associated
Module

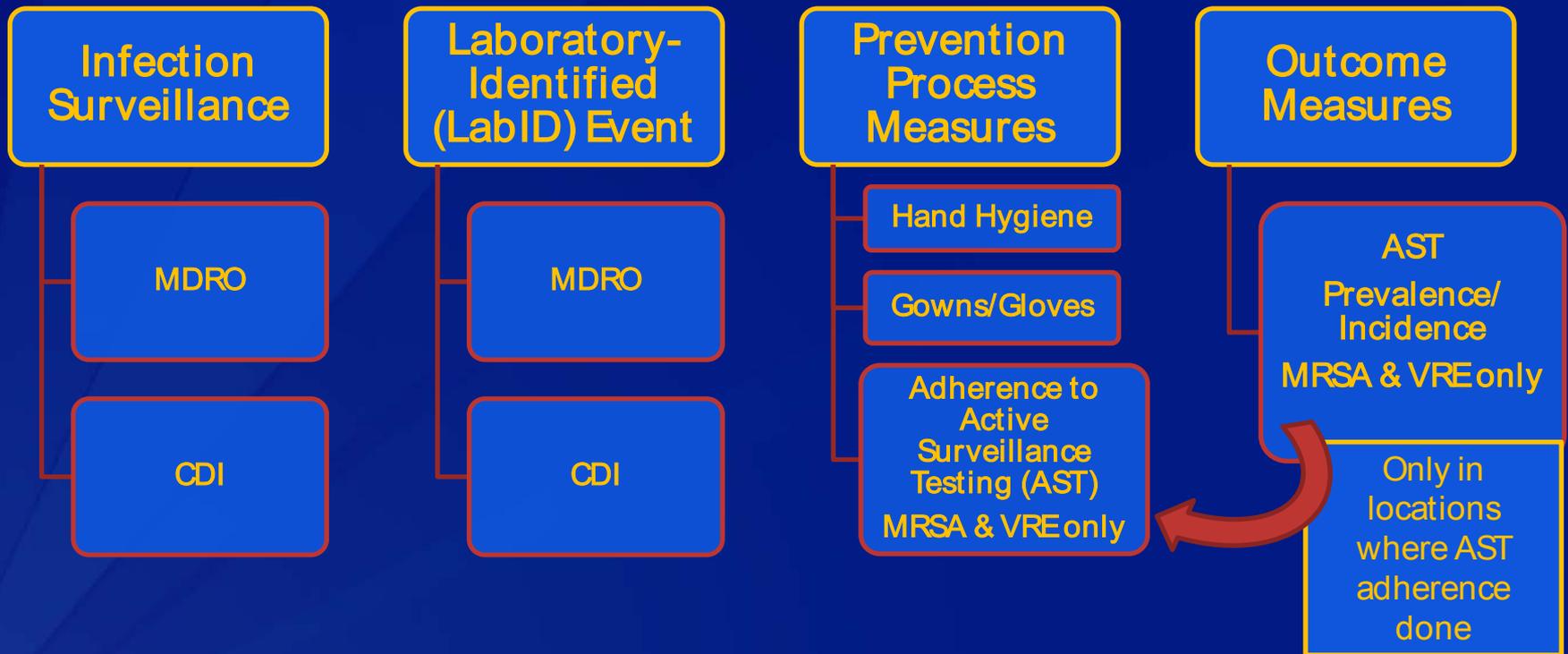
Procedure-
associated
Module

Antimicrobial Use
and Resistance
(AUR)
Module

MDRO & CDI
Module

Vaccination Module

Multidrug-Resistant Organism & *Clostridium difficile* Infection Module (MDRO/CDI)



Background

Goal of the MDRO and CDI Module

- Monitoring of MDROs and *C. difficile* infection (CDI) helps to evaluate local trends and changes in the occurrence of these pathogens and related infections
- This module provides a mechanism for facilities to report and analyze MDRO and CDI data, in order to inform infection control staff of the impact of targeted prevention efforts

Why *C. difficile*?

- Unlike many causes of healthcare associated infections (HAIs), *C. difficile* diarrheal infections have increased, and are now at **historic highs**
- *C. difficile* infections are linked to about **14,000 deaths** each year, with approximately 90% being among the elderly
- Antibiotic use and healthcare exposure are two of the greatest risk factors
- Careful attention to surface cleaning, and wearing gowns and gloves when treating those known to be infected, can reduce spread by 20%
- Renewed interest:
 - Reporting to CMS via NHSN

CDC. (2012). Vital signs: Preventing clostridium difficile infections, MMWR, 61.



