



Introduction to NHSN



Basics of Infection Prevention
2-Day Mini-Course
2014

Objectives

- Describe NHSN key terms
- Demonstrate how to use NHSN as both a surveillance system and the web-based platform used in California for public reporting
- Understand how to interpret NHSN reports of your data

National Healthcare Safety Network (NHSN)

- Surveillance system used nationwide for reporting HAI from hospitals, long term care facilities, and hemodialysis clinics
- Providing more transparency and accountability in healthcare
- Surveillance system used by CDPH, other state health departments, and CMS for HAI reporting
- Data used for HAI public reporting, pay for reporting, and pay for performance programs
- Accessed through a secure, web-based interface; open to all US healthcare facilities at no charge

NHSN Strengths

- Provides standards for surveillance across healthcare facilities
- Data risk-adjusted for comparison to national data
- Web-based; data housed remotely; data quality checks
- Data analysis tools built into system
- Adapting to electronic reporting using national electronic health record standards (e.g. HL7, CDA)
- Expandable to many health care settings

NHSN Limitations

- Data validation methods in development
- Requires following all NHSN protocols - detailed, lengthy
- Not easily integrated with electronic medical record for data import
- While training and support is provided by NHSN, its use is not as intuitive as initially assumed or hoped

Recommended Practices for Surveillance and NHSN

- I. Assess the population
- II. Select the outcome or process for surveillance

You may be required by regulation to perform surveillance for specific HAI and specific patient populations



NHSN for Mandatory HAI Reporting

Required by [CDPH](#) to meet mandated HAI reporting requirements in California acute care hospitals (including LTACs)

- CLIP in ICUs
- CLABSI facility-wide
- SSI from 29 operative procedures (per AFL 11-32)
- *C difficile* from inpatients*
- MRSA and VRE bacteremia from inpatients*
 - If inpatient MRSA BSI related to central line, event must be reported also as CLABSI (entered in both NHSN modules)

* and ED patients admitted to facility same day



NHSN for Mandatory HAI Reporting

Required by **CMS** for reporting specific infections for Medicare reimbursement from all U.S. acute care and LTAC hospitals:

- CLABSI in hospital ICUs, 2011
- CAUTIs in hospital ICUs, 2012
- SSI from colon and abdominal hysterectomies, 2012
- MRSA bacteremia and *C.difficile* , 2013
- HCP Influenza Vaccination, 2013
- CLABSI & CAUTI in hospital wards , 2015

Reference: Healthcare Facility HAI Reporting Requirements to CMS via NHSN

<http://www.cdc.gov/nhsn/PDFs/CMS/CMS-Reporting-Requirements.pdf>, December

2013

NHSN for Mandatory HAI Reporting -

Required by **CMS** for reporting specific infections for

- Outpatient hemodialysis, 2012
- Inpatient rehabilitation facilities
 - CAUTI, all wards, 2012
 - HCP influenza vaccination, Oct 2014
- Ambulatory Surgery Centers
 - HCP influenza vaccination, Oct 2014

Reference: Healthcare Facility HAI Reporting Requirements to CMS via NHSN
<http://www.cdc.gov/nhsn/PDFs/CMS/CMS-Reporting-Requirements.pdf>,

