



Multidrug-Resistant Organism (MDRO) and *Clostridium difficile*-Associated Disease (CDAD) Module



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Background

NHSN ANNUAL UPDATE

Antimicrobial-Resistant Pathogens Associated With Healthcare-Associated Infections: Annual Summary of Data Reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2006–2007

Alicia I. Hidron, MD; Jonathan R. Edwards, MS; Jean Patel, PhD; Teresa C. Horan, MPH; Dawn M. Sievert, PhD; Daniel A. Pollock, MD; Scott K. Fridkin, MD; for the National Healthcare Safety Network Team and Participating National Healthcare Safety Network Facilities



OBJECTIVE. To describe the frequency of selected antimicrobial resistance patterns among pathogens causing device-associated and procedure-associated healthcare-associated infections (HAIs) reported by hospitals in the National Healthcare Safety Network (NHSN).

METHODS. Data are included on HAIs (ie, central line-associated bloodstream infections, catheter-associated urinary tract infections, ventilator-associated pneumonia, and surgical site infections) reported to the Patient Safety Component of the NHSN between January 2006 and October 2007. The results of antimicrobial susceptibility testing of up to 3 pathogenic isolates per HAI by a hospital were evaluated to define antimicrobial-resistance in the pathogenic isolates. The pooled mean proportions of pathogenic isolates interpreted as resistant to selected antimicrobial agents were calculated by type of HAI and overall. The incidence rates of specific device-associated infections were calculated for selected antimicrobial-resistant pathogens according to type of patient care area; the variability in the reported rates is described.

RESULTS. Overall, 463 hospitals reported 1 or more HAIs: 412 (89%) were general acute care hospitals, and 309 (67%) had 200–1,000 beds. There were 28,502 HAIs reported among 25,384 patients. The 10 most common pathogens (accounting for 84% of any HAIs) were coagulase-negative staphylococci (15%), *Staphylococcus aureus* (15%), *Enterococcus* species (12%), *Candida* species (11%), *Escherichia coli* (10%), *Pseudomonas aeruginosa* (8%), *Klebsiella pneumoniae* (6%), *Enterobacter* species (5%), *Acinetobacter baumannii* (3%), and *Klebsiella oxytoca* (2%). The pooled mean proportion of pathogenic isolates resistant to antimicrobial agents varied significantly across types of HAI for some pathogen-antimicrobial combinations. As many as 16% of all HAIs were associated with the following multidrug-resistant pathogens: methicillin-resistant *S. aureus* (8% of HAIs), vancomycin-resistant *Enterococcus faecium* (4%), carbapenem-resistant *P. aeruginosa* (2%), extended-spectrum cephalosporin-resistant *K. pneumoniae* (1%), extended-spectrum cephalosporin-resistant *E. coli* (0.5%), and carbapenem-resistant *A. baumannii*, *K. pneumoniae*, *K. oxytoca*, and *E. coli* (0.5%). Nationwide, the majority of units reported no HAIs due to these antimicrobial-resistant pathogens.

Infect Control Hosp Epidemiol 2008; 29:996–1011

Antimicrobial-resistant pathogens that cause healthcare-associated infections (HAIs) pose an ongoing and increasing public health threat. In hospitals, both in the clinical treatment of patients and in the prevention of HAIs, resistance varies from facility to facility and over time. The National Healthcare Safety Network (NHSN) is a national, multi-center, multi-facility and multi-specialty surveillance system that monitors and reports HAIs in participating hospitals. The NHSN is a national, multi-center, multi-facility and multi-specialty surveillance system that monitors and reports HAIs in participating hospitals.



HICPAC Guidance On Management of MDROs in Healthcare Settings (8/10/2006)

**First Tier: General Recommendations
For All Acute Care Settings**

If endemic rates not decreasing, or
if first case of important organism

**What
Metrics?**

Second Tier: Intensified Interventions

e.g., chlorhexidine washes, active surveillance testing for MRSA



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)