Making Health Care Safer

Stopping *C. difficile* Infections

CDC
Vitalsigns™

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 \(HAIs\)](#). While most types of HAIs are [de](#)one – caused by the germ *C. difficile** – [1](#) 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 are in 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 health care provider's hands. About 25% of *C. difficile* infections first show symptoms among hospital patients; 75% first show in nursing home patients or in people recently discharged from doctors' offices and clinics. *C. difficile* infections cost at least \$1 billion in extra health care annually.

**Clostridium difficile* (kloh-STRID-ee-um) (see)

Centers for Disease Control and Prevention

MMWR

Early Release / Vol. 61

Morbidity and Mortality Weekly Report

March 6, 2012

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 and *C. difficile* transmission occurs. Hospital-onset CDIs were prevented through an emphasis on infection control.

Implications for Public Health: More needs to be done to prevent CDIs; major reductions will require antibiotic stewardship along with infection control applied to nursing homes and ambulatory-care settings as well as hospitals. State health departments and partner organizations have shown leadership in preventing CDIs in hospitals and can prevent more CDIs by extending their programs to cover other health-care settings.

3X

94%

20%

<http://www.cdc.gov/mmwr/pdf/wk/mm61e0306.pdf>

SHEA/HICPAC Position Paper (October 2008): *Recommendations for MDRO Metrics in Healthcare Settings*

- Define reasonable and practical metrics to best measure impact of prevention
- Authors from APIC, CDC, SHEA, HICPAC
- Five Categories of MDRO Outcome Measures
 1. Tracking Patients
 2. Monitoring Susceptibility Patterns
 3. Estimating Infection Burden
 4. Estimating Exposure Burden
 5. Quantifying Healthcare Acquisition (which includes Transmission)

Recommended metrics
from the
SHEA/HICPAC Position Paper
were the basis
for the
new MDRO and CDI Module

Organisms

1) Methicillin-Resistant *Staphylococcus aureus* (MRSA)
[option w/ Methicillin-Sensitive *S. aureus* (MSSA)]

2) Vancomycin-Resistant *Enterococcus* spp. (VRE)

3) Cephalosporin-Resistant (CephR) *Klebsiella* spp.

4) Carbapenem-Resistant (CRE) *Klebsiella* spp.

5) Carbapenem-Resistant (CRE) *E. coli* spp.

6) Multidrug-Resistant (MDR) *Acinetobacter* spp.

7) *Clostridium difficile*

Definitions

- ❑ **MRSA:** *S aureus* testing oxacillin, cefoxitin, or methicillin resistant; or positive from molecular testing for mecA and PBP2a
- ❑ **MSSA:** *S aureus* testing oxacillin, cefoxitin, or methicillin intermediate or susceptible; or negative from molecular testing for mecA and PBP2a
- ❑ **VRE:** Any Enterococcus spp. testing resistant to vancomycin
- ❑ **CephR-*Klebsiella*:** *Klebsiella* spp. testing intermediate or resistant to ceftazidime, ceftriaxone, cefotaxime, or cefepime
- ❑ **CRE-*Klebsiella*:** *Klebsiella* spp. testing intermediate or resistant to imipenem, meropenem, or doripenem
- ❑ **CRE-*E coli*:** *E Coli* spp. testing intermediate or resistant to imipenem, meropenem, or doripenem

Definitions (2)

- ❑ MDR-*Acinetobacter*. *Acinetobacter* spp. testing intermediate or resistant to at least one drug within at least 3 antimicrobial classes of 6, including:
 - β-lactam/β-lactamase inhibitor combo (PIP, PIPTAZ)
 - cephalosporins (CEFEP, CEFTAZ)
 - carbapenems (IMI, MERO, DORI)
 - aminoglycosides (AMK, GENT, TOBRA)
 - fluoroquinolones (CIPRO, LEVO)
 - sulbactam (AMPSUL)
- ❑ *C. difficile*. *C. difficile* is identified as the associated pathogen for Lab ID Event or HAI reporting [Gastrointestinal System Infection (GI)-Gastroenteritis (GE) or Gastrointestinal Tract (GIT)]

Reporting Requirements and Options

Active participants must choose main reporting method

Infection Surveillance

LabID Event Reporting

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)

CMS Reporting Requirements LabID Event for FacWideIN



Healthcare Facility HAI Reporting to CMS via NHSN – Current and Proposed Requirements