December 2013

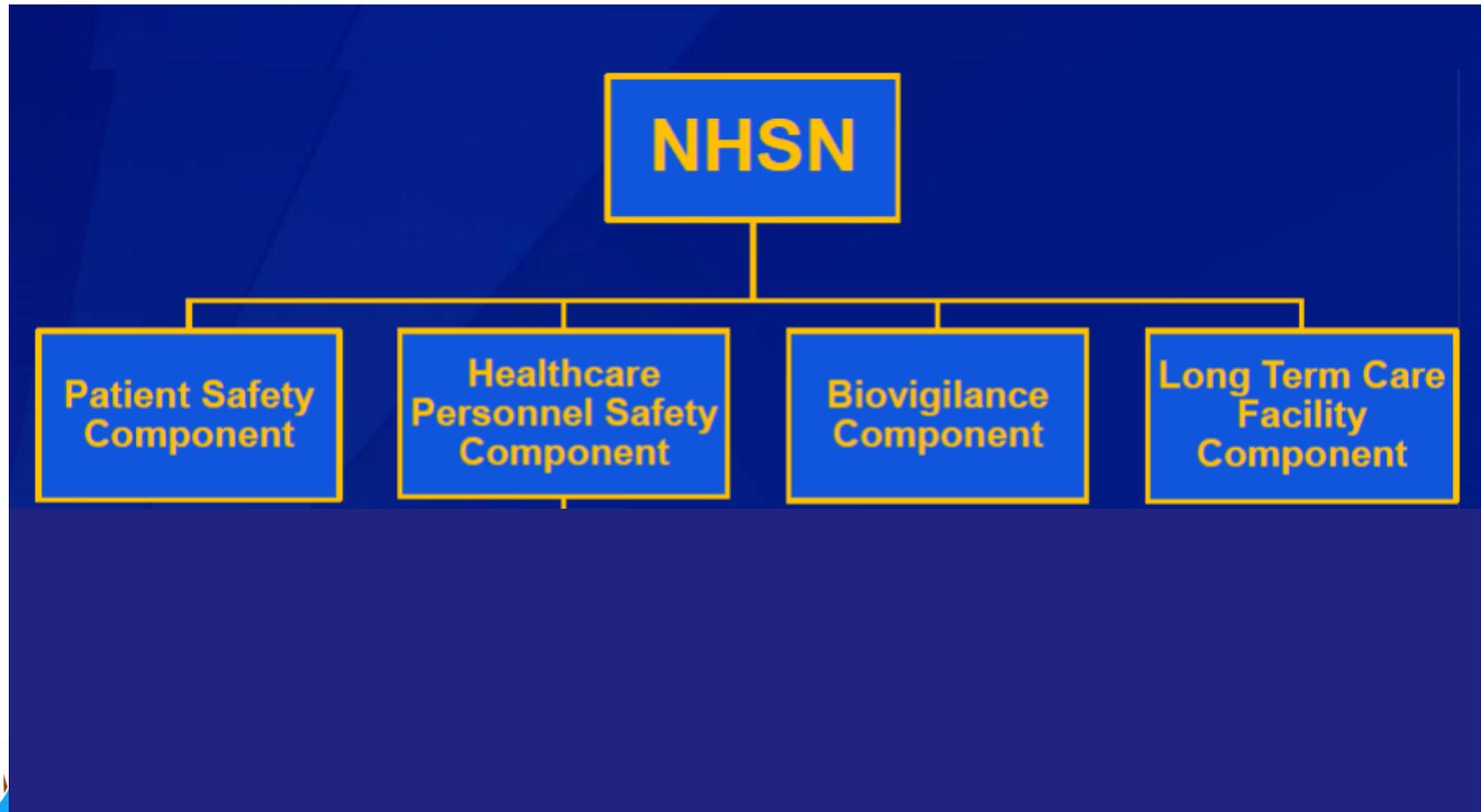


NHSN Data Access

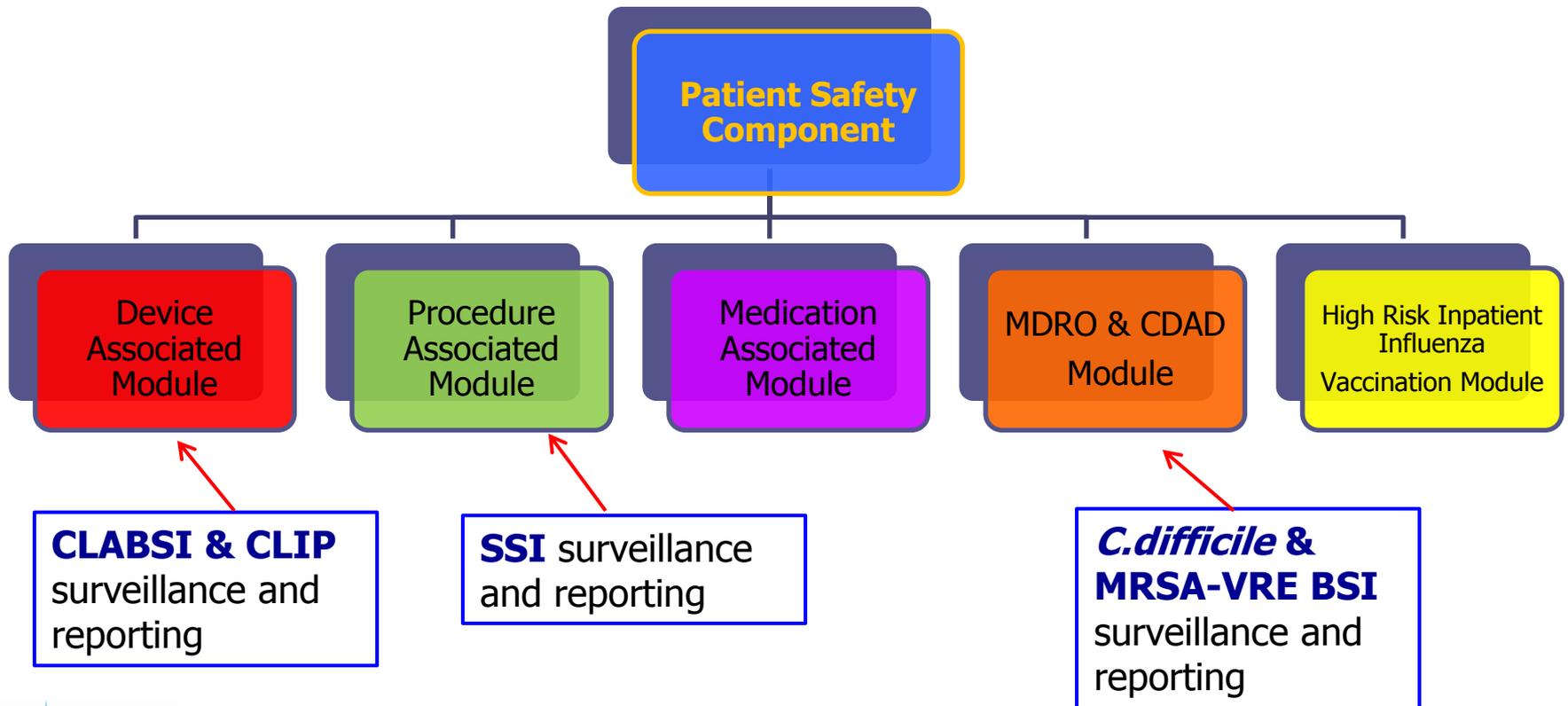
- Facilities own their NHSN surveillance data
 - May edit at any time to improve accuracy, completeness
- Facilities can (or may be required) to join one or more NHSN Group
 - Examples: healthcare organization, CDPH
 - Facility confers rights for data access to the Group
 - CDPH accesses data required by statute
 - Facilities within Group cannot see each other's data
- Facility signed a data use agreement with CDC; allows CMS access to specific NHSN data