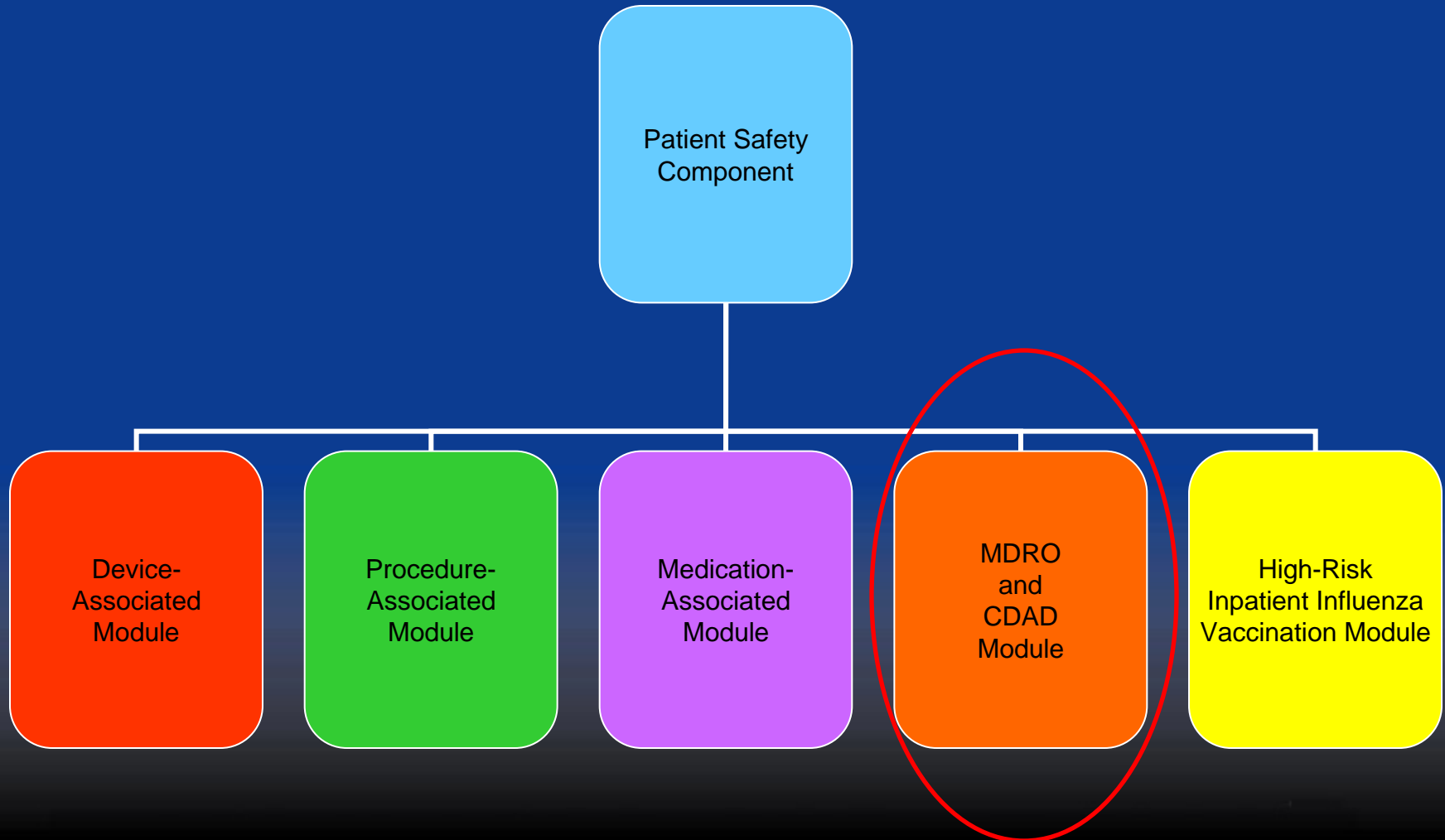


Recommended metrics
from the
SHEA/HICPAC Position Paper
were the basis
for the
new MDRO and CDAD Module



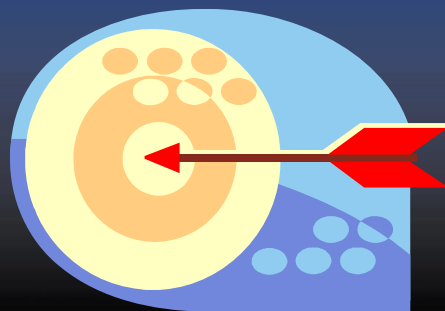
Module Overview

National Healthcare Safety Network (NHSN)



Goal of the MDRO and CDAD Module

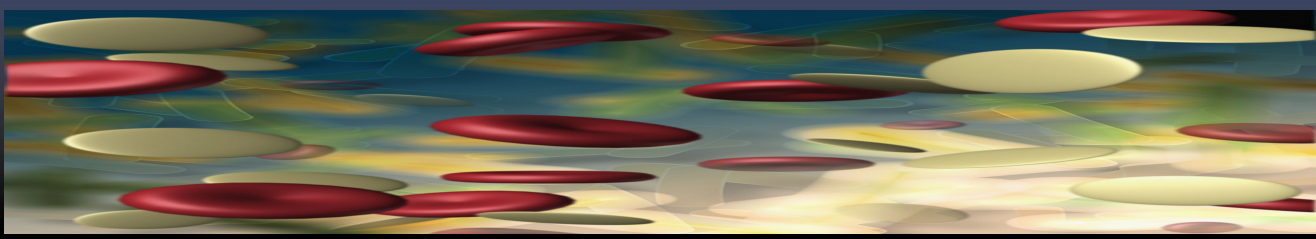
- Monitoring of MDRO and *C. difficile* infection (CDI) helps to evaluate local trends and changes in the occurrence of these pathogens and related infections.
- This module provides a mechanism for facilities to report and analyze MDRO and CDI data, in order to inform infection control staff of the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





Organisms Monitored

- 1) Methicillin-Resistant *Staphylococcus aureus* (MRSA)
(option w/ Methicillin-Sensitive *S. aureus* (MSSA))
- 2) Vancomycin-Resistant *Enterococcus* spp. (VRE)
- 3) Multidrug-Resistant (MDR) *Klebsiella* spp.
- 4) Multidrug-Resistant (MDR) *Acinetobacter* spp.
- 5) *Clostridium difficile*-Associated Disease (CDAD)