DRAFT (11/23/2011)

HAI Event	Facility Type	Reporting Start Date
CLABSI	Acute Care Hospitals Adult, Pediatric, and Neonatal ICUs	January 2011
CAUTI	Acute Care Hospitals Adult and Pediatric ICUs	January 2012
SSI	Acute Care Hospitals Colon and abdominal hysterectomy	January 2012
I.V. antimicrobial start	Dialysis Facilities	January 2012
Positive blood culture	Dialysis Facilities	January 2012
Signs of vascular access infection	Dialysis Facilities	January 2012
CLABSI	Long Term Care Hospitals *	October 2012
CAUTI	Long Term Care Hospitals *	October 2012
CAUTI	Inpatient Rehabilitation Facilities	October 2012
MRSA Bacteremia LabID Event	Acute Care Hospitals	January 2013
C. difficile LabID Event	Acute Care Hospitals	January 2013
HCW Influenza Vaccination	Acute Care Hospitals	January 2013
HCW Influenza Vaccination	Outpatient Surgery/ASCs	October 2014
SSI (future proposal)	Outpatient Surgery/ASCs	TBD

* Long Term Care Hospitals are called **Long Term Acute Care Hospitals** in NHSN

CMS 2013

MRSA Bacteremia Lab ID Event

Organism: Methicillin-Resistant *Staphylococcus aureus* (MRSA)

Data Collection: CDC NHSN - MDRO/CDI Module

Required Locations:

All inpatient locations (=FacWide IN) for Lab ID Events

Required Data:

Community-Onset (CO) and Healthcare-Onset (HO) Event

MRSA blood specimens at the facility-wide inpatient level

CMS 2013

C. difficile Lab ID Event

- **Organism:** *Clostridium difficile* (C.diff)
- **Data Collection:** CDC NHSN - MDRO/CDI Module (Lab ID Event)
- **Required Locations:** All inpatient locations at Facility-wide Inpatient level (Fac Wide IN) minus NICU, SCN, or other Well Baby locations (e.g. Nurseries, babies in LDRP)
- **Required Data:**
 - **Community-Onset (CO) and Healthcare-Onset (HO) Events**
 - **All *C. difficile* Lab ID Events** on unformed stool specimens at the facility-wide Inpatient level

Facility-wide Inpatient FacWideIN

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

CMS 2013

What Data Will NHSN Report to CMS?

MRSA Blood and C. difficile Healthcare Facility-Onset (HO) LabID Events

CDI: All non-duplicate, non-recurrent LabID Event specimens collected > 3 days after admission to the facility

MRSA Blood: All non-duplicate, LabID Event specimens collected > 3 days after admission to the facility

Getting Ready for Reporting

Creating a Monthly Reporting Plan

The screenshot displays the NHSN Reporting Plan interface. On the left is a navigation menu with the following items: NHSN Home, Reporting Plan (with sub-items Add and Find), Patient, Event, Procedure, Summary Data, Import/Export, Analysis, Surveys, Users, Facility, Group, and Log Out. The main content area shows a confirmation message: 'Plan saved successfully.' Below this, it states 'Mandatory fields marked with *' and lists three fields: 'Facility ID*': DHQP Memorial Hospital (10000), 'Month*': July, and 'Year*': 2012. In the top right corner of the main area, there is a link that says 'View Monthly Reporting Plan'. At the top of the main area, a login status message reads: 'Logged into DHQP Memorial Hospital (ID 10000) as ANGELA. Facility DHQP Memorial Hospital (ID 10000) is following the PE component.'

Monthly Reporting Plan

C.diff and MRSA LabID (*blood specimens only*) Events must be included in Monthly Reporting Plan each month for data to be reported on behalf of the facility to CMS

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

Locations		Specific Organism Type						
FACWIDEIN - 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
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Locations		Specific Organism Type						
FACWIDEIN - 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
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All specimens are not required for CMS, but if state mandates, require facility to report all specimens, then it is okay and only bloods will be counted for CMS reporting

Location Reporting Options

CMS
Requirement

Facility-Wide Inpatient or Facility-Wide Outpatient:

- Options currently available only for LabID Event reporting
- Report from throughout all of a facility's inpatient or outpatient locations
 - Numerator (MDRO/CDI Events)- report separately for each location in facility
 - Single denominators for entire facility:
 - FacWideIN – patient days and admissions
 - Separate counts for MDRO and CDI
 - Minus baby locations for CDI
 - FacWideOUT – encounters