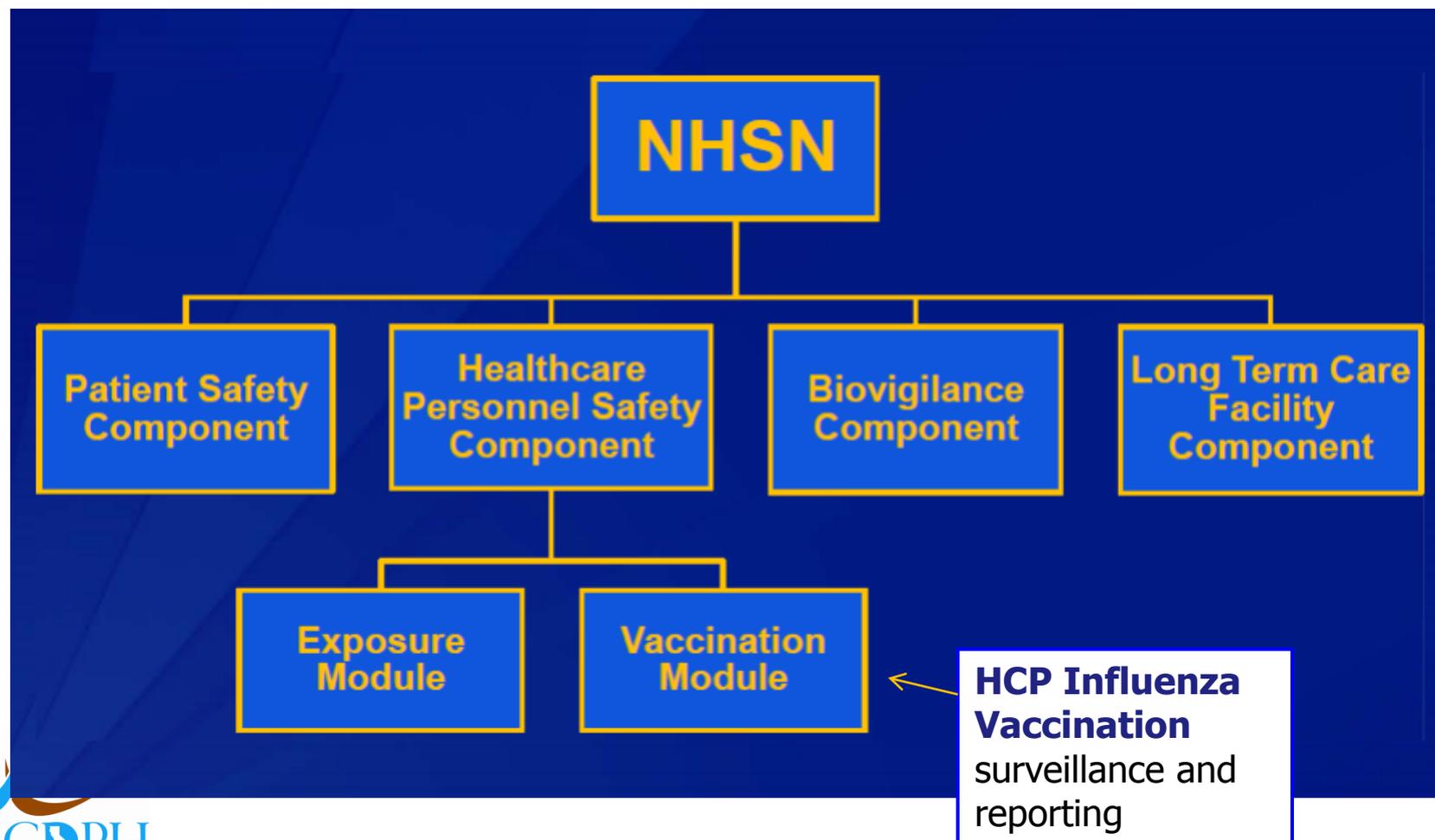
NHSN Structure – All Components, **2014**



NHSN Structure – Patient Safety Component



NHSN Structure – HCP Safety Component





**Long-term
Care Facility**

**Healthcare
associated
infection**

**Laboratory
identified
(Lab ID) event**

**Prevention
process
measures**

Modules of the LTCF Component

Recommended Practices for Surveillance and NHSN

- III. Use surveillance definitions (*and protocols!*)
- IV. Collect surveillance data



Difference Between Clinical and Surveillance Definitions

- **Clinical criteria used by physicians for patient care and management may differ from surveillance criteria**
 - **Clinical**
 - Patient centered
 - Used for therapeutic decisions
 - **Surveillance**
 - Population based
 - Applied exactly the same way each time
 - Physician diagnosis of infection is acceptable for some infections