MDRO and *C. difficile* Current Definitions

- **MRSA:** *S. aureus* testing oxacillin resistant; or positive from molecular testing for *mecA* and PBP2a
- **MSSA:** *S. aureus* testing oxacillin intermediate or susceptible; or (option) negative from molecular testing for *mecA* and PBP2a
- **VRE:** Any *Enterococcus* spp. testing resistant to vancomycin
- **MDR-Klebsiella:** *Klebsiella* spp. testing intermediate or resistant to ceftazidime or ceftriaxone
- **MDR-Acinetobacter:** *Acinetobacter* spp. resistant to all agents tested within at least 3 antimicrobial classes, including β -lactams, carbapenems, aminoglycosides, and fluoroquinolones
- ***C. difficile*:** Gastrointestinal System Infection-Gastroenteritis or Gastrointestinal System Infection-Gastrointestinal Tract where *C. difficile* is the associated pathogen



MDRO and *C. difficile* Definitions for 2011



- **MRSA:** *S. aureus* testing oxacillin resistant; or
(positive from molecular testing for *mecA* and PBP2a)
- **MSSA:** *S. aureus* testing oxacillin intermediate or susceptible; or
(negative from molecular testing for *mecA* and PBP2a)
- **VRE:** Any *Enterococcus* spp. testing resistant to vancomycin
- **MDR-Klebsiella:** *Klebsiella* spp. testing intermediate or
resistant to **ceftazidime or cefotaxime/ceftriaxone
or cefepime**
- **MDR-Acinetobacter:** *Acinetobacter* spp. testing intermediate or
resistant to **at least one agent** within at least 3
antimicrobial classes of 6, including:
**penicillins, carbapenems, aminoglycosides,
cephalosporins, quinolones, or sulbactam**
- ***C. difficile*:** *C. difficile* is identified as the associated pathogen for
Gastrointestinal System Infection-Gastroenteritis or
Gastrointestinal System Infection-Gastrointestinal Tract

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

Outcome Measures:

- AST Prevalence / Incidence



Reporting Methods

Location Specific:

- Select only a few locations or full facility coverage.
- Report separately from each selected location in the facility.
- Separate denominators (patient days, admissions, encounters) for both locations.

Facility-Wide Inpatient or Facility Wide Outpatient:

- Options available only in the MDRO/CDAD Module and only for LabID Event reporting.
- Report totals from throughout a facility's inpatient or outpatient locations.
- Single denominators (either patient days and admissions for FacWideIN , or encounters for FacWIDE OUT) for entire facility.

Monthly Reporting Plan for Lab ID Event



Add Row

Clear All Rows

Copy from Previous Month

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

Locations

Specific Organism Type

FACWIDEIN - FacWideIN

MRSA - MRSA

Process and Outcome Measures

Infection Surveillance

AST-Timing

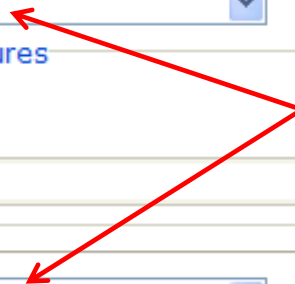
AST-Eligible

Incidence Prevalence

Lab ID Event All Specimens

Lab ID Blood

Enter both for inpatient and outpatient facility wide



FACWIDEOUT - FacWideOUT

MRSA - MRSA

Process and Outcome Measures

Infection Surveillance

AST-Timing

AST-Eligible

Incidence Prevalence

Lab ID Event All Specimens

Lab ID Blood

Add Rows

Clear All Rows

Copy from Previous Month

Patient Influenza Vaccination Module [?HELP](#)

Method A



Infection Surveillance

Purpose: To collect MDRO or CDI data on NHSN-defined healthcare-associated infections (HAIs)

HAI: A localized or systemic condition resulting from an adverse reaction to the presence of an infectious agent or its toxin.
There must be no evidence that the infection was present or incubating at the time of admission to the location.

- Report for at least three months any time in a calendar year
- Location specific reporting
- Inpatient locations (where denominator data can be collected)



Infection Surveillance Analysis

MDRO/CDI Infection Incidence Density Rate

$$= \frac{\text{\# of reported MDRO or CDI Infections}}{\text{\# of Patient-Days}} \times 1000$$

(stratified by time and location)