Location Specific:

- Select only a few locations or every location for full facility coverage
- Report separately from each selected location in the facility
- Separate denominators for each location:
 - Patient days and admissions for inpatient locations
 - Encounters for outpatient locations

Location Reporting Options

Location Specific

Selected Locations

All Locations

Report LabID Events separately from all specific locations being monitored

Separate numerator and denominator from each chosen location

Overall Facility-wide Inpatient (FacWideIN) and/or Outpatient (FacWideOUT)

Report LabID Events from all inpatient and/or all outpatient locations

Report LabID Events from each patient location separately (numerator)

Inpatient: one denominator for entire facility (*patient days and admissions*)

Outpatient: one denominator for all outpatient locations (*patient encounters*)

Adding Locations

Why do I Need to Add Locations?

- Each LabID Event (numerator) is reported according to the patient's location when the specimen is collected
- This means that any inpatient unit could potentially house a patient who has a MRSA blood specimen or *C. difficile* stool specimen Lab ID Event
- To ensure that a location is available for reporting when a LabID Event is identified:
 - Add all inpatient locations before reporting begins in 2013

PS Home Page: Facility > Locations



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

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.**



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NHSN Home

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

Locations Page: Specify Location Info



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[Group](#)

[Log Out](#)

Logged into Pleasant Valley Hospital (ID 10312) as DSIEVERT.

Facility Pleasant Valley Hospital (ID 10312) is following the PS component.

Locations

[HELP](#) 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*: 5W

Your Label*: MED WARD

CDC Location Description*: Inpatient Medical Ward

Status*: Active

Bed Size*: 22

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

Find

Add

Clear

Find Locations: All or Specific Search



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[Facility Info](#)

[Add/Edit Component](#)

[Locations](#)

[Surgeons](#)

[Group](#)

[Log Out](#)

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

Locations

[HELP](#) 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*: Inpatient Medical Ward

Status*: Active

Bed Size*: 0

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

Find

Add

Clear

Location Table

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

[First](#) | [Previous](#) | [Next](#) | [Last](#)

Displaying 1 - 2 of 2

<input type="checkbox"/>	Status	Your Code	Your Label	CDC Description	CDC Code <input checked="" type="checkbox"/>	Bed Size
<input type="checkbox"/>	Active	5W	MED WARD	Inpatient Medical Ward	IN:ACUTE:WARD:M	22
<input type="checkbox"/>	Active	INMEDWARD	IN:ACUTE:WARD:M	Inpatient Medical Ward	IN:ACUTE:WARD:M	42

[First](#) | [Previous](#) | [Next](#) | [Last](#)

Displaying 1 - 2 of 2

LabID Event Reporting Introduction

Reporting of **proxy** infection measures of MDRO and *C. difficile* **healthcare acquisition, exposure burden, and infection burden** by using primarily laboratory data. Laboratory testing results can be used without clinical evaluation of the patient, allowing for a much less labor-intensive means to track MDROs and CDI

Overview

**MRSA Bacteremia Lab ID
Event Reporting in NHSN**



Definition

MRSA Positive Blood Isolate

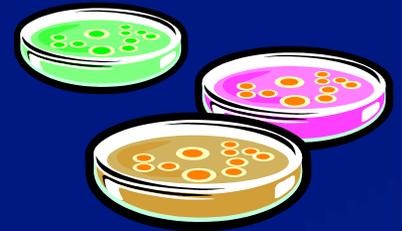
Any blood specimen obtained for clinical decision making for MRSA

Excludes tests related to active surveillance testing

Definition

MRSA Bacteremia

LabID Event



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

Also referred to as all non-duplicate LabID Events

Definition

Duplicate MRSA Bacteremia Lab ID Event

Any MRSA blood isolate from the same patient and same location, following a previous positive MRSA blood laboratory result within the past 14 days

Summary: MRSA Bacteremia

Purpose: To calculate proxy measures of MRSA bloodstream infections, exposures burdens, and healthcare acquisitions through monitoring and reporting data from positive clinical cultures

LabID Event: A laboratory-identified event. MRSA positive blood specimen for a patient in a location with no prior MRSA positive blood specimen reported within **14 days for the patient and location**. It must be a specimen that is collected for diagnosis/treatment (NO surveillance cultures). A patient in a location in a month can then have additional MRSA blood specimens reported as LabID Events after a full 14-day interval with no positive MRSA blood specimen for the same patient and same location identified by the lab