In NHSN, infection is not

- ❑ **Colonization (presence of microorganisms on skin, mucous membranes, in open wounds, or in excretions or secretions but are not causing adverse clinical signs or symptoms)**
- ❑ **Inflammation that results from tissue response to injury or stimulation by noninfectious agents, such as chemicals**

NHSN HAI Surveillance Definitions

Look for annual
updates to definitions
www.cdc.gov/nhsn



CDC/NHSN Surveillance Definitions for Specific Types of Infections

INTRODUCTION

This chapter contains the CDC/NHSN surveillance definitions and criteria for all specific types of infections. Comments and reporting instructions that follow the site-specific criteria provide further explanation and are integral to the correct application of the criteria. This chapter also provides further required criteria for the specific infection types that constitute organ/space surgical site infections (SSI) (e.g., mediastinitis [MED] that may follow a coronary artery bypass graft, intra-abdominal abscess [IAB] after colon surgery).

Additionally, it is necessary to refer to the criteria in this chapter when determining whether a positive blood culture represents a primary bloodstream infection (BSI) or is secondary to a different type of HAI (see [Appendix 1](#) Secondary Bloodstream Infection (BSI) Guide). A BSI that is identified as secondary to another site of HAI must meet one of the criteria of HAI detailed in this chapter. Secondary BSIs are not reported as separate events in NHSN, nor can they be associated with the use of a central line.

Also included in this chapter are the criteria for Ventilator-Associated Events (VAEs). It should be noted that Ventilator-Associated Condition (VAC), the first definition within the VAE surveillance definition algorithm and the foundation for the other definitions within the algorithm (IVAC, Possible VAP, Probable VAP) may or may not be infection-related.

CDC/NHSN SURVEILLANCE DEFINITIONS OF HEALTHCARE-ASSOCIATED INFECTION

Present on Admission (POA) Infections

To standardize the classification of an infection as present on admission (POA) or a healthcare-associated infection (HAI), the following objective surveillance criteria have been adopted by NHSN. NOTE: This classification should not be applied to SSI, VAE, or LabID Events.

If all of the elements used to meet a CDC/NHSN site-specific infection criterion are present during the two calendar days before the day of admission, the first day of admission (day 1) and/or the day after admission (day 2) and are documented in the medical record, the infection is considered POA. Infections that are POA should not be reported as HAIs. Acceptable documentation does not include patient-reported signs and/or symptoms (e.g., patient reporting having a fever prior to arrival to the hospital). Instead, symptoms must be documented in the chart by a healthcare professional during the POA time frame (e.g., nursing home documents fever prior to arrival to the hospital). Physician diagnosis can be accepted as evidence of an infection that is POA only when physician diagnosis is an element of the specific infection definition.

NHSN

- About NHSN
- Enroll Here
- Materials for Enrolled Facilities**
- Acute Care Hospitals/Facilities
- Long-term Acute Care Facilities
- Long-term Care Facilities
- Outpatient Dialysis Facilities
- Inpatient Rehabilitation Facilities
- Ambulatory Surgery Centers
- Ventilator-Associated Event Calculator
- FAQs about Healthcare Personnel (HCP)
- Influenza Vaccination Summary Reporting in NHSN
- Group Users
- Patient Safety Analysis Resources
- Annual Reports
- Newsletters
- E-mail Updates
- CMS Requirements
- Clinical Document Architecture (CDA)
- HIPAA Privacy Rule

NHSN Manuals

- Dialysis Event Surveillance Manual [PDF - 1.65 MB]
- Healthcare Personnel Safety Component Manual [PDF - 1.96 MB]
- Biovigilance Component Protocol [PDF - 326 KB]

NHSN

Recommend 1 Tweet Share

Surveillance Reporting for Enrolled Facilities

Select Your Facility Type



Acute Care Hospitals/Facilities
 Urgent care or other short-term stay facilities (e.g., critical access facilities, oncology facilities, military/VA facilities).



Outpatient Dialysis Facilities
 Outpatient dialysis clinics.



Long-term Acute Care Facilities
 Long-term acute care hospitals (LTACs).



Inpatient Rehabilitation Facilities
 Inpatient rehabilitation hospitals.



Long-term Care Facilities
 Nursing homes, assisted living and residential care, chronic care facilities, and skilled nursing facilities.



Ambulatory Surgery Centers
 Outpatient surgery centers.



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CMS
NHSN
 Requirements
 Click here for more information

Clinical Document Architecture
CDA

Contact NHSN:

Centers for Disease Control and Prevention
 National Healthcare Safety Network
 MS-A24
 1600 Clifton Rd
 Atlanta, GA 30333

Contact
NHSN@cdc.gov

Contact Us:

Centers for Disease Control and Prevention
 1600 Clifton Rd
 Atlanta, GA 30333
 800-CDC-INFO

www.cdc.gov/nhsn/settings.html



"For Enrolled Facilities" Web Page



National Healthcare Safety Network (NHSN)
Tracking Infections in Acute Care Hospitals/Facilities

NHSN is the HAI surveillance gold standard. The system (and its predecessors) started years ago helping a few hundred healthcare facilities; today, more than 11,000 healthcare facilities use NHSN as the cornerstone of their HAI elimination strategies. Specifically, facilities use NHSN to:

- Access NHSN enrollment requirements for CMS Hospital Inpatient Quality Reporting Program,
- Obtain baseline HAI rates,
- Compare rates to CDC's national data,
- Participate in state or national HAI prevention collaboratives,
- Devise and implement HAI elimination strategies,
- Evaluate immediate and long-term results of elimination efforts,
- Refocus efforts as needed, or advance to different areas.