LabID Event Reporting

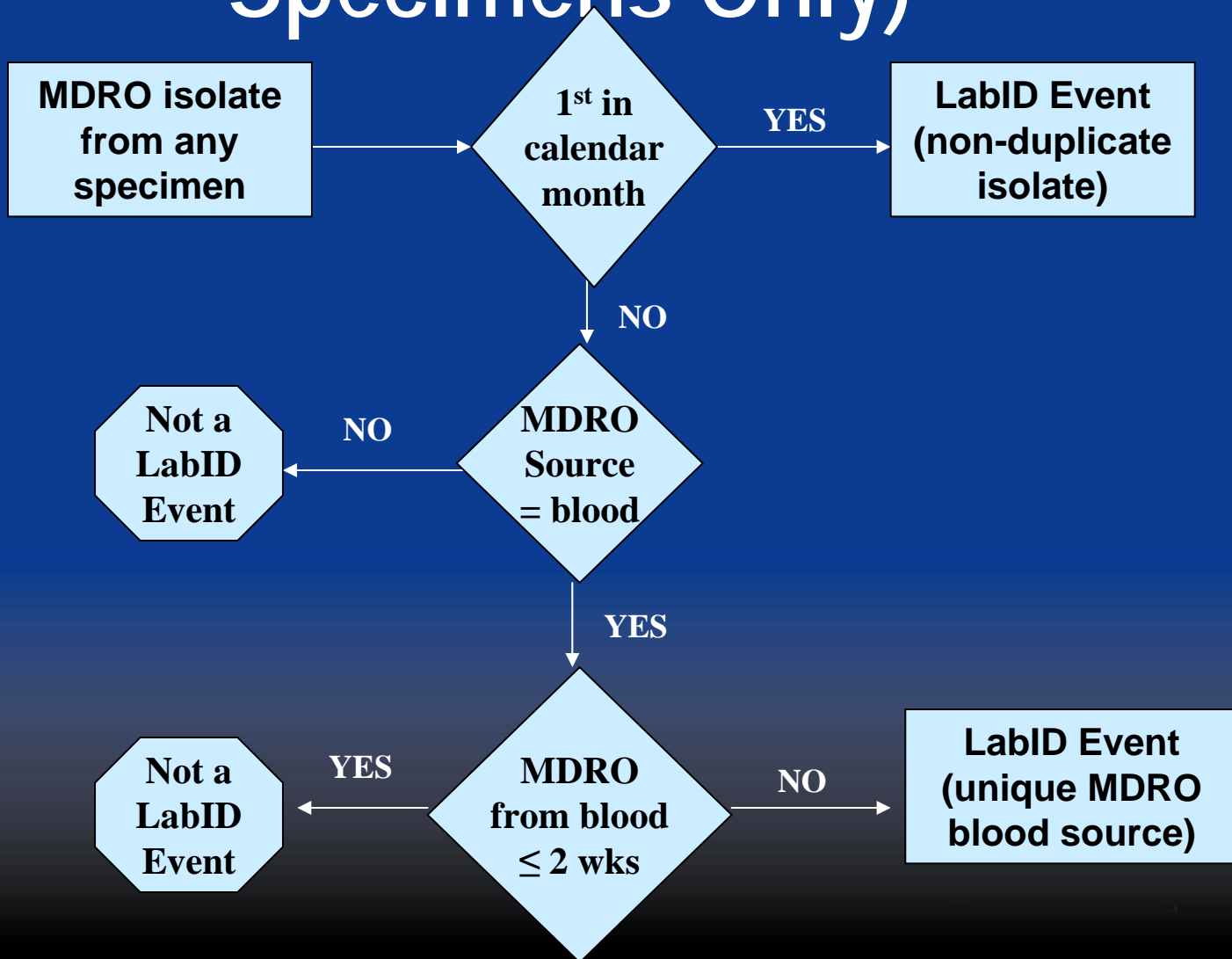
Purpose: To calculate proxy measures of MDRO or CDI events, exposures, healthcare acquisitions through monitoring and reporting data from positive clinical cultures.

LabID Event: A laboratory-identified event. First positive MDRO/CDI isolate collected for diagnosis/treatment for the patient in a location during a month. Only time a patient will have > 1 LabID Event reported for a location in a month is for bloods (MDRO) or stool (CDI), as these can be reported every 14 days.

- Report for at least three **consecutive** months in a calendar year
- Location specific or Overall facility-wide reporting
- Report all specimens or blood specimens only (for Facility-wide reporting)
- Inpatient locations (no NICUs or Well Baby Nurseries for CDI) and Outpatient locations (no dialysis centers nor Well Baby Clinics)

Identifying an MDRO LabID Event (if Monitoring All Specimens Only)

Begin Here



MDRO isolate from any specimen

1st in calendar month

YES

LabID Event (non-duplicate isolate)

NO

Not a LabID Event

NO

MDRO Source = blood

YES

Not a LabID Event

YES

MDRO from blood ≤ 2 wks

NO

LabID Event (unique MDRO blood source)

Categorization of LabID Events



NHSN Application Categorizes LabID Events as:

- ❑ Community-Onset (CO): LabID Event collected as an outpatient or as an inpatient ≤ 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): LabID Event collected from a patient who was discharged from the facility < 4 weeks prior to date stool specimen collected. * *C diff only*



LabID Event Reporting Analysis



Specific Metrics	Exposure	Infection	Acquisition
Admission Prevalence Rate	√		
Overall Prevalence Rate	√		
Bloodstream Infection Admission Prevalence Rate	√	√	
Bloodstream Infection Incidence or Incidence Density Rate		√	√
Overall MDRO Infection/Colonization Incidence or Incidence Density Rate			√
Location CDI Incidence Rate			√
Facility CDI Healthcare Facility-Onset Incidence Rate			√
Facility CDI Combined Incidence Rate			√

Infection Surveillance

Event Information [HELP](#)

Event Type*: SST - Skin and Soft Tissue Date of Event*: 02/13/2008

Post-procedure:

