



NHSN Analysis Features

Maggie Dudeck, MPH, CPH
Division of Healthcare Quality
Promotion

SAFER • HEALTHIER • PEOPLE™



Objectives

- Define key terms in NHSN Analysis
- Discuss the dataset generation process
- Demonstrate how to run basic output options
- Demonstrate how to modify/customize output for your facility
- Interpret CLABSI and SSI rate tables



Where Do I Begin?

Answer: The Analysis option on the Navigation or “Nav” Bar

- The NHSN Nav Bar is the list of options or functions displayed on the left hand side of the screen.
- Click on **Analysis** to begin.



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
- Reporting Plan
- Patient
- Event
- Procedure
- Summary Data
- Analysis
- Survey
- Users
- Facility
- Group
- Log Out

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

Welcome to the NHSN Home Page.

← Nav Bar

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)).

Click on Analysis to begin



What Data Can I Access?

Answer: The data that have been entered by the users at your facility and that you have rights to access.

- In most cases, a user will have access to analyze all the data entered for a particular component at a facility.
- However, rights can be restricted (more on this later)



How Do I Access My Data?

Answer: A user can access facility data by generating analysis data sets and executing available output options.

- A user generates her own set of analysis data sets by selecting **Generate Datasets** in the Analysis section of the Nav Bar.
- Next, a user selects **Output Options** to view available choices.



Generate Datasets

- Generating datasets is the first step in performing analysis in NHSN
- Each user has their own analysis datasets
- May take several minutes to complete this process
- Do not log off of NHSN or navigate NHSN while datasets are generating!

Generate Datasets



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

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

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

NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as MAGGIE.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Generate Data Sets

[HELP](#)

Generate Patient Safety Analysis Data Sets

Date Last Generated

Jun 17 2009 10:40AM

Windows Internet Explorer



The current data sets will be overwritten.
Are you sure you want to continue?

OK


Cancel

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.

Back



Generate Datasets



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

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

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as MAGGIE.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Generate Data Sets

Data sets are being generated, Please Wait...

Events

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

Generate Datasets



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

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

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

NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as MAGGIE.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Generate Data Sets

[HELP](#)

Generate Patient Safety Analysis Data Sets

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

Jun 29 2009 10:21AM	<input type="button" value="Generate New"/>
---------------------	---

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.



How Do I Generate Output (Create Reports)?

Answer: A user can generate output by navigating the Analysis Output Options Treeview and clicking the **Run** button beside the desired output option.



Analysis Output Options Treeview

- Output options are organized by module with sub-sections that display like a branches of a tree.
 - “Guided” context
 - Device-Associated Module
 - Procedure-Associated Module
 - Medication-Associated Module
 - MDRO & CDAD Module
 - High Risk Inpatient Influenza Vaccination Module

Guided Context Collapsed Treeview



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

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

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

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as TCH.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) 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

**Collapsed Treeview
for Guided Context**

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



Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as TCH.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Patient Safety Component

Analysis Output Options

Expand All

Collapse All

- 📁 Device-Associated Module
 - 📁 All Device-Associated Events
 - 📁 Central Line-Associated BSI
 - 📁 Ventilator-Associated PNEU
 - 📁 Urinary Catheter-Associated UTI
 - 📁 Central Line Insertion Practices
 - 📁 Dialysis Events
- 📁 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

Each folder section of the Treeview can be expanded by clicking on either the folder icon or name

[NHSN Home](#)

[Reporting Plan](#)

[Patient](#)

[Event](#)

[Procedure](#)

[Summary Data](#)

[Import/Export](#)

[Analysis](#)

[Generate Data Sets](#)

[Output Options](#)

[Surveys](#)

[Users](#)

[Facility](#)

[Group](#)

[Log Out](#)



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

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

Patient Safety Component Analysis Output Options

Expand All Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - CDC Defined Output
 - Line Listing - All CLAB Events [Run] [Modify]
 - Frequency Table - All CLAB Events [Run] [Modify]
 - Bar Chart - All CLAB Events [Run] [Modify]
 - Pie Chart - All CLAB Events [Run] [Modify]
 - Rate Table - CLAB Data for ICU-Other [Run] [Modify]
 - Control Chart - CLAB Data for ICU-Other [Run] [Modify]
 - Rate Table - UCAB/CLAB Data for NICU [Run] [Modify]
 - Control Chart - UCAB/CLAB Data for NICU [Run] [Modify]
 - Rate Table - CLAB Data for SCA [Run] [Modify]
 - Control Chart - CLAB Data for SCA [Run] [Modify]

Each branch of the Treeview displays a list of pre-defined output options contained within a folder called CDC Defined Output



What Output Can I Generate?

Answer: A user can generate several types of output including line listings, frequency tables, pie charts, bar charts, rate tables, line plots, and control charts.

- Each output option uses a specific analysis data set from which to produce output.
- When an output option is executed, the output will be displayed in a separate browser window which then can be printed or saved as a file on a local computer workstation.



Can I Customize My Output?

Answer: A user can customize output by clicking the **Modify** button beside the desired output option, which then will display a page of design parameters that can be modified.

- Each user has the option to execute the modified output option by clicking the **Run** button at the bottom of the design page and/or save the modified output option by clicking the **Save As** button.



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

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

Patient Safety Component
Analysis Output Options

Expand All Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - CDC Defined Output
 - Line Listing - All CLAB Events
 - Frequency Table - All CLAB Events
 - Bar Chart - All CLAB Events
 - Pie Chart - All CLAB Events
 - Rate Table - CLAB Data for ICU-Other
 - Control Chart - CLAB Data for ICU-Other
 - Rate Table - UCAB/CLAB Data for NICU
 - Control Chart - UCAB/CLAB Data for NICU
 - Rate Table - CLAB Data for SCA
 - Control Chart - CLAB Data for SCA

Run	Modify
Run	Modify
Run	Modify
Run	Modify
Run	Modify
Run	Modify
Run	Modify
Run	Modify
Run	Modify
Run	Modify

The Modify button allows the user change the design of each Output option



NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Import/Export

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as TCH.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Line Listing

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

Modify Attributes of the Output:

Last Modified On: 08/18/2009

Output Type:

Output Name:

Output Title:

This page displays a list of parameters that can be modified to customize output

Select output format:

Output Format:

Use Variable Labels

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

Date Variable [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](#)

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:

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

Design Parameter Page

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

Patient Safety Component

Analysis Output Options

Expand All Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - CDC Defined Output
 - Line Listing - All CLAB Events
 - Frequency Table - All CLAB Events
 - Bar Chart - All CLAB Events
 - Pie Chart - All CLAB Events
 - Rate Table - CLAB Data for ICU-Other
 - Control Chart - CLAB Data for ICU-Other
 - Rate Table - UCAB/CLAB Data for NICU
 - Control Chart - UCAB/CLAB Data for NICU
 - Rate Table - CLAB Data for SCA
 - Control Chart - CLAB Data for SCA
 - Custom Output
 - Rate Table - CLAB Data for ICU-Other
 - My Custom Line Listing - All CLAB Events

Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	
Run	Modify	Delete
Run	Modify	Delete

Each user-modified output option design can be saved for later execution and is saved a Custom Output folder in the same branch of the Treeview



Analysis: Line Listing



Patient Safety Component

Analysis Output Options

Expand All

Collapse All

Device-Associated Module

All Device-Associated Events

Central Line-Associated BSI

CDC Defined Output

Line Listing - All CLAB Events

Frequency Table - All CLAB Events

Bar Chart - All CLAB Events

Pie Chart - All CLAB Events

Rate Table - CLAB Data for ICU-Other

Control Chart - CLAB Data for ICU-Other

Rate Table - UCAB/CLAB Data for NICU

Control Chart - UCAB/CLAB Data for NICU

Rate Table - CLAB Data for SCA

Control Chart - CLAB Data for SCA

Custom Output

Ventilator-Associated PNEU

Urinary Catheter-Associated UTI

Central Line Insertion Practices

Dialysis Events



Run Modify

Run Modify

Run Modify

Run Modify

Run Modify

Run Modify

Run Modify

Run Modify

Run Modify

Run Modify



Analysis: Line Listing



National Healthcare Safety Network

Line Listing for All Central Line-Associated BSI Events

As of: November 3, 2009 at 9:04 AM

Date Range: All CLAB_EVENTS

orgID	patID	dob	gender	admitDate	eventID	eventDate	eventType	spcEvent	location
10018	7425	09/22/1961	M	06/06/2005	1676	06/11/2005	BSI	LCBI	BMT
10018	MD-4937	09/19/1922	F	05/30/2005	1678	06/21/2005	BSI	LCBI	BMT
10018	85613	04/18/1951	M	07/08/2005	1685	07/13/2005	BSI	LCBI	S-ICU
10018	10222	01/04/1978	F	08/01/2005	1927	08/08/2005	BSI	LCBI	MICU
10018	01-88-145	10/07/1939	M	03/17/2006	3321	03/21/2006	BSI	LCBI	S-ICU
10018	122-501	02/29/1952	M	02/21/2006	4265	02/23/2006	BSI	LCBI	S-ICU
10018	34-22-100	03/22/1940	M	03/12/2006	4789	03/20/2006	BSI	LCBI	MICU
10018	86-990-01	12/12/1926	M	03/10/2006	4798	03/14/2006	BSI	LCBI	S-ICU
10018	26-22-678	03/28/2006	M	03/28/2006	4800	03/31/2006	BSI	LCBI	NICU
10018	32-54-731	02/21/1959	M	03/06/2006	4820	03/09/2006	BSI	LCBI	S-ICU
10018	13-19	04/18/1934	F	03/07/2006	4821	03/16/2006	BSI	LCBI	MICU
10018	44-18-004	08/16/1944	F	02/11/2006	4824	02/21/2006	BSI	LCBI	MICU
10018	44-66-88	06/23/1951	F	01/06/2006	4835	01/09/2006	BSI	LCBI	ICU/CCU
10018	55-67-9878	09/18/1977	M	03/22/2006	4839	03/27/2006	BSI	LCBI	ORT
10018	12-88-901	08/19/1955	M	04/10/2006	4939	04/12/2006	BSI	LCBI	S-ICU
10018	11-22-447	04/04/2006	F	04/04/2006	5017	04/11/2006	BSI	LCBI	NICU
10018	21-19-663	04/01/2006	M	04/01/2006	5018	04/11/2006	BSI	CSEP	NICU
10018	999-640	06/24/1955	F	05/07/2006	5764	07/03/2006	BSI	LCBI	ORT
10018	0000-00	01/01/1921	M	01/30/2007	7212	02/15/2007	BSI	LCBI	ORT
10018	12-99-800	02/12/1959	F	12/28/2006	7387	01/04/2007	BSI	LCBI	BMT



NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Import/Export

Analysis

▢ Generate Data Sets

▢ Output Options

Surveys

Users

Facility

Group

Log Out

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as TCH.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Line Listing

Analysis Data Set: **CLAB_Events**

Modify Attributes of the Output:

Last Modified On: **08/18/2009**

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

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

Specify Other Selection Criteria:

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

<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>

Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:



Design Parameter Page

Analysis: Line Listing



Line Listing

Analysis Data Set: CLAB_Events

Export Analysis Data Set

Modify Attributes of the Output:

Last Modified On: 11/03/2009

Output Type: Line Listing

Output Name: Line Listing - All CLAB Events

Output Title: Line Listing for All Central Line-Associated B

The option to export the analysis data set will include all data within the output option chosen, without modifications (i.e., it will not include any date parameters or other filtering).

Select output format:

Output Format: HTML

Use Variable Labels

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

Date Variable

Beginning

Ending

Period

Analysis: Line Listing



Line Listing

Analysis Data Set: CLAB_Events

Export Analysis Data Set

Modify Attributes of the Output:

Last Modified On: 11/03/2009

Output Type:

Line Listing

Output Name:

Line Listing - All CLAB Events

Output Title:

Line Listing for All Central Line-Associated BSI Events

The output name and title should be changed if you wish to save these modifications as a custom output option.

Select output format:

Output Format:

HTML

Use Variable Labels

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

Date Variable

Beginning

Ending

Period

Analysis: Line Listing



Select output format:

Output Format:

Use Variable Labels

The output formats available are: HTML, RTF, CSV, and PDF. NOTE: Some of these output formats may not apply for the selected output type.

You may wish to use variable labels, which provide clearer description of the variables in the output option. Using variable labels will make your output wider.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other Options:

[Print Variable Reference List](#)

By Clicking: [Modify List](#)

Analysis: Line Listing



All output can be restricted by time period. Date variables depend on the output type selected.

Select output format:

Output Format:

Use Variable Labels

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

Date Variable	Beginning	Ending	<input type="button" value="Clear Time Period"/>
<input type="text" value="evntDateYM"/>	<input type="text" value="01/2008"/>	<input type="text" value="11/2009"/>	

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

Specify Other Selection Criteria:

If saved as a custom output option, you may want to specify the time period each time the output option is run.