Email page link
 Print page
 NHSN Login
 Continuing Education Opportunities
 Get email updates
 To receive email updates about this page, enter your email address:

 What's this? Submit

CLABSI - Surveillance for Central Line-associated Bloodstream Infections

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

CAUTI - Surveillance for Catheter-associated Urinary Tract Infections

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

CMS NHSN Requirements
 Click here for more information

CLIP - Surveillance for Central Line Insertion Practices Adherence

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

SSI - Surveillance for Surgical Site Infections

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs



MDRO/CDI - Surveillance for C. difficile, MRSA, and Other Drug-Resistant Infections

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

AUR - Surveillance for Antimicrobial Use and Antimicrobial Resistance Option

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Contact NHSN:
 Centers for Disease Control and Prevention
 National Healthcare Safety Network
 MS-A24
 1600 Clifton Rd
 Atlanta, GA 30333
 Contact NHSN@cdc.gov

VAP - Surveillance for Ventilator-associated Pneumonia Events *In Plan for Pediatric Patients Only

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

VAE - Surveillance for Ventilator-associated Events *In-Plan Adult Locations Only

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Contact Us:
 Centers for Disease Control and Prevention
 1600 Clifton Rd
 Atlanta, GA 30333
 800-CDC-INFO (800-232-4636)
 TTY: (888) 232-6348
 New Hours of Operation
 8am-5pm ET/Monday-Friday
 Closed [Holidays](#)
 [Contact CDC-INFO](#)

Surveillance for Healthcare Personnel Influenza Vaccination

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Surveillance for Healthcare Personnel Exposure

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Blood Safety Surveillance

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

About CMS HAI IPPS Acute Care Hospitals Quality Reporting Program, click here.

- CCN
- Training
- Digital Certificates
- Monthly Data Submission

NHSN Acute Care Hospital-Specific Page

- Contains educational modules
- CMS requirements
- Links to emails and past newsletters



SSI Surveillance

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

www.cdc.gov/nhsn/acute-care-hospital

Special Edition!October 2010, Updated
December 2010

vention (CDC)

NEWS

Your Guide to the Standardized Infection Ratio (SIR)

With the new version of NHSN (version 6.3), new output options are available that will permit the calculation of standardized infection ratios (SIRs) for central line-associated bloodstream infection (CLABSI) and surgical site infection (SSI) data. Each of these measures fall in line with the State-Specific Healthcare-associated Infections Summary Data Report, published by CDC. For SSIs, we will make the transition from SSI rates to the SSI SIR with this new version of the NHSN tool. The SSI SIR is the result of logistic regression modeling that considered all procedure-level data collected by NHSN facilities in order to provide better risk adjustment than afforded by the risk index. In addition, the SSI SIR provided to facilities within NHSN will be more precise and be calculated only if appropriate for comparisons. As we make this transition, we understand that you will have numerous questions, including how to operationalize this new statistic in your facility to drive prevention practices. This guide is intended to answer some of these questions.

STANDARDIZED INFECTION RATIO (SIR)

What is a standardized infection ratio (SIR)?

The standardized infection ratio (SIR) is a summary measure used to track HAIs at a national, state, or local level over time. The SIR adjusts for patients of varying risk

Read all NHSN Newsletters – great guidance!

Key Term: Inpatient vs. Outpatient

NHSN Inpatient

- A patient whose date of admission to the healthcare facility and the date of discharge are different calendar days

NHSN Outpatient

- A patient whose date of admission to the healthcare facility and the date of discharge are the same day

CDC Location Mapping

- Each patient care area in NHSN is defined by the type of patients receiving care in that location
 - Periodically reassess locations mapping for changes!
- To define (or redefine) a patient care location
 - Step 1: Determine the acuity level (e.g. critical care, ward)
 - Step 2: Determine the type of service (e.g. burn, surgical)
- Apply 80% Rule to designate patient type
 - EXCEPTION: Medical/Surgical Locations (ICUs and wards)
 - Try to better define medical/surgical mixed units
 - If more than 60% medical patients, define as a medical location
 - If more than 60% surgical, define as a surgical location



NHSN Facility Home Page

Accessed via secure web portal

NHSN 6.4.2.4 Home Page - Windows Internet Explorer

https://sdn7.cdc.gov/nhsn/nhsnMain.do

File Edit View Favorites Tools Help

Favorites HAI Program CDC Portal Login Page SDN

NHSN 6.4.2.4 Home Page

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

NHSN - National Healthcare Safety Network

NHSN Home | My Info | Contact us | Help | Log Out

NHSN Home Logged into California General Hospital (ID 15633) as SUECHEN.
Facility California General Hospital (ID 15633) 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 voluntarily provided 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)).