MDRO Infection Surveillance*: Yes, this event pathogen/location is in-plan for MDRO/CDAD Module

Specific Organism Type*:

MDR-Acinetobacter C. difficile MDR-Klebsiella

MRSA MSSA VRE

Location*: INMEDCC - INMEDCC

Date Admitted to Facility*: 02/02/2008

Risk Factors

Event Details [HELP](#)

Specific Event*: SKIN - Skin

Specify Criteria Used* (check all that apply)

Signs & Symptoms

Abscess

Heat

Hypotension

Hypothermia

Redness

Fever

Purulent drainage or material

Pain or tenderness

Localized swelling

Other evidence of infection found on direct exam, during surgery, or by diagnostic tests

Other signs & symptoms

Laboratory & Diagnostic Testing

Positive blood culture

Positive culture

Other positive laboratory tests

Positive culture of pathogen

Positive culture of skin contaminant

Clinical Diagnosis

Physician diagnosis of this event type

Physician institutes appropriate antimicrobial therapy

Secondary Bloodstream Infection*: N - No

Died*: N - No

Discharge Date:

Pathogens Identified: Y - Yes If Yes, specify below ->

Pathogens [HELP](#)

Pathogen 1: Staphylococcus aureus - SA Search 10 drugs required

Drug	Result
*	

LabID Events



White

Event Information [HELP](#)

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

Date Specimen Collected*: 05/02/2010

Specific Organism Type*: MRSA - MRSA

Outpatient*: N - No

Specimen Body Site/Source*: SST - Skin / Soft tissue

Specimen Source*: WOUND - Specimen from wound

Date Admitted to Facility*: 05/02/2010

Location*: 720RTHO - ORTHOPEDIC UNIT

Date Admitted to Location*: 05/02/2010

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*: 04/19/2010

Custom Fields [HELP](#)

DATE1:



LabID Events versus AST



- LabID Event reporting is ONLY for collecting and tracking positive cultures that are taken for “clinical” purposes (i.e., for diagnosis and treatment), which means NO active surveillance testing/cultures (AST/ASC) results are included in this reporting of individual events.
- Active Surveillance Testing (AST) is for collecting and tracking positive cultures that are collected for surveillance purposes (e.g., nasal or rectal swabs) to identify patients that are colonized with a specific organism (i.e., MRSA or VRE) at admission to a location and at discharge or transfer out of the location. The data are NOT collected on an individual basis, but instead are entered as aggregate counts.



Adherence to Prevention Process Measures



- Required Minimum Reporting - if chosen:
 - a) **HH**: at least 30 unannounced observations after HCW contact with patient or objects near patient
 - b) **GG**: at least 30 unannounced observations during HCW contact with patient or objects near patient
 - c) **AST**: conducted on patient Admission or Admission & Discharge for MRSA and/or VRE only on All or those with No History
- Report for at least one month in a calendar year
- Location specific reporting (suggest same location as IS or LabID reporting)
- Inpatient locations and Outpatient (for HH) locations





Process Measures Adherence Analysis



Adherence Rate to Process Measures

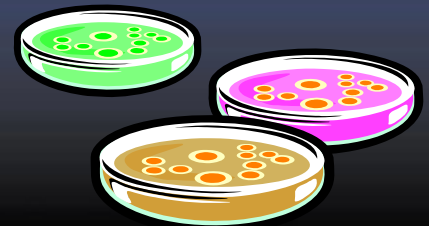
$$= \frac{\text{\# Performed or Used}}{\text{\# Indicated or Eligible}} \times 100$$

AST Outcomes Measures



Purpose: To allow facilities to more accurately quantify exposure burden (prevalence) and/or healthcare acquisition (incidence) of MRSA and/or VRE

- Report for at least one month in a calendar year
- Location specific reporting:
 - required same location where AST adherence is performed
 - suggest same location where Infection Surveillance or LabID Event reporting is conducted
- Inpatient locations





AST Outcomes Measures Definitions



- **AST at Admission provides Prevalence data**
 - **Known Positive**
 - Patient with documented MRSA or VRE colonization or infection in previous 12 months
 - **Admission AST or Clinical Positive**
 - Patient with MRSA or VRE isolated from specimen collected on admission (≤ 3 days)
- **AST at Discharge/Transfer provides Incidence data**
 - Patient with stay > 3 days
 - No documented MRSA or VRE in previous 12 months or on admission (≤ 3 days)
 - MRSA or VRE isolated from specimen collected > 3 days after admission or at time of discharge/transfer



AST Outcome Measures Analysis



AST Admission Prevalence

$$= \frac{\text{\# of Admission AST/Clinical/Known Positives}}{\text{\# of Admissions}} \times 100$$

AST Incidence / Direct Acquisition

$$= \frac{\text{\# of Discharge/Transfer AST and New Clinical Positives}}{\text{\# of Patient-Days}} \times 1000$$



Analysis and Output

1) Generate a Dataset



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

NHSN - National Healthcare Safety Network (15D-CLFT-NHSN1)

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Logged into DHQP Sievert Memorial (ID 10471) as DSIEVERT.
Facility DHQP Sievert Memorial (ID 10471) is following the PS component.