Entering Date Variables:
evntDate: 01/01/2009
evntDateYM: 01/2009
evntDateYQ: 2009Q1
evntDateYH: 2009H1
evntDateYr: 2009



Analysis: Line Listing

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

Date Variable	Beginning	Ending	Clear Time Period
evntDateYM <input type="button" value="v"/>	01/2008	11/2009	

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

Specify Other Selection Criteria:

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

<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>



Analysis: Line Listing



Specify Other Selection Criteria:

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

location				

Specify an operator and value(s) for selection criteria:

<u>Variable</u>	<u>Operator</u>	<u>Value(s)</u>
location	=	71 ICU CARDIAC (71ICU)

Save Clear Close

Analysis: Line Listing



Specify Other Selection Criteria:

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

location				
= 71ICU				

[Add Column+/-](#)

<u>Variable</u>	<u>Operator</u>	<u>Value(s)</u>
		71 ICU CARDIAC (71ICU) <input type="button" value="v"/>
		CARDIAC ICU (5G) <input type="button" value="v"/>
		72 NEURO UNIT (72N) <input type="button" value="v"/>
		ICU/CCU (ICU/CCU) <input type="button" value="v"/>
		<input type="button" value="v"/>
		<input type="button" value="v"/>
		<input type="button" value="v"/>
		<input type="button" value="v"/>
		<input type="button" value="v"/>
		<input type="button" value="v"/>
		<input type="button" value="v"/>

location

Analysis: Line Listing



Specify Other Selection Criteria:

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

location	clipBundle			
IN (71ICU, 5G, 72N, ICU/CCU)				



Analysis: Line Listing



Specify Other Selection Criteria:

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

mrsa	mssa			
= Y	= Y			

OR

This selection will give you a line listing of CLABSI event data where the pathogen is either MRSA or MSSA.

Analysis: Line Listing



Specify Other Selection Criteria:

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

location	mrsa			
IN (71ICU, ICU, MICU)	= Y			

AND

This selection will give you a line listing of CLABSI event data in only the 3 locations listed and only for those CLABSI events with MRSA.

Analysis: Line Listing



Specify Other Selection Criteria:

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

location	mrsa			
IN (71ICU, ICU, MICU)	= Y			

Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:

Run

Save As

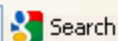
Reset

Back

Export Output
Data Set



Google



Search



1 / 27



Find

NHSN Variable Reference List

1

Variable Name	Label
abx_mean	NHSN ABX Pooled Mean
ABX_pct10	NHSN ABX 10th Percentile
ABX_pct25	NHSN ABX 25th Percentile
ABX_pct50	NHSN ABX 50th Percentile
ABX_pct75	NHSN ABX 75th Percentile
ABX_pct90	NHSN ABX 90th Percentile
ABXCount	ABX Incident Count
ABXFistulaCount	ABX Count Fistula
ABXGraftCount	ABX Count Graft
ABXPCLCount	ABX Count Perm Central Line
ABXPortCount	ABX Count Port
ABXRate	ABX Rate
abxStandards	Use ABX Susc Stds?
abxStart	In-unit IV Antimicrobial Start
ABXTCLCount	ABX Count Temp Central Line
abxTest	Perform Susc Testing?
abxTestPerf	Where Susc Testing Performed
abxTestPerfDesc	Where Susc Testing Performed
accessType	Access Type
acComment	ACS Test Method Comment
accRelBact	Access Related Bacteremia
ACINE	Organism MDR-Acinetobacter
ACINE_admPrevBldCount	ACINE Blood Admission Prevalence LabID Count
ACINE_admPrevCOCCount	ACINE CO Admission Prevalence LabID Count
ACINE_admPrevCount	ACINE Admission Prevalence LabID Count
ACINE_admPrevHCCCount	ACINE HCC Admission Prevalence LabID Count

Analysis: Line Listing



Specify Other Selection Criteria:

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

location	mrsa			
IN (71ICU, ICU, MICU)	= Y			

Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)



Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:

Run

Save As

Reset

Back

Export Output
Data Set

Analysis: Line Listing



Select Variables to include in Line Listing:

Available Variables		Selected Variables
cr_labNoOrg		orgID
cr_labPath		patID
cr_labSkinCon		dob
cr_ssApnea		gender
cr_ssBradycard		admitDate
cr_ssChills		eventID
cr_ssFever		eventDate
cr_ssHypoten		eventType
cr_ssHypotherm		spcEvent
customEventType	>>	location
devInsertDate		died
devInsertLoc	All >>	
disDateYH		Up
disDateYM	<<	Down
disDateYQ		
disDateYr	All <<	
dischargeDate		
ethnicity		
ethnicityDesc		
eventTypeDesc		
evntDateYH		
evntDateYM		
evntDateYQ		
evntDateYr		
evntToDisDays		
id2		
kleb		

Save Reset Close

Analysis: Line Listing



Specify Other Selection Criteria:

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

location	mrsa
IN (71ICU, ICU, MICU)	= Y

Other Options:

Modify Variables To Display By Clicking: [Modi](#)

Specify Sort Variables By Clicking: [Modify Lis](#)

Select Page by variable:

Select Sort Order in Line Listing:

Available Variables

customEventType
devInsertDate
devInsertLoc
died
disDateYH
disDateYM
disDateYQ
disDateYr
dischargeDate
dob
ethnicity
ethnicityDesc
eventID
eventType
eventTypeDesc
evntDateYH
evntDateYM
evntDateYQ
evntDateYr
evntToDisDays
gender
id2
kleb
lcbiPath
lcbiPathDesc
linkedproc
locCDC

Selected Variables

eventDate



All >>



All <<

Up

Down

Save

Reset

Close

Analysis: Line Listing




Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable: 



Run

Save As

Reset

Back

Export Output
Data Set

Analysis: Line Listing



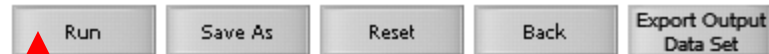
Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:



Analysis: Line Listing



SAS Output - Windows Internet Explorer

File Edit View Favorites Tools Help

Google Search

National Healthcare Safety Network
Line Listing for All Central Line-Associated BSI Events
As of: November 3, 2009 at 11:10 AM
Date Range: CLAB_EVENTS evtDateYM 2007M07 to 2009M07

Location=71ICU

Org ID	Patient ID	Date of Birth	Gender	Fac Admission Date	Event ID	Event Date	Event Type	Specific Event	Location	Died?
10018	KB1245	11/06/1952	M	12/28/2008	15334	01/05/2009	BSI	LCBI	71ICU	N
10018	MD-4003	03/22/1956	F	12/26/2008	14901	01/13/2009	BSI	LCBI	71ICU	N

Sorted by eventDate
Data contained in this report were last generated on November 3, 2009 at 8:37 AM.

National Healthcare Safety Network
Line Listing for All Central Line-Associated BSI Events
As of: November 3, 2009 at 11:10 AM
Date Range: CLAB_EVENTS evtDateYM 2007M07 to 2009M07

Location=MICU

Org ID	Patient ID	Date of Birth	Gender	Fac Admission Date	Event ID	Event Date	Event Type	Specific Event	Location	Died?
10018	2468	06/03/1952	F	06/18/2008	12046	06/30/2008	BSI	LCBI	MICU	N
10018	MD-321	07/12/1953	F	12/29/2008	14071	01/03/2009	BSI	LCBI	MICU	N

Analysis: Line Listing



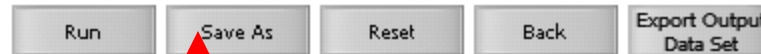
Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:



Analysis: Line Listing



Line Listing

✓ Analysis option saved successfully.