- The number of available functions (on the left blue navigation bar) depends on your NHSN User's rights
- Your NHSN Facility Administrator sets (and can change) the rights for each User
- Types of User rights are: 1) Administrative (all functions available), 2) Analyze data, 3) Enter data, 4) View data

Recommended Practices for Surveillance and NHSN

- V. Calculate and analyze infection rates
- VI. Apply risk stratification methodology
- VII. Report and use surveillance data

*Can all be done
within the NHSN
system!*



NHSN Rate Table

Review your Data Findings!

Check first that all your infections are listed
AND denominator data for each month

National Healthcare Safety Network Rate Table for Central Line-Associated BSI Data for ICU-Other

As of: February 26, 2014 at 8:28 PM
Date Range: CLAB_RATE\$ICU summaryYM 2013M07 to 2013M12

Org ID=15633 CDC Location=IN:ACUTE:CC:5

Location	Summary Year/Month	CLA BSI Count	Central Line Days	CLA BSIRate	NHSN CLAB Pooled Mean	Incidence Density p-value	Incidence Density Percentile	Patient Days	CL Util Ratio	NHSN Line DU Pooled Mean	Proportion p-value	Proportion Percentile
1 SICU	2013M07	0	280	0.000	1.2	0.7172	10	435	0.644	0.59	0.2672	63
1 SICU	2013M09	1	399	2.506	1.2	0.4602	86	448	0.891	0.59	0.0000	94
1 SICU	2013M10	1	250	4.000	1.2	0.2935	95	450	0.556	0.59	0.4323	45
1 SICU	2013M11	0	350	0.000	1.2	0.6600	10	400	0.875	0.59	0.0000	93
1 SICU	2013M12	0	315	0.000	1.2	0.6880	10	375	0.840	0.59	0.0000	92
3 SICU	2013M08	0	395	0.000	1.2	0.6257	10	442	0.894	0.59	0.0000	94

Source of aggregate data: Am J Infect Control 2013;41:1148-66
Data contained in this report were last generated on February 26, 2014 at 8:28 PM.

Sample Rate Table

Shows your CLABSI rate and p-value to determine if significantly higher or lower as compared to NHSN rate (>0.05 NS)

Shows where your rate falls in the percentile distribution of all NHSN hospital rates

Shows your device utilization ratio compared to all similar hospital units in NHSN data 2006-2008

National Healthcare Safety Network

Rate Table for Central Line-Associated BSI Data for ICU-Other

As of: February 26, 2014 at 8:28 PM

Date Range: CLAB_RATE\$ICU summaryYM 2013M07 to 2013M12

Org ID=15633 CDC Location=IN:ACUTE:CC:5

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Source of aggregate data: Am J Infect Control 2013;41:1148-66

Data contained in this report were last generated on February 26, 2014 at 8:26 PM.



Check for missing infections AND missing Summary data for each unit each month!

NHSN Standardized Infection Ratio (SIR)

- Driven by need for a **summary measure**
 - e.g. replaces multiple rate comparisons for SSI
- Adjusts for differences in infection risk
 - e.g. by type of procedure and associated risk factors of patients undergoing that procedure in your hospital
- SIR compares #HAIs reported by your hospital with the “predicted” #based on NHSN referent data
 - CLABSI (2006-2008)
 - SSI (2006-2008)
 - CAUTI (2009)

Interpreting SIR

- Value of **1.0** = number of HAI observed in your hospital is the **same as the predicted** number of HAI compared to national referent data
 - Less than 1.0 = fewer HAI than predicted
 - Greater than 1.0 = more HAI than predicted

Note: In NHSN, the SIR will only be calculated for your hospital if the predicted is >1 (*because can't have less than a whole person infected*)



$$\text{SIR} = \frac{\text{Observed HAIs}}{\text{Predicted HAIs}}$$

Examples:

If your hospital has 2 CLABSI per 1000 line days and national data predict 2.0 CLABSI per 1000 line days:

$$\text{SIR} = \frac{2}{2.0} = 1.0$$

If your hospital has 4 SSI per 100 Hip prosthesis procedures and national data predict 2.5 SSI:

$$\text{SIR} = \frac{4}{2.5} = 1.6$$

“How do I interpret whether our SIR is significantly different (higher or lower) than NHSN data?”

Org ID	Summary Yr	Infection Count	Number Expected	Central Line Days	SIR	SIR p-value	95% Confidence Interval
10018	2009	9	7.191	3786	1.25	0.2962	0.653, 2.184

1. If the p-value is above 0.05, the observed difference is not statistically significant.
2. If the 95% Confidence interval overlaps 1.0, the observed difference is not statistically significant.

If the p-value is not significant, the confidence interval won't be significant either and vice versa

SIR Interpretation - Example

Pretend this is "our" hospital.

Org ID	Summary Yr	Infection Count	Number Expected	Central Line Days	SIR	SIR p-value	95% Confidence Interval
10018	2009	9	7.191	3786	1.25	0.2962	0.653, 2.184

To discuss these findings:

1. "We had 9 CLABSI; 7.2 were expected. Our SIR is 1.25 or 25% higher than what would be predicted from national data."
2. "However, this difference is not significantly different than the national hospital data because our estimate is not very precise." *
3. "In fact, our SIR may be anywhere from 35% below to more than double the predicted value (.65 – 2.2)."
4. "We will continue to monitor CLABSIs. Observations over time (and more line days) will help us better understand how we compare. Our ultimate goal is to prevent all CLABSIs."