- ❑ LabID Events (numerators) are reported by specific location where the specimen was collected
- ❑ Monthly Monitoring Summary Data (denominators) for Total Patient Days and Total Admissions are reported for the overall inpatient facility (FacWideIN)

Add Event - Patient Information



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

Add Event

[Print PDF Form](#)

Mandatory fields marked with *

Fields required for record completion marked with **

Fields required when in Plan marked with >

Patient Information [?HELP](#)

Facility ID*: Pleasant Valley Hospital (ID 10312)

Event #: 24941

Patient ID*: DS3636

Social Security #:

Secondary ID:

Last Name:

First Name:

Middle Name:

Gender*: F - Female

Date of Birth*: 05/16/1943



Ethnicity:

Race: American Indian/Alaska Native

Asian

Black or African American

Native Hawaiian/Other Pacific Islander

White

- [NHSN Home](#)
- [Reporting Plan](#)
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- [Add](#)
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- [Procedure](#)
- [Summary Data](#)
- [Import/Export](#)
- [Analysis](#)
- [Surveys](#)
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- [Facility](#)
- [Group](#)
- [Log Out](#)

Add Event Information

Event Information HELP

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

Date Specimen Collected*: 01/14/2013

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*: 01/09/2013

Location*: INMSWARD - IN:ACUTE:WARD:MS

Date Admitted to Location*: 01/09/2013

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

N - No

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

Entries for Blood LabID Events

Patient Location when Specimen Collected

Auto-filled

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

NHSN Application Categorizes* LabID Events As:

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

*Based on Inpatient Admission & Specimen Collection Dates

Overview

CDI Lab ID Event Reporting in NHSN



Definition

CDI Positive Laboratory Assay

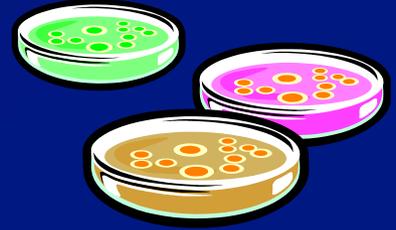
- A positive laboratory test result for *C. difficile* toxin A and/or B **
- OR**
- A toxin-producing *C. difficile* organism detected by culture or other laboratory means performed on a stool sample

Remember..
C. difficile testing
only on
unformed stool
samples
(should
conform to
shape of
container)



***Positive PCR result for toxin producing gene is equal to a positive C. diff test result*

Definition CDI LabID Event



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

Also referred to as all non-duplicate LabID Events

Definition

Duplicate *C. difficile* Positive Test

Any *C. difficile* toxin-positive laboratory result from the same patient and same location, following a previous *C. difficile* toxin-positive laboratory result within the past **14** days