Analysis Data Set: CLAB_Events

of the Output:

Other Options:

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:

Analysis: Line Listing




Other Options:

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Location:

Line Listing

Analysis option published successfully. 

Analysis Data Set: CLAB_Events


Analysis: Line Listing



Other Options:

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable: 

Run

Save

Save As

Reset

Back

Publish

Export Output
Data Set

Analysis: Line Listing



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

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

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as MAGGIE.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

NHSN Home

Reporting Plan

Patient

Event

Procedure

Summary Data

Import/Export

Analysis

Generate Data Sets

Output Options

Surveys

Users

Facility

Group

Log Out

Export Output Options

Exporting Option Line Listing - MRSA CLABSI in select ICUs: Select data export format

Microsoft Access table (*.mdb)
Microsoft Access table (*.mdb)
Microsoft Access 97 table (*.mdb)
delimited file (comma-separated values) (*.csv)
delimited file (tab-delimited values) (*.txt)
Excel spreadsheet (*.xls)
Excel 5.0 or 7.0 (95) spreadsheet (*.xls)
dBASE 5.0, IV, III+, III, and II files (*.dbf)
SAS for Windows V7/8/9 (*.sas7bdat)

Export

Back

Analysis: Line Listing



Patient Safety Component
Analysis Output Options

Expand All Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - CDC Defined Output
 - Line Listing - All CLAB Events
 - Frequency Table - All CLAB Events
 - Bar Chart - All CLAB Events
 - Pie Chart - All CLAB Events
 - Rate Table - CLAB Data for ICU-Other
 - Control Chart - CLAB Data for ICU-Other
 - Rate Table - UCAB/CLAB Data for NICU
 - Control Chart - UCAB/CLAB Data for NICU
 - Rate Table - CLAB Data for SCA
 - Control Chart - CLAB Data for SCA
 - Custom Output
 - Line Listing - MRSA CLABSI in select ICUs
 - Ventilator-Associated PNEU
 - Associated UTI
- Advanced
- My Custom Output
 - Published Output
 - Device-Associated Module
 - Central Line-Associated BSI
 - Line Listing - MRSA CLABSI in select ICUs
- Advanced
- Output Sets

Analysis: Frequency Table



Patient Safety Component

Analysis Output Options

Expand All

Collapse All

Device-Associated Module

All Device-Associated Events

Central Line-Associated BSI

CDC Defined Output

Line Listing - All CLAB Events

Run

Modify

Frequency Table - All CLAB Events

Run

Modify

Bar Chart - All CLAB Events

Run

Modify

Pie Chart - All CLAB Events

Run

Modify

Rate Table - CLAB Data for ICU-Other

Run

Modify

Control Chart - CLAB Data for ICU-Other

Run

Modify

Rate Table - UCAB/CLAB Data for NICU

Run

Modify

Control Chart - UCAB/CLAB Data for NICU

Run

Modify

Rate Table - CLAB Data for SCA

Run

Modify

Control Chart - CLAB Data for SCA

Run

Modify

Custom Output

Ventilator-Associated PNEU

Urinary Catheter-Associated UTI

Infection Practices

Analysis: Frequency Table



National Healthcare Safety Network
 Frequency Table for All Central Line-Associated BSI Events
 As of: November 3, 2009 at 11:54 AM
 Date Range: All CLAB_EVENTS

Frequency Percent Row Pct Col Pct	Table of location by spcEvent			
	location	spcEvent		Total
		CSEP	LCBI	
3E	0	1	1	
	0.00	1.43	1.43	
	0.00	100.00		
	0.00	1.52		
3G	0	4	4	
	0.00	5.71	5.71	
	0.00	100.00		
	0.00	6.06		
5PEDCC	0	4	4	
	0.00	5.71	5.71	
	0.00	100.00		
	0.00	6.06		
NICU	4	5	9	
	5.71	7.14	12.86	
	44.44	55.56		
	100.00	7.58		
ORT	0	3	3	
	0.00	4.29	4.29	
	0.00	100.00		
	0.00	4.55		
S-ICU	0	10	10	
	0.00	14.29	14.29	
	0.00	100.00		
	0.00	15.15		
Total	4	66	70	
	5.71	94.29	100.00	

Frequency Percent Row Pct Col Pct	Table of location by spcEvent			
	location	spcEvent		Total
		CSEP	LCBI	
3E	0	1	1	
	0.00	1.43	1.43	
	0.00	100.00		
	0.00	1.52		
3G	0	4	4	
	0.00	5.71	5.71	
	0.00	100.00		
	0.00	6.06		

Analysis: Frequency Table



Frequency Table

Analysis Data Set: CLAB_Events

Modify Attributes of the Output:

Last Modified On: 11/03/2009

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 at the time you click the Run button

Specify Other Selection Criteria:

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

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

The top portion of the modification screen is the same for each output type.

Analysis: Frequency Table



Other Options:

[Print Variable Reference List](#)

Selected Variables to include in output:

Row: Column: Page by:

Frequency Table Options:

- Table percent - Display cell frequency divided by table total
- Missing - Include observations with missing values
- Print the table in list form

Two-Way Table Options:

- Row Percent - Display cell frequency divided by row total
- Column Percent - Display cell frequency divided by column total
- Expected - Expected cell frequencies
- Chi-square - Test for independence

These are the default settings for row & column variables and options.

Run

Save As

Reset

Back

Export Output
Data Set

Analysis: Frequency Table



Other Options: [Print Variable Reference List](#)

Selected Variables to include in output:

Row: Column: Page by:

Frequency Table Options:

- Table percent - Display cell frequency divided by table total
- Missing - Include observations with missing values
- Print the table in list form

Two-Way Table Options:

- Row Percent - Display cell frequency divided by row total
- Column Percent - Display cell frequency divided by column total
- Expected - Expected cell frequencies
- Chi-square - Test for independence

Run Save As Reset Back Export Output Data Set

You can change row &/or column variables and options to modify the table output.