* Due to limited surveillance experience, e.g. too few line days across hospital units with predicted low rates.

SIR Interpretation - Example 2

Pretend this is our hospital.

Org ID	Summary Yr/Half	infCount	Number Expected	Central Line Days	SIR	SIR p-value	95% Confidence Interval
15331	2009H1	74	26.606	10065	2.78	0.0000	2.184, 3.492

To discuss these findings:

1. "We saw 74 CLABSI in 10,065 line days; 26.6 were predicted."
2. The SIR is 2.78 or nearly 3 times higher than what would be predicted from national data."
3. "This difference is significantly different than the national hospital data."
4. "In fact, the precision of this estimate shows that our hospital is between 2 and 3 ½ times higher than predicted (C.I. 2.2 – 3.5)."
5. "We need to implement a CLABSI prevention program immediately."

SSI Risk Adjustment

- Models developed for each NHSN operative procedure
 - Specific factors found to increase SSI risk for that procedure
- Every patient undergoing a procedure in your hospital has a calculated SSI risk
- Based on your surgical patient population, the expected (predicted) number of SSI can be calculated

Example: HYST

Factors in the risk adjustment model that add to SSI risk are

- Age equal to or younger than 44 years
- ASA score of 3, 4, or 5
- Duration of surgery longer than 100 minutes (incision to close time)
- Procedure done at major teaching hospital (from NHSN Annual Survey)

This table represents a partial list of 100 hypothetical patients who have undergone a HYST procedure and the risk factors present for each.

Patient	Age	Duration	ASA	Medical School Aff.	SSI	Probability of SSI
1	40	117	4	Y	0	0.050
2	53	95	2	N	0	0.004
3	30	107	2	Y	1	0.033
.
.
.
100	37	128	4	Y	1	0.050
TOTAL					Observed (O)	Expected (E)
					3	2.91
SIR = O/E = 3/2.91					= 1.03	

Interpreted as a 5.0% risk of SSI for patient 1

Probability of SSI is calculated for each surgical patient

The SSI probabilities are added together to get the predicted (expected) number of SSI for this surgical patient population

SSI SIR is not different than predicted

- 3 SSI observed
- 2.9 SSI expected

NHSN Data Analysis Functions

NHSN Home Logged into California General Hospital (ID 15633) as TRACYLANIER.
Facility California General Hospital (ID 15633) is following the PS component.

Alerts
Reporting Plan
Patient
Event
Procedure
Summary Data
Import/Export
Analysis
 Generate Data Sets
 Output Options
 Statistics Calculator
Surveys
Users
Facility
Group
Log Out

Generate Data Sets

[HELP](#)

Generate Patient Safety Analysis Data Sets

Datasets generated will include data for the 3 most recent full calendar years up until today's date for the Patient Safety Component. To include all years check the box below.

For all other components, datasets generated will include all years. Note that any analysis options you run will be limited to the time period shown on the date range bar.

Include all data reported to NHSN for this component.

1/2011 2/2014

Last Generated: Feb 26 2014 8:26PM

- Prior to performing Analysis, a data set must be generated
- "Generating a Data Set" retrieves a copy of your hospital data from the NHSN servers in Atlanta
- Data sets aren't shared; specific to each NHSN User only

NHSN Analysis Options and Reports

Patient Safety Component

Analysis Output Options



Expand All

Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - Ventilator-Associated PNEU
 - Ventilator-Associated Events
 - Urinary Catheter-Associated UTI
 - Central Line Insertion Practices
 - Dialysis Events
 - Procedure-Associated Module
 - MDRO/CDI Module - Infection Surveillance
 - MDRO/CDI Module - LABID Event Reporting
 - MDRO/CDI Module - Process Measures
 - MDRO/CDI Module - Outcome Measures
 - Vaccination Module
 - Antimicrobial Use and Resistance Module
 - Advanced
 - My Custom Output
 - Published Output

- Analysis options are available only if you have generated a data set
- “Analysis Output Options” are the canned analysis reports developed by NHSN
- Options are presented in a series of expandable folders
- To view report Options
 - Chose a Module
 - Chose “CDC-defined Output”

If you select to “Run” a report, all relevant data since starting NHSN reporting will be included. You can also “Modify” canned reports.

Modifying a CDC "Canned" Report

Select output format:

Output Format:

Use Variable Labels

Always check - Labels easier to read

If you want to pick a specific time period click here

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

Example: To select only specific locations click here and make selection

Specify Other Selection Criteria:

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

location				

Then click here to pick which of your locations



National Healthcare Safety Network (NHSN)

CDC's National Healthcare Safety Network is the nation's most widely used healthcare-associated infection tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate healthcare-associated infections.

In addition, NHSN allows healthcare facilities to track blood safety errors and important healthcare process measures such as healthcare personnel influenza vaccine status and infection control adherence rates.

Drug Resistance
Superbugs ranked, CDC outlines four core actions to halt resistance
[Learn More>](#)



[Email page link](#)
[Print page](#)

NHSN Login
Tips for navigating the new NHSN website [\[PDF - 1.6 MB\]](#)

Contact NHSN:

- Centers for Disease Control and Prevention
National Healthcare Safety Network
MS-A24
1600 Clifton Rd
Atlanta, GA 30333
- [Contact NHSN@cdc.gov](mailto:NHSN@cdc.gov)

About NHSN
CDC's NHSN is the largest HAI reporting system in the U.S.