Generate Data Sets

[HELP](#)

Generate Patient Safety Analysis Data Sets

- [NHSN Home](#)
- [Reporting Plan](#)
- [Patient](#)
- [Event](#)
- [Procedure](#)
- [Summary Data](#)
- [Import/Export](#)
- [Analysis](#)
 - [Generate Data Sets](#)
 - [Output Options](#)
- [Surveys](#)
- [Users](#)
- [Facility](#)
- [Group](#)
- [Log Out](#)

Date Last Generated	Action
---------------------	--------

Mar 10 2010 2:51PM	Generate New
--------------------	------------------------------

Generation of a Data Set is specific to User Login

The data set generation process will take several minutes. Do not logoff or close this window while the process is running. You may minimize the browser window and work in other applications while you wait.

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2) Choose Output Options



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.

Patient Safety Component

Analysis Output Options

Expand All

Collapse All

- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module
- MDRO/CDAD Module - Infection Surveillance
- MDRO/CDAD Module - LABID Event Reporting
- MDRO/CDAD Module - Process Measures
- MDRO/CDAD Module - Outcome Measures
- High Risk Inpatient Influenza Vaccination Module
- Advanced
- My Custom Output
- Published Output

NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

3) Choose Reporting Option and Organism



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.

Patient Safety Component Analysis Output Options

Expand All

Collapse All

- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module
- MDRO/CDAD Module - Infection Surveillance

All MRSA HAI

CDC Defined Output

Line Listing for All MRSA HAI

Frequency Table for All MRSA HAI

Bar Chart for All MRSA HAI

Pie Chart for All MRSA HAI

Rate Table for MRSA HAI Data by Location

Run

Modify

Run

Modify

Run

Modify

Run

Modify

Run

Modify

All MSSA HAI

All C. difficile HAI

NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

4) Basic Run Options – Line Listing



National Healthcare Safety Network

Line Listing - All MRSA HAI

As of: March 9, 2009 at 3:09 PM

Date Range: All MDRO_EVENTS

orgID	eventID	eventType	centralLine	urinaryCath	ventUsed	postProc	spcEvent	admitDate	eventDate	location	mrsa	mssa	vre	acine	kleb	cdif
10312	13017	REPR					EMET	01/15/2008	01/23/2008	INHONCSCA	Y	N	N	N	N	N
10312	13027	SST					DECU	01/12/2008	01/23/2008	INHONCSCA	Y	N	N	N	N	N
10312	13029	SST					DECU		01/15/2008	INHONCSCA	Y	N	N	N	N	N
10312	13048	REPR				N	OREP	01/25/2008	01/30/2008	INSURGCC	Y	N	N	N	N	N
10312	13133	SST					DECU	01/15/2008	01/24/2008	PEDMEDSURG	Y	N	N	N	N	N
10312	13216	BSI	N				LCBI	10/29/2008	11/12/2008	INMEDCC	Y	N	N	N	N	N
10312	13221	SST					DECU	11/09/2008	11/27/2008	INMEDCC	Y	N	N	N	N	N
10312	13474	SST				N	DECU	11/09/2008	11/12/2008	INMEDCC	Y	N	N	N	N	N
10312	13561	BSI	N				LCBI	10/07/2008	10/23/2008	INMSCC	Y	N	N	N	N	N
10312	13563	SST					SKIN	10/14/2008	10/16/2008	INMEDWARD	Y	N	N	N	N	N
10312	13944	BSI	Y			N	LCBI	11/15/2008	12/01/2008	INBMTSCA	Y	N	N	N	N	N
10312	13950	BJ				N	BONE	11/30/2008	12/05/2008	INBMTSCA	Y	N	N	N	N	N
10312	13973	SST					BURN		12/13/2008	INIFMWARD	Y	N	N	N	N	N
10312	13977	LRI				N	LUNG		12/12/2008	INGIWARD	Y	Y	Y	Y	Y	N
10312	13995	EENT				N	UR	12/12/2008	12/16/2008	INENTWARD	Y	N	N	Y	Y	N
10312	13997	EENT				N	UR	12/16/2008	12/17/2008	INENTWARD	Y	Y	Y	Y	Y	N
10312	14106	UTI		N			SUTI	12/01/2008	12/12/2008	INGIWARD	Y	N	N	N	N	N
10312	14290	SSI					BONE	05/10/2008	05/15/2008	INORTWARD	Y	N	N	N	N	N
10312	14293	BSI	N				LCBI	02/28/2008	03/02/2008	INCARDCC	Y	N	N	N	N	N

Sorted by orgID eventID

Data contained in this report were last generated on March 6, 2009 at 4:30 PM.