Analysis: Frequency Table



National Healthcare Safety Network

Frequency Table for All Central Line-Associated BSI Events

As of: November 3, 2009 at 2:29 PM

Date Range: All CLAB_EVENTS




Example of modified table

Frequency Percent Row Pct	Table of location by mrsa			
	location	mrsa		Total
		N	Y	
	3E	1	0	1
		1.43	0.00	1.43
		100.00	0.00	
	5G	3	1	4
		4.29	1.43	5.71
		75.00	25.00	
	5PEDCC	3	1	4
		4.29	1.43	5.71
		75.00	25.00	
	61EAST	1	0	1
		1.43	0.00	1.43
		100.00	0.00	
	7 WEST	1	0	1
		1.43	0.00	1.43
		100.00	0.00	
	71ICU	4	2	6
		5.71	2.86	8.57
		66.67	33.33	
	72N	1	0	1
		1.43	0.00	1.43

Analysis: CLABSI Rate Tables



Expand All Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - CDC Defined Output
 - Line Listing - All CLAB Events
 - Frequency Table - All CLAB Events
 - Bar Chart - All CLAB Events
 - Pie Chart - All CLAB Events
 -  Rate Table - CLAB Data for ICU-Other
 - Control Chart - CLAB Data for ICU-Other
 -  Rate Table - UCAB/CLAB Data for NICU
 - Control Chart - UCAB/CLAB Data for NICU
 -  Rate Table - CLAB Data for SCA
 - Control Chart - CLAB Data for SCA
 - Custom Output
 - Ventilator-Associated PNEU
 - Urinary Catheter-Associated UTI
 - Central Line Insertion Practices

Analysis: Rate Table



National Healthcare Safety Network

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

As of: November 3, 2009 at 2:46 PM

Date Range: All CLAB_RATESICU

orgID=10018 loccdc=IN:ACUTE:CC:C

location	summaryYM	CLABCount	numCLDays	CLABRate	CLAB_Mean	IDR_pval	IDR_pctl	numPatDays	LineDU	LineDU_Mean	P_pval	P_pctl
5G	2007M01	0	106	0.0	2.1	0.8038	25	300	0.35	0.40	0.0599	56
5G	2007M02	0	204	0.0	2.1	0.6569	25	351	0.58	0.40	0.0000	89
5G	2007M03	0	180	0.0	2.1	0.6902	25	351	0.51	0.40	0.0000	75
5G	2007M04	0	181	0.0	2.1	0.6888	25	306	0.59	0.40	0.0000	89
5G	2007M05	0	290	0.0	2.1	0.5503	25	404	0.72	0.40	0.0000	93
5G	2007M06	1	148	6.8	2.1	0.2628	94	366	0.40	0.40	0.4376	56
5G	2007M07	0	122	0.0	2.1	0.7778	25	384	0.32	0.40	0.0007	34
5G	2007M08	1	200	5.0	2.1	0.3377	88	354	0.56	0.40	0.0000	89
5G	2007M09	0	203	0.0	2.1	0.6583	25	387	0.52	0.40	0.0000	75
5G	2007M10	0	106	0.0	2.1	0.8038	25	315	0.34	0.40	0.0137	34
5G	2007M11	0	113	0.0	2.1	0.7923	25	374	0.30	0.40	0.0001	34
5G	2007M12	0	108	0.0	2.1	0.8005	25	316	0.34	0.40	0.0218	34
5G	2009M01	0	100	0.0	2.1	0.8138	25	300	0.33	0.40	0.0118	34
ICU/CCU	2006M01	1	412	2.4	2.1	0.5720	68	644	0.64	0.40	0.0000	89
ICU/CCU	2007M01	2	131	15.3	2.1	0.0305	100	218	0.60	0.40	0.0000	89
ICU/CCU	2007M02	1	181	5.5	2.1	0.3112	90	246	0.74	0.40	0.0000	93
ICU/CCU	2007M03	1	103	9.7	2.1	0.1912	100	171	0.60	0.40	0.0000	89

Analysis: CLABSI Rate Tables



National Healthcare Safety Network

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

As of: September 22, 2009 at 1:28 PM

Date Range: All CLAB_RATESICU

orgID=10018 loccdc=IN:ACUTE:CC:M

NHSN aggregate data
and comparative statistics

location	summaryYM	CLABCount	numCLDays	CLABRate	CLAB_Mean	IDR_pval	IDR_pctl	numPatDays	LineDU	LineDU_Mean	P_pval	P_pctl
MICU	2005M06	0	110	0.0	2.4	0.7714	10	299	0.37	0.58	0.0000	23
MICU	2005M07	0	266	0.0	2.4	0.5339	10	401	0.66	0.58	0.0004	78
MICU	2005M08	1	238	4.2	2.4	0.4296	80	494	0.48	0.58	0.0000	39
MICU	2005M09	0	288	0.0	2.4	0.5069	10	447	0.64	0.58	0.0030	58
MICU	2006M01	0	214	0.0	2.4	0.6036	10	439	0.49	0.58	0.0001	39
MICU	2006M02	1	302	3.3	2.4	0.5096	71	481	0.63	0.58	0.0168	58
MICU	2006M03	2	169	11.8	2.4	0.0612	100	401	0.42	0.58	0.0000	23
MICU	2006M11	0	100	0.0	2.4	0.7899	10	388	0.26	0.58	0.0000	13
MICU	2007M01	0	115	0.0	2.4	0.7624	10	330	0.35	0.58	0.0000	13
MICU	2007M02	0	219	0.0	2.4	0.5965	10	309	0.71	0.58	0.0000	78
MICU	2007M03	0	114	0.0	2.4	0.7642	10	385	0.30	0.58	0.0000	13

Analysis: Rate Table



Other Options:

[Print Variable Reference List](#)

Group by:

summaryYM ▼

Show Histogram

Run

Save As

Reset

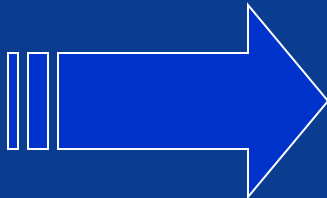
Back

Export Output
Data Set

Analysis: Rate Table



Group by:

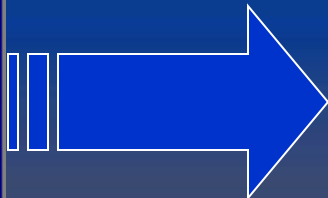


National Healthcare Safety Network
 Rate Table for Central Line-Associated BSI Data for ICU-Other
 As of: November 3, 2009 at 2:55 PM
 Date Range: All CLAB_RATESICU
 orgID=10018 loccdc=IN:ACUTE:CC:C

location	summaryYr	months	clabcount	numclays	CLABRate	CLAB_Mean	IDR_pval
5G	2007	12	2	1961	1.0	2.1	0.2324
5G	2009	1	0	100	0.0	2.1	0.8138
ICU/CCU	2006	1	1	412	2.4	2.1	0.5720
ICU/CCU	2007	3	4	415	9.6	2.1	0.0113
ICU/CCU	2009	1	0	30	0.0	2.1	0.9401

Source of data: NHSN Report, Am J Infect Control 2008;36:609-26
 Report last generated on Nov 3, 2009 at 2:55 PM

Group by:



National Healthcare Safety Network
 Rate Table for Central Line-Associated BSI Data for ICU-Other
 As of: November 3, 2009 at 2:58 PM
 Date Range: All CLAB_RATESICU
 orgID=10018 loccdc=IN:ACUTE:CC:C

location	clabcount	numclays	CLABRate	CLAB_Mean	IDR_pval	IDR_pct
5G	2	2061	1.0	2.1	0.2043	
ICU/CCU	5	857	5.8	2.1	0.0340	

Source of data: NHSN Report, Am J Infect Control 2008;36:609-26
 Report last generated on Nov 3, 2009 at 2:58 AM