Identifying a *C. difficile* LabID Event

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

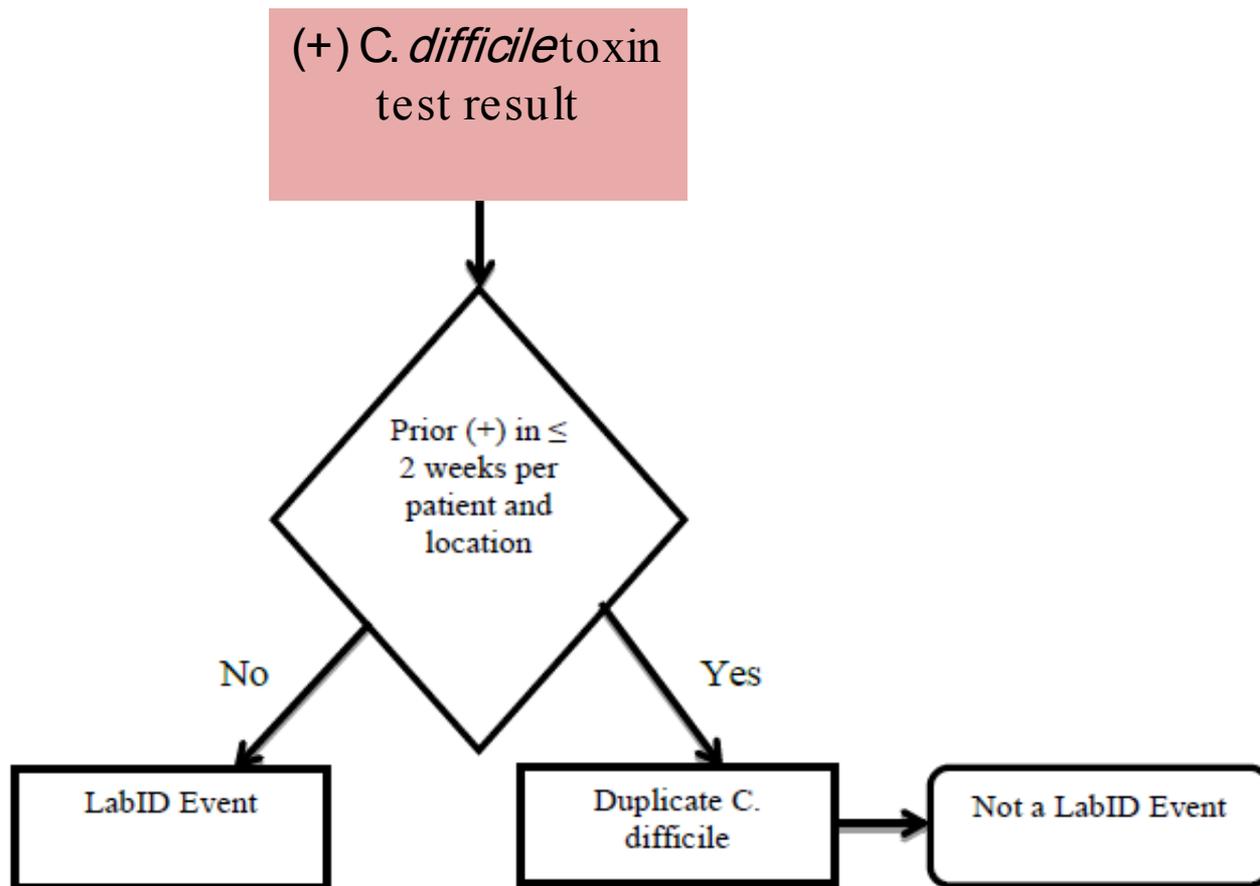


Figure 2. *C. difficile* Test Results Algorithm for LabID Events

Facility-wide Inpatient (FacWideIN) Reporting for CDI



MICU

+



SCA

+



Med-Surg



Surgical

+



SICU



NICU

Summary: *C. difficile*

Purpose:

To calculate proxy measures of *C. difficile* infections, exposures burdens, and healthcare acquisitions through monitoring and reporting data from positive clinical cultures (unformed stool only)

Lab ID Event:

A laboratory-identified event. A toxin-positive / toxin-producing *C. difficile* stool specimen for a patient in a location with no prior *C. difficile* specimen reported within 14 days for the patient and location, and having a full 14-day interval with no toxin-positive *C. difficile* stool specimen identified by the lab since the prior reported *C. difficile* Lab ID Event. Also referred to as non-duplicate *C. difficile* toxin-positive laboratory result

- ❑ Lab ID Events (numerators) are reported by specific location where the specimen was collected
- ❑ Monthly Monitoring Summary Data (denominators) for Patient Days and Admissions (*minus all NICU, SCN, and Well Baby locations, including LDRP baby counts*) are reported for the overall inpatient facility (FacWideIN)

LabID Event Report Form



Laboratory-identified MDRO or CDI Event

OMB No. 0920-0666
Exp. Date: xx-xx-xxxx

*required for saving

Facility ID:

Event #:

*Patient ID:

Social Security #:

Secondary ID:

Patient Name, Last:

First:

Middle:

*Gender: M F

*Date of Birth:

Ethnicity (Specify):

Race (Specify):

Event Details

*Event Type: LabID

*Date Specimen Collected:

*Specific Organism Type: (Check one)

MRSA

MSSA

VRE

C. difficile

CephR-Klebsiella

CRE-Ecoli

CRE-Klebsiella

MDR-Acinetobacter

*Outpatient: Yes No

*Specimen Body Site/System:

*Specimen Source:

*Date Admitted to Facility:

*Location:

*Date Admitted to Location:

*Has patient been discharged from your facility in the past 3 months? Yes No

If Yes, date of last discharge from your facility:

Custom Fields

Label

Label

_____ / ____ / ____

_____ / ____ / ____

Add Patient Information

- The top section of data collection form is used to collect patient demographics. Required fields have an asterisk (*).
- There are 4 required fields:
 - Facility ID
 - Patient ID
 - Gender
 - Date of Birth

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

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*:

Add Event Information

Event Information [?HELP](#)

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

Date Specimen Collected*: 01/13/2013

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*: 01/11/2013

Location*: INGI(WARD) - IN:ACUTE:WARD(GI)

Date Admitted to Location*: 01/11/2013

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

N - No

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

Y - Yes

Date of last discharge from your facility*: 12/19/2012

Auto-filled when LabID and CDIF selected

Patient Location when Specimen Collected

Auto-filled

NHSN will Categorize CDI Lab ID Events Based on Inpatient Admission & Specimen Collection Dates

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

NHSN will Further Categorize CDI LabID Events based on Specimen Collection Date & Prior Specimen Collection Date of a Previous CDI LabID Event (that was entered into NHSN)

- 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.