Data & Reports
See national and state reports using NHSN data

HICPAC Guidelines and Recommendations
Review CDC HAI prevention guidelines

New to NHSN? Enroll Facility Here.
For first time facility enrollment.

Reporting & Surveillance Resources for Enrolled Facilities
Training, protocols, forms, support materials, analysis resources, and FAQs

Group Users
View resources for group users here.



[Training / Demo](#)

[Newsletters / Members Meeting Updates](#)

[E-mail Updates](#)

[State-based HAI Prevention Activities](#)

[HIPAA Privacy Rule](#)

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National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)
Division of Healthcare Quality Promotion (DHQP)

File Formats Help:
How do I view different file formats (PDF, DOC, PPT, MPEG) on this site? >>

NHSN Help

Use website at www.cdc.gov/nhsn

Email questions to nhsn@cdc.gov



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- » Su salud en su idioma
- Most Popular Links**
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 - » WIC
- Quick Links**
- » About Us
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 - » Diseases & Conditions
 - » Job Opportunities
 - » Local Health Services
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- Related Links**
- » California Health and Human Services Agency
 - » Department of Health Care Services (includes Medi-Cal)
 - » State Agencies Directory

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Healthcare Associated Infections (HAI) Program

The Healthcare Associated Infections (HAI) Program is one of three programs in the [Center for Health Care Quality](#) of the [California Department of Public Health](#). The Program is responsible for the surveillance, reporting, and prevention of infections in California's general acute care hospitals as mandated by Senate Bills 739, 1058, and 158. The Program was authorized in December 2009.

HAIs are the most common complication of hospital care and are listed among the top ten leading causes of death in the United States. It is estimated that each year there are more than 1.7 million infections, 99,000 deaths, and \$3.1 billion dollars in excess healthcare costs in acute care hospitals alone. Based on this data it is estimated that approximately 200,000 infections occur in California each year with an annual cost of about \$600 million - \$1.6 billion. The vision of the HAI Program is to eliminate HAIs for California patients.

Healthcare Associated Infections

New [HAI Information and Reports](#)
Links to All Pages on HAIs and Mandatory Public Reporting

Healthcare Associated Infections - Advisory Committee

New [HAI Advisory Committee](#)

Information for Infection Prevention Programs

- New** [AFLs, Legislation, and Regulations](#)
- New** [NHSN Guidance Specific to California Hospitals](#)
- » [Data Validation for Improving HAI Surveillance and Prevention](#)
- » [NHSN Analysis for Prevention Guidelines](#)
- » [Basics of Infection Prevention](#)
2 Day Mini Course
- » [California Infection Control and Prevention Guidelines](#)
- » [HAI Liaison Program - IP Assignments by County \(PDF, New Window\)](#)

Antimicrobial Resistance

- New** [Carbapenem-resistant Enterobacteriaceae](#)
- » [California Antibioqram Project](#)
- » [The California Antimicrobial Stewardship Program Initiative](#)

Influenza Information

- » [Healthcare Personnel Influenza Vaccination](#)
- » [Influenza Vaccination Information for Consumers](#)

Public Reporting - Healthcare Associated Infections

- New** [My Hospital 411 - Healthcare Associated Infections Interactive Map 2012 Data](#)
- New** [Central Line associated Bloodstream Infection \(CLABSI\) 2012](#)
- New** [Methicillin-resistant Staphylococcus aureus \(MRSA\) and Vancomycin-resistant Enterococcus \(VRE\) 2012](#)
- New** [Surgical Site Infections 2012](#)
- New** [Clostridium difficile Infection \(CDI\) 2012](#)

Public Reporting - Prevention Measures

- » [Central Line Insertion Practices \(CLIP\)](#)
- » [Healthcare Personnel Influenza Vaccination](#)
- » [Surgical Site Infection Prevention Measures Mandatory Reporting](#)

Long-Term Care (LTC)

New [Guidelines and Information for Long-Term Care Facilities \(LTCF\)](#)
Includes New Survey

Resources

- » [Selected links to the Association of Professionals in Infection Control and Hospital Epidemiology \(APIC\)](#)
- » [Selected links to the Centers for Disease Control and Prevention \(CDC\)](#)
- » [Selected links to the Society for Healthcare Epidemiology of America \(SHEA\)](#)
- » [Infectious Diseases Society of America \(IDSA\) \(New Window\)](#)
- » [UCSD Infection Prevention Course -- Designed to Meet CA SB 158 Requirements \(PDF, New Window\)](#)

Contact

- » [HAI Program](#)

For issues specific to California, NHSN help is also available from the CDPH HAI Program

www.cdph.ca.gov/hai

Includes tailored guides, slide sets, implementation tools

In Summary

NHSN is a surveillance system

- It is also the platform for recording data, which meets the regulatory reporting requirements for CDPH and CMS

This slide set provides only an introduction to NHSN

- Intent not to provide every detail (you wouldn't remember anyway)
- Enough information to get you started
- Available resources

The best way to begin NHSN surveillance?

- Take a deep breath and just start
- Find a mentor
- Consult with your designated HAI Program Liaison IP

Questions?

For more information, please contact any
HAI Liaison Team member.

Thank you