Analysis: CLABSI Rate Tables



National Healthcare Safety Network

Rate Table for Umb Cath/Central Line-Associated BSI Data for NICU

As of: September 22, 2009 at 1:31 PM

Date Range: All CLAB_RATESNICU

orgID=10018 loccdc=IN:ACUTE:CC:NURS

Non-umbilical CLABSI Rates (CLAB rate)

location	birthwtcode	clabcount	numcldays	CLABRate	CLAB_Mean	IDR1_pval	IDR1_pctl	numpatdays	LineDU	LineDU_Mean	P1_pval	P1_pctl
NICU	A	0	172	0.0	3.7	0.5294	25	504	0.34	0.34	0.4911	29
NICU	B	0	116	0.0	3.3	0.6791	25	375	0.31	0.32	0.4104	47
NICU	C	0	109	0.0	2.6	0.7551	25	290	0.38	0.23	0.0000	91
NICU	D	0	124	0.0	2.4	0.7459	25	580	0.21	0.16	0.0005	75
NICU	E	0	111	0.0	2.0	0.7972	50	406	0.27	0.20	0.0001	90

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on September 11, 2009 at 9:05 AM.

National Healthcare Safety Network

Rate Table for Umb Cath/Central Line-Associated BSI Data for NICU

As of: September 22, 2009 at 1:31 PM

Date Range: All CLAB_RATESNICU

orgID=10018 loccdc=IN:ACUTE:CC:NURS

Umbilical Catheter CLABSI Rates (UCAB rate)

location	birthwtcode	ucabcount	numumbcdays	UCABRate	UCAB_Mean	IDR2_pval	IDR2_pctl	numpatdays	UmbCDU	UmbCDU_Mean	P2_pval	P2_pctl
NICU	A	0	202	0.0	4.7	0.3860	50	504	0.40	0.11	0.0000	97
NICU	B	1	160	6.3	2.6	0.3397	82	375	0.43	0.10	0.0000	99
NICU	C	2	124	16.1	1.9	0.0242	100	290	0.43	0.08	0.0000	100
NICU	D	0	360	0.0	0.9	0.7183	75	580	0.62	0.07	0.0000	100
NICU	E	0	157	0.0	1.0	0.8604	75	406	0.39	0.10	0.0000	100

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on September 11, 2009 at 9:05 AM.

Analysis: CLABSI Rate Tables



National Healthcare Safety Network

Rate Table for Central Line-Associated BSI Data for SCA

As of: September 22, 2009 at 1:38 PM

Date Range: All CLAB_RATESSCA

Permanent Central Line CLABSI Rates (PCLAB Rate)

orgID=10018 loccdc=IN:ACUTE:SCA:BMT

location	pclabcount	numpcldays	PCLABRate	PCLAB_Mean	IDR1_pval	IDR1_pctl	numpatdays	PLineDU	PLineDU_Mean	P1_pval	P1_pctl
BMT	0	558	0.0	3.9	0.1139	.	1790	0.31	0.67	0.0000	.

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on September 11, 2009 at 9:05 AM.

National Healthcare Safety Network

Rate Table for Central Line-Associated BSI Data for SCA

As of: September 22, 2009 at 1:38 PM

Date Range: All CLAB_RATESSCA

Temporary Central Line CLABSI Rates (TCLAB Rate)

orgID=10018 loccdc=IN:ACUTE:SCA:BMT

location	tclabcount	numtcldays	TCLABRate	TCLAB_Mean	IDR2_pval	IDR2_pctl	numpatdays	TLineDU	TLineDU_Mean	P2_pval	P2_pctl
BMT	5	481	10.4	.	.	.	1790	0.27	.	.	.

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on September 11, 2009 at 9:05 AM.

Interpreting CLABSI Rates



Location	Birth Wt Code	CLA BSI Count	Central Line Days	CLA BSI Rate	NHSN CLAB Pooled Mean	Incidence Density p-value #1	Incidence Density Percentile #1	Patient Days	CL Util Ratio	NHSN Line DU Pooled Mean	Proportion p-value #1	Proportion Percentile #1
NICU3	A	0	248	0.0	6.4	0.2049	10	552	0.45	0.32	0.0000	68
NICU3	B	4	214	18.7	4.4	0.0158	97	549	0.39	0.31	0.0000	65
NICU3	C	1	240	4.2	4.8	0.6764	54	730	0.33	0.23	0.0000	67
NICU3	D	0	162	0.0	4.2	0.5068	50	490	0.33	0.17	0.0000	79
NICU3	E	0	61	0.0	3.1	0.8277	50	335	0.18	0.21	0.0893	66

- This table shows data for a Neonatal ICU (NICU).
- During the time period, the NICU reported 4 central line-associated BSIs and a total of 214 days in which patients had central lines (central line days) in birthweight category B (751-1000 grams).
- Dividing 4 (numerator) by 214 (denominator) and multiplying by 1000 gives this birthweight category in the NICU a CLABSI rate of 18.7 per 1000 central line days.

Interpreting CLABSI Rates



Location	Birth Wt Code	CLA BSI Count	Central Line Days	CLA BSI Rate	NHSN CLAB Pooled Mean	Incidence Density p-value #1	Incidence Density Percentile #1	Patient Days	CL Util Ratio	NHSN Line DU Pooled Mean	Proportion p-value #1	Proportion Percentile #1
NICU3	A	0	248	0.0	6.4	0.2049	10	552	0.45	0.32	0.0000	68
NICU3	B	4	214	18.7	4.4	0.0158	97	549	0.39	0.31	0.0000	65
NICU3	C	1	240	4.2	4.8	0.6764	54	730	0.33	0.23	0.0000	67
NICU3	D	0	162	0.0	4.2	0.5068	50	490	0.33	0.17	0.0000	79
NICU3	E	0	61	0.0	3.1	0.8277	50	335	0.18	0.21	0.0893	66

- When compared to the NHSN mean rate of 4.4, this NICUs rate is at the 97th percentile, which means that 97% of all reporting NICUs in that birthweight category had a rate at or below this one.
- The p-value indicates that the difference in these two incidence density rates is statistically significant ($p = 0.0158$).

Interpreting CLABSI Rates



Location	Birth Wt Code	CLA BSI Count	Central Line Days	CLA BSI Rate	NHSN CLAB Pooled Mean	Incidence Density p-value #1	Incidence Density Percentile #1	Patient Days	CL Util Ratio	NHSN Line DU Pooled Mean	Proportion p-value #1	Proportion Percentile #1
NICU3	A	0	248	0.0	6.4	0.2049	10	552	0.45	0.32	0.0000	68
NICU3	B	4	214	18.7	4.4	0.0158	97	549	0.39	0.31	0.0000	65
NICU3	C	1	240	4.2	4.8	0.6764	54	730	0.33	0.23	0.0000	67
NICU3	D	0	162	0.0	4.2	0.5068	50	490	0.33	0.17	0.0000	79
NICU3	E	0	61	0.0	3.1	0.8277	50	335	0.18	0.21	0.0893	66

- There were 549 patient days reported for this birthweight category in the NICU during this time period.
- Dividing 214 (central line days) by 549 yields a device utilization ratio of 0.39.
- When compared to the NHSN mean device utilization ratio of 0.31, this NICU's device utilization ratio for birthweight category B is at the 65th percentile, which means that 65% of all reporting NICUs in this birthweight category had a ratio at or below this one.
- The p-value indicates that the difference in these two ratios is statistically significant ($p < 0.00001$).