Provision to LabID Event Reporting for CDI and MRSA Bacteremia

A LabID Event for an inpatient location can include specimens collected during an emergency department or other outpatient clinic visit, if collected same calendar day as patient admission.

**Location will be assigned to the admitting inpatient location (for FacWideIN).

***If participating in both inpatient and outpatient LabID reporting, report the LabID Event in both locations as two separate Events, ED and admitting location.

Rules for Entering MRSA Blood and C. diff LabID Events FacWideIN

- C. diff toxin-positive and MRSA blood specimens MUST be monitored throughout all inpatient locations within a facility
 - *Exception for C. diff:* NICUs, SCN, Well Baby Nurseries, and babies in LDRP units excluded
- Lab ID Event(s) MUST be entered whether community-onset (CO) or healthcare facility-onset (HO)
- A specimen (C. diff stool and/or MRSA blood) qualifies as a Lab ID Event if there has not been a previous positive laboratory result for the patient and location within the previous 14 days
- Lab ID Events never include results from Active Surveillance Testing

**Entry of
Monthly Denominator Data
for FacWideIN
LabID Event Reporting**

MDRO/CDI Summary Form (Denominators)



MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring

OMB No. 0920-0666
Exp. Date: xx-xx-xxxx

Page 1 of 2

*required for saving **conditionally required based upon monitoring selection in Monthly Reporting Plan

Facility ID #: _____ *Month: _____ *Year: _____ *Location Code: _____

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

Setting: Outpatient (or Emergency Room) **Total Encounters: _____

If monitoring *C. difficile* in a FACWIDE location, then subtract NICU & Well Baby counts from Totals:

**§Patient Days: _____ **§Admissions: _____ **§Encounters: _____

MDRO & CDI Infection Surveillance or LabID Event Reporting

Specific Organism Type	MRSA	VRE	CephR- <i>Klebsiella</i>	CRE- <i>Ecoli</i>	CRE- <i>Klebsiella</i>	MDR- <i>Acinetobacter</i>	<i>C. difficile</i>
Infection Surveillance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>LabID</u> Event (All specimens)	<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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Process Measures (Optional)

Hand Hygiene

**Performed: _____ **Indicated: _____

Gown and Gloves

**Used: _____ **Indicated: _____

Active Surveillance Testing (AST)

**Active Surveillance Testing

performed

Choose Summary Data and Add Select Summary Data Type > Continue



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

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

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

Add Patient Safety Summary Data

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

Continue

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Enter Location Code = FacWideIN plus Month and Year



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NHSN - National Healthcare Safety Network (apt-v-nhsn-test:7002)

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

MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring

Save of Summary Data successful.

[HELP](#)

Mandatory fields marked with *

Facility ID*: 10312 (Pleasant Valley Hospital)

Location Code*: FACWIDEIN - FacWideIN

Month*: January

Year* 2013

[Print PDF Form](#)

- Reporting Plan
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General

Enter All Required Facility-Wide Inpatient Counts



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NHSN - National Healthcare Safety Network (apt-v-nhsn-test:7002)

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[NHSN Home](#)

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

[Reporting Plan](#)

MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring

[Patient](#)

✔ Save of Summary Data successful.

[Event](#)

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[Log Out](#)

HELP

Mandatory fields marked with *

[Print PDF Form](#)

Facility ID*: 10312 (Pleasant Valley Hospital)

Location Code*: FACWIDEIN - FacWideIN

Month*: January

Year 2013

MRSA
Bacteremia

General

Setting: Inpatient Total Patient Days*: 680 Total Admissions*: 135

Setting: Outpatient (or Emergency Room) Total Encounters:

C. difficile

If monitoring C. difficile in a FACWIDE location, then subtract NICU and Well Baby counts from Totals:

Patient Days*: 478 Admissions*: 98 Encounters:

MDRO & CDI Infection Surveillance or LabID Event Reporting

Specific Organism Type	MRSA	VRE	CephR-Klebsiella	CRE-Ecoli	CRE-Klebsiella	MDR-Acinetobacter	C. difficile
Infection Surveillance							
LabID Event (All specimens)							* X
LabID Event (Blood specimens only)	* X						

Auto-filled

Resources

Resources for NHSN



Centers for Disease Control and Prevention

CDC 24/7: Saving Lives. Protecting People. Saving Money through Prevention.