5) Basic Run Options – Frequency Tables



National Healthcare Safety Network

Frequency Table - All MRSA HAI

As of: March 9, 2009 at 5:14 PM

Date Range: All MDRO_EVENTS

orgID=10312

Frequency Row Pct	Table of location by eventType								
	location	eventType							Total
	BJ	BSI	EENT	LRI	REPR	SSI	SST	UTI	Total
INBMTSCA	1 50.00	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2
INCARDCC	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1
INENTWARD	0 0.00	0 0.00	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2
INGIWARD	0 0.00	0 0.00	0 0.00	1 50.00	0 0.00	0 0.00	0 0.00	1 50.00	2
INHONCSA	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33	0 0.00	2 66.67	0 0.00	3
INIFMWARD	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1
INMEDCC	0 0.00	1 33.33	0 0.00	0 0.00	0 0.00	0 0.00	2 66.67	0 0.00	3
INMEDWARD	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1
INMSCC	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1
INORTWARD	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	0 0.00	1
INSURGCC	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1
PEDMEDSURG	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1
Total	1	4	2	1	2	1	7	1	19

Data contained in this report were last generated on March 6, 2009 at 4:30 PM.

National Healthcare Safety Network

Frequency Table - All MRSA LabID Events

As of: March 9, 2009 at 5:17 PM

Date Range: All LABID_EVENTS

orgID=10312

Frequency Row Pct	Table of specimenSource by onset			
	specimenSource	onset		Total
		CO	HO	Total
BLDSPC	6 40.00	9 60.00		15
BONESPC	0 0.00	1 100.00		1
PUS	3 42.86	4 57.14		7
SKINSORE	1 100.00	0 0.00		1
SPUTUM	2 22.22	7 77.78		9
SRGEXSPC	1 50.00	1 50.00		2
ULCERSPC	0 0.00	1 100.00		1
URINE	1 100.00	0 0.00		1
WOUNDSPC	5 41.67	7 58.33		12
Total	19	30		49

Data contained in this report were last generated on March 6, 2009 at 4:30 PM.

6) Basic Run Options – Pie or Bar Charts



National Healthcare Safety Network

Pie Chart – All MRSA HAI

As of: March 9, 2009 at 5:22 PM

Date Range: All MDRO_EVENTS

orgID= 10312

FREQUENCY of eventType

location= INBMTSCA

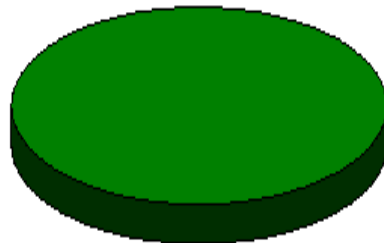
BJ
1
50%



BSI
1
50%

location= INCARDCC

BSI
1
100%



National Healthcare Safety Network

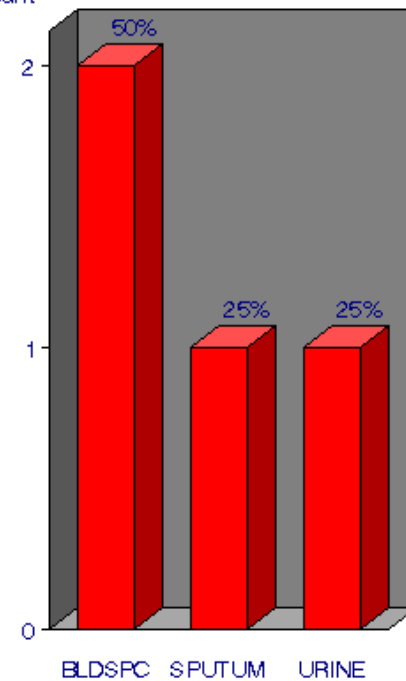
Bar Chart – All MRSA LabID Events

As of: March 9, 2009 at 5:21 PM

Date Range: All LABID_EVENTS

orgID= 10312 location= INCARDCC

Count



specimenSource

7) Basic Run Options – Rate Tables



National Healthcare Safety Network Rate Table - All MRSA HAI by Location

As of: March 9, 2009 at 5:28 PM

Date Range: All MDRO_RATES

orgID=10312 locCDC=IN:ACUTE:CC:C

location	summaryYM	MRSACount	numPatDays	MRSARate
INCARDCC	2008M02	0	312	0.0
INCARDCC	2008M03	1	312	3.2

Source of aggregate data: Not available

Data contained in this report were last generated on March 6, 2009 at 4:30 PM.

National Healthcare Safety Network Rate Table - All MRSA HAI by Location

As of: March 9, 2009 at 5:28 PM

Date Range: All MDRO_RATES

orgID=10312 locCDC=IN:ACUTE:CC:M

location	summaryYM	MRSACount	numPatDays	MRSARate
INMEDCC	2008M01	0	743	0.0
INMEDCC	2008M03	0	723	0.0
INMEDCC	2008M05	0	2000	0.0
INMEDCC	2008M08	0	66	0.0
INMEDCC	2008M11	3	533	5.6

National Healthcare Safety Network Rate Table - All MRSA LabID Events by Location

MDRO Exposure Burden - Inpatient MRSA Admission Prevalence Rate

As of: March 9, 2009 at 5:30 PM

Date Range: All LABID_RATESMRSA

orgID=10312 locCDC=' '

summaryYM	location	MRSA_admPrevCount	numAdms	MRSA_admPrevRate
2007M01	ALL-IN	0	350	0.0
2008M06	ALL-IN	0	120	0.0
2008M11	ALL-IN	1	658	0.2

Source of aggregate data: Not available

Data contained in this report were last generated on March 6, 2009 at 4:30 PM.