Analysis: SSI Rate Tables



Patient Safety Component

Analysis Output Options

Expand All

Collapse All

Device-Associated Module

Procedure-Associated Module

All Procedure-Associated Events

SSI

CDC Defined Output

Line Listing - All SSI Events

Run Modify

Frequency Table - All SSI Events

Run Modify

Bar Chart - All SSI Events

Run Modify

Pie Chart - All SSI Events

Run Modify

SIR Table - SSI Data by Procedure

Run Modify

SIR Table - SSI Data by Surgeon

Run Modify

Rate Table - SSI Data by Procedure and Risk Index

Run Modify

Control Chart - SSI Data by Procedure and Risk Index

Run Modify

Rate Table - Specific Event SSI Rates by Procedure

Run Modify

Control Chart - Specific Event SSI Data by Procedure

Run Modify

Rate Table - SSI Data by Surgeon, Procedure, and...more

Run Modify

Control Chart - SSI Data by Surgeon, Procedure, ...more

Run Modify

Post-Procedure PNEU

Procedure-Associated Module

Modify Output: SSI Rate Table



Use Variable Labels

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

Date Variable: summaryYr
Beginning: 2008
Ending: 2008

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

Specify Other Selection Criteria

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

Variable	Operator	Value(s)
procCode		
IN (CBGB, CBGC, COLO, KPRO)		

Specify an operator and value(s) for selection criteria:

[Add Column+/-](#)

Variable	Operator	Value(s)
procCode	in	CBGB - Coronary bypass w/ chest & donor incisions
		CBGC - Coronary bypass graft with chest incision
		COLO - Colon surgery
		KPRO - Knee prosthesis

Other Options:

[Print Variable Reference List](#)

Group by:

summaryYr



SSI Rate Table

National Healthcare Safety Network

Rate Table for Surgical Site Infection Data by Procedure and Risk Index

As of: September 29, 2009 at 6:43 PM

Date Range: SSI_RATESPROC_RISK summaryYr 2008 to 2008

Org ID=10018

Procedure Code	Risk Category	Performed in Outpatient Setting?	summaryYr	months	SSI Count	Procedure Count	SSI Rate	NHSN SSI Pooled Mean	Proportion p-value	Proportion Percentile
CBGB	0	N	2008	1	0	1	0.00	0.30	0.9970	.
CBGB	1	N	2008	5	8	52	15.38	2.96	0.0000	100
CBGB	2,3	N	2008	2	1	3	33.33	4.88	0.1396	100
CBGC	0,1	N	2008	1	0	1	0.00	1.63	0.9837	50
CBGC	2,3	N	2008	1	0	1	0.00	2.88	0.9713	.
COLO	1	N	2008	1	1	1	100.00	6.07	0.0608	100
COLO	3	N	2008	1	0	1	0.00	10.86	0.8915	.
KPRO	0	N	2008	2	0	2	0.00	0.68	0.9865	25
KPRO	1	N	2008	3	0	6	0.00	1.12	0.9345	25
KPRO	2,3	N	2008	3	0	8	0.00	1.82	0.8632	25

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on August 18, 2009 at 7:28 PM.

Interpreting SSI Rates



Procedure Code	Risk Category	Performed in Outpatient Setting?	summaryYr	months	SSI Count	Procedure Count	SSI Rate	NHSN SSI Pooled Mean	Proportion p-value	Proportion Percentile
CBGB	0	N	2008	1	0	1	0.00	0.30	0.9970	
CBGB	1	N	2008	5	8	52	15.38	2.96	0.0000	100
CBGB	2,3	N	2008	2	1	3	33.33	4.88	0.1396	100
CBGC	0,1	N	2008	1	0	1	0.00	1.63	0.9837	50
CBGC	2,3	N	2008	1	0	1	0.00	2.88	0.9713	.
COLO	1	N	2008	1	1	1	100.00	6.07	0.0608	100
COLO	3	N	2008	1	0	1	0.00	10.86	0.8915	.
KPRO	0	N	2008	2	0	2	0.00	0.68	0.9865	25
KPRO	1	N	2008	3	0	6	0.00	1.12	0.9345	25
KPRO	2,3	N	2008	3	0	8	0.00	1.82	0.8632	25

- During 5 months of 2008, this hospital found 8 SSI following 52 CBGB risk category 1 operations resulting in an SSI rate of 15.38%.
- The pooled NHSN mean rate for this same procedure-risk category was 2.96%. When the hospital's rate and the NHSN rate are compared, the hospital's rate is significantly higher ($p < 0.00001$).
- The hospital's rate falls at the 100th percentile meaning that no other hospital whose data were included in the pooled NHSN mean had a rate higher than this one.

Analysis: Other SSI Tables



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

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

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as TCH.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Patient Safety Component Analysis Output Options

Expand All

Collapse All

Device-Associated Module

Procedure-Associated Module

All Procedure-Associated Events

SSI

CDC Defined Output

Line Listing - All SSI Events

Run Modify

Frequency Table - All SSI Events

Run Modify

Bar Chart - All SSI Events

Run Modify

Pie Chart - All SSI Events

Run Modify

→ SIR Table - SSI Data by Procedure

Run Modify

→ SIR Table - SSI Data by Surgeon

Run Modify

Rate Table - SSI Data by Procedure and Risk Index

Run Modify

→ Control Chart - SSI Data by Procedure and Risk Index

Run Modify

Rate Table - Specific Event SSI Rates by Procedure

Run Modify

→ Control Chart - Specific Event SSI Data by Procedure

Run Modify

Rate Table - SSI Data by Surgeon, Procedure, and...more

Run Modify

→ Control Chart - SSI Data by Surgeon, Procedure, ...more

Run Modify

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



National Healthcare Safety Network
 SIR for Surgical Site Infection Data by Procedure

As of: November 3, 2009 at 3:05 PM

Date Range: All SSI_RATESPROC_RISK

orgid=10018

procCode	outpatient	summaryYr	infCount	numExp	procCount	SIR	SIR_pval	SIR95CI
CARD	N	2006	1	0.6534	42	1.53	0.4797	
CARD	N	2007	0	0.603	40	0.00	0.5472	
CARD	N	2008	0	0.3105	21	0.00	0.7331	
CBGB	N	2006	2	1.2224	40	1.64	0.3455	0.005, 10.363
CBGB	N	2007	2	0.7992	27	2.50	0.1909	0.008, 15.85
CBGB	N	2008	9	1.6886	56	5.33	0.0001	1.212, 14.465
CBGB	N	2009	3	0.8608	20	3.49	0.0566	0.103, 16.906
HPRO	N	2006	3	2.0583	115	1.46	0.3391	0.043, 7.07
HPRO	N	2007	4	1.3014	72	3.07	0.0432	0.206, 12.552
HPRO	N	2008	1	0.9297	48	1.08	0.6053	
HPRO	N	2009	0	0.3675	26	0.00	0.6925	

If infCount in this table is less than you reported, either element(s) of the risk index are missing or operative procedures were performed for which aggregate data are not available to calculate numExp.