SEARCH

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National Healthcare Safety Network (NHSN)

The National Healthcare Safety Network (NHSN) is a secure, internet-based surveillance system that integrates and expands legacy patient and healthcare personnel safety surveillance systems managed by the Division of Healthcare Quality Promotion (DHQP) at CDC. NHSN also includes a new component for hospitals to monitor adverse reactions and incidents associated with receipt of blood and blood products. Enrollment is open to all types of healthcare facilities in the United States, including acute care hospitals, long term acute care hospitals, psychiatric hospitals, rehabilitation hospitals, outpatient dialysis centers, ambulatory surgery centers, and long term care facilities. For more information, click on the topics below.

Replay NHSN Training
Dialysis Module
Infections are a leading cause of death...
GO
Dialysis Module >>

Text size: [S](#) [M](#) [L](#) [XL](#)

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To receive email updates about NHSN, enter your email address:

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Contact NHSN:

- Centers for Disease Control and Prevention
National Healthcare Safety Network
MS-A24
1600 Clifton Rd
Atlanta, GA 30333
- 800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348
- New Hours of Operation
8am-8pm ET/Monday-Friday
Closed Holidays
- nhsn@cdc.gov
More contact info >>

Topics

Join NHSN

Welcome to NHSN, CMS Hospital Inpatient Quality Reporting Program Training...

About NHSN

Overview, Purposes, Confidentiality statement, How data are used, External Peer Review report...

Forms

Component-specific manuals containing data collection protocols, instructions for completing forms...

NHSN Manuals

Component-specific manuals containing data collection protocols, instructions for completing forms...

Resource Library

Guides, Component Manuals, NHSN Codes & Variables, Protocols, Metrics, Frequently Asked Questions, HIPAA...

Enrollment Requirements

Eligibility, Required Training, Reporting & System Requirements, Security, Begin Enrollment...

Training

Self-study slide sets and corresponding materials for NHSN modules...

Patient Safety Component

Overview of the Modules: Device-associated, Procedure-associated, MDRO/CDAD, Vaccination...

Biovigilance Component

Hemovigilance Module Overview, Protocol and Tables of Instructions, Frequently Asked Questions...

Healthcare Personnel Safety Component

Overview, Benefits of Participation, Management, Vaccination Modules...

Dialysis Facilities

Enroll here to comply with CMS QIP requirement >>

Data & Statistics

NHSN Annual Reports

State Healthcare-associated Infections Prevention Activities and Reports

CDC's NHSN Healthcare-associated Infections Summary Data Reports

Communication Updates

- E-mail updates
- Members meetings
- Newsletters



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

Resources for MDRO/CDI Lab ID Event Reporting

- NHSN Patient Safety Component Manual
 - Ch 12: MDRO and CDI Module (January 2012); pages 18-21
http://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf
 - Ch 14: Tables of Instructions, Table 19, 21
http://www.cdc.gov/nhsn/PDFs/pscManual/14pscForm_Instructions_current.pdf
- Determining Patient Days for Summary Data Collection: Observation vs. Inpatients
http://www.cdc.gov/nhsn/PDFs/PatientDay_SumData_Guide.pdf

http://www.cdc.gov/nhsn/TOC_PSCManual.html

Resources for MDRO/CDI Lab ID

- NHSN Forms (January 2012)
 - 57.106: Monthly Reporting Plan
 - 57.128: Lab ID MDRO or CDI Event Form (numerator)
 - 57.127: MDRO and CDI Prevention Process and Outcomes Measures Monthly Reporting (denominator)

<http://www.cdc.gov/nhsn/forms/Patient-Safety-forms.html#mdro>

Available Training

- **C. difficile Guidelines for Clinicians**
 - http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_clinicians.html
- **Training**
 - Lectoras (coming soon)
- **NHSN Training Website:** <http://www.cdc.gov/nhsn/training/>
 - Currently updating site with updated LabID Event Reporting presentations



Email help desk: nhsn@cdc.gov

NHSN website:

<http://www.cdc.gov/nhsn/>