National Healthcare Safety Network Rate Table - All MRSA LabID Events by Location

MDRO Exposure Burden - Inpatient MRSA Admission Prevalence Rate

As of: March 9, 2009 at 5:30 PM

Date Range: All LABID_RATESMRSA

orgID=10312 locCDC=IN:ACUTE:CC:C

summaryYM	location	MRSA_admPrevCount	numAdms	MRSA_admPrevRate
2008M02	INCARDCC	1	23	4.3
2008M03	INCARDCC	0	23	0.0
2008M06	INCARDCC	0	10	0.0
2008M11	INCARDCC	1	23	4.3

Modify - Output Options



NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

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

Patient Safety Component

Analysis Output Options

Expand All

Collapse All

- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module
- MDRO/CDAD Module - Infection Surveillance
- MDRO/CDAD Module - LABID Event Reporting
 - All LabID Events
 - All MRSA LabID Events
 - All MSSA LabID Events
 - All C. difficile LabID Events
 - CDC Defined Output

Line Listing for All CDIF LabID Events

Run **Modify**

Frequency Table for All CDIF LabID Events

Run **Modify**

Bar Chart for All CDIF LabID Events

Run **Modify**

Pie Chart for All CDIF LabID Events

Run **Modify**

Rate Table for CDIF LabID Data by Location

Run **Modify**

Modify - Line Listing



- NHSN Home
- Reporting Plan
- Patient
- Event
- Procedure
- Summary Data
- Analysis
 - Generate Data Sets
 - Output Options
- Surveys
- Users
- Facility
- Group
- Log Out

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

Line Listing

Analysis Data Set: LabID_Events

Modify Attributes of the Output:

Last Modified On: 03/11/2009

Output Type:

Output Name:

Output Title:

Select output format:

Output Format:

Use Variable Labels

Select a time period or Leave Blank for Cumulative Time Period:

Date variable: Beginning: Ending:

Enter Date variable/Time period

Specify Other Selection Criteria:

[Show Criteria](#) [Column +](#) [Row +](#)

cdif	= Y

Other Options:

Modify Variables To Display By Clicking

Specify Sort Variables By Clicking:

Select Page by variable:

Select Variables to include in Line Listing:

Available Variables	Selected Variables
mdroIncompleteFlag	patID
mdroInfPlan	eventID
modifyDate	location
modifyUserID	outpatient
mrsa	prevPos
mssa	onset
onsetDesc	cdiAssay
orgID	admitDate
patDischarge	locationAdmitDate
patGName	specimenDate
patMName	
patRaceAAB	
patRaceASIAN	
patRaceNH_PI	
patRaceWHITE	
patSurname	
prevDisMons	
spcOrgType	
specDateYH	
specDateYM	
specDateYQ	
specDateYr	
specimenSource	
specimenSourceDes	
ssn	
vre	

Modify – Rate Table



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

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Logged into Pleasant Valley Hospital (ID 10312) as DCSVEK1.
Facility Pleasant Valley Hospital (ID 10312) is following the PS component.

Analysis Rate Table

Analysis Data Set: LABID_RatesMRSA [Export Analysis Data Set](#)

Modify Attributes of the Output:

Last Modified On: 03/06/2009

Output Type:

Output Name:

Output Title:

Select output format:

Output Format:

Choose page Orientation: Portrait Landscape

Use Variable Labels

Select a time period or Leave Blank for Cumulative Time Period:

Date Variable Beginning Ending

[Clear Time Period](#)

Enter Date variable/Time period at the time you click the Run button

Specify Other Selection Criteria:

[Show Criteria](#) [Column +](#) [Row +](#) [Clear Criteria](#)

location					
= INMEDCC					

FYI: an "or" command works by using diagonal cells

Other Options:

Group by:

Show Histogram

[Print Variable Reference List](#)

[Run](#) [Save As](#) [Reset](#) [Back](#) [Export Output Data Set](#)

Export 'Analysis' or 'Output' Data Set



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Logged into DHQP Sievert Memorial (ID 10471) as DSIEVERT.
Facility DHQP Sievert Memorial (ID 10471) is following the PS component.

Analysis Rate Table

Analysis Data Set: LABID_RatesMRSA

[Export Analysis Data Set](#)

- “Export Analysis Data Set”: will export the data from the category through which you have navigated to get to the Modify screen.

Other Options:

[Print Variable Reference List](#)

Group by:

summaryYM

Show Histogram

Run

Save As

Reset

Back

[Export Output Data Set](#)

- “Export Output Data Set”: will export the data from the subset which you have specified on the Modify screen.

Export Data Set Facility Users Only



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 DHQP Sievert Memorial (ID 10471) as DSIEVERT.
Facility DHQP Sievert Memorial (ID 10471) is following the PS component.

Import/Export Data

Import/Export Type:

Export Data



Please choose an export type and click Submit. Only Patient Safety related data that you have privileges to view will be exported for the facility you have chosen.

Note: All export types will result in a compressed (zip) download file.

Save as type:

Submit

Back

- “Export Data”: will export all data in all categories ever entered for the facility.



NHSN Reference

Home Page:

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



Questions

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