See the table below for excluded procedures.

95% Confidence Interval is only calculated if infCount > 1

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on November 3, 2009 at 8:37 AM.



National Healthcare Safety Network Procedures Performed But Not Included in SIR

As of: November 3, 2009 at 3:05 PM

Date Range: All SSI_RATESPROC_RISK

orgID=10018

orgID	procCode	outpatient	summaryYr	proccount
10018	CARD	N	2006	1
10018	CARD	N	2007	3
10018	CBGB	N	2006	2
10018	CBGB	N	2007	16

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on November 3, 2009 at 8:37 AM.




Standardized Infection Ratio (SIR)

Ratio of


Observed (O) rate to Expected (E)
rate

- or equivalently -

Observed # events to Expected #
events



Example of Calculating SIR: Hospital



$$\text{SIR} = \text{O}/\text{E}$$

To calculate E, multiply the number of operations in a procedure-risk category performed by the hospital times the corresponding standard population's rate and divide by 100 and sum across the procedure-risk categories.



SIR by Procedure

National Healthcare Safety Network

SIR for Surgical Site Infection Data by Procedure

As of: September 29, 2009 at 6:47 PM

Date Range: SSI_RATESPROC_RISK summaryYr 2008 to 2008

Org ID=10018

$$SIR = O / E$$

Procedure Code	Performed in Outpatient Setting?	summaryYr	infCount	Number Expected	Procedure Count	SIR	SIR p-value	95% Confidence Interval
CBGB	N	2008	9	1.6886	56	5.33	0.0001	1.212, 14.465
CBGC	N	2008	0	0.0451	2	0.00	0.9559	
COLO	N	2008	1	0.1693	2	5.91	0.1557	
KPRO	N	2008	0	0.2264	16	0.00	0.7974	

If infCount in this table is less than you reported, either element(s) of the risk index are missing or operative procedures were performed for which aggregate data are not available to calculate numExp.

See the table below for excluded procedures.

95% Confidence Interval is only calculated if infCount > 1

Source of aggregate data: NHSN Report, Am J Infect Control 2008;36:609-26

Data contained in this report were last generated on August 18, 2009 at 7:28 PM.



Interpreting the SIR

- If $O = E$, no difference
- If $O > E$, more SSI compared to standard
- If $O < E$, fewer SSI than standard
 - Be sure that case-finding has been adequate



Advanced Analysis Options Procedure Line List

Advanced

[Create New custom Option](#)

- Folder: Patient-level Data
- Folder: Event-level Data
- Folder: Procedure-level Data
 - Folder: CDC Defined Output
 - Line Listing - All Procedures
 - Frequency Table - All Procedures
 - Bar Chart - All Procedures
 - Pie Chart - All Procedures
- Folder: Summary-level Data
- Folder: Plan Data
- Folder: Pathogen-level Data
- Folder: Facility-level Data
- Folder: Group-level Data

Advanced Analysis Options Procedure Line List



National Healthcare Safety Network

Line Listing for All Procedures

As of: November 3, 2009 at 4:14 PM

Date Range: PROCEDURES procDateYr 2009 to 2009

procCode=CBGB

patID	dob	gender	procID	procDate	procCode	implant	risk	asa	procDurationHr	procDurationMin	swClass
MD-3001	11/16/1954	M	15585	02/02/2009	CBGB	Y	1	4	4	21	C
MD-3004	01/25/1938	F	15586	02/23/2009	CBGB	Y	1	4	4	45	C
MD-3006	02/18/1961	M	15587	02/04/2009	CBGB	Y	2	4	5	4	C
MD-3007	06/14/1938	M	15588	02/13/2009	CBGB	Y	2	4	5	9	C
MD-3008	07/25/1960	M	15589	02/09/2009	CBGB	Y	2	4	5	21	C
MD-3009	05/25/1945	M	15590	02/18/2009	CBGB	Y	2	4	5	44	C
MD-3011	09/09/1940	M	15591	02/03/2009	CBGB	Y	2	3	5	51	C
MD-3012	07/07/1934	M	15592	02/19/2009	CBGB	Y	2	3	5	41	C
MD-3013	12/28/1942	M	15593	02/04/2009	CBGB	Y	2	4	6	21	C
MD-3014	09/25/1946	M	15594	02/18/2009	CBGB	Y	2	3	6	24	C
MD-3015	12/04/1938	F	15595	02/04/2009	CBGB	Y	2	3	8	31	C
MD-3016	11/15/1952	F	15596	02/27/2009	CBGB	Y	2	3	6	8	C
MD-3017	03/12/1934	M	15597	02/09/2009	CBGB	Y	1	4	3	43	C
MD-3018	11/01/1934	M	15598	02/09/2009	CBGB	Y	1	4	4	43	C
MD-3019	03/14/1923	M	15599	02/03/2009	CBGB	Y	1	4	4	39	C
MD-3020	06/19/1961	M	15600	02/19/2009	CBGB	Y	2	3	5	52	C
MD-3021	08/22/1950	M	15601	02/10/2009	CBGB	Y	2	4	10	37	C
MD-3022	04/30/1953	M	15602	02/25/2009	CBGB	Y	1	4	3	24	C
1240000	06/15/1944	M	15861	03/14/2009	CBGB	Y	2	3	5	20	C
MD-2020	03/14/1946	F	15891	06/01/2009	CBGB	Y	2	3	5	13	C








Advanced Analysis Options

Event Line List with Pathogens



Advanced

[Create New custom Option](#)

- Folder: Patient-level Data
- Folder: Event-level Data
 - Folder: CDC Defined Output
 -   Line Listing - All Events Run Modify
 -  Frequency Table - All Events Run Modify
 -  Bar Chart - All Events Run Modify
 -  Pie Chart - All Events Run Modify
 -  Line Listing - All CDC Infections Run Modify
 -  User-Defined Rate Table - All Events Run Modify
- Folder: Procedure-level Data
- Folder: Summary-level Data
- Folder: Plan Data
- Folder: Pathogen-level Data
- Folder: Facility-level Data
- Folder: Group-level Data

Advanced Analysis Options Event Line List with Pathogens



National Healthcare Safety Network

Line Listing for All Events

As of: November 3, 2009 at 4:24 PM

Date Range: All EVENTS

patID	dob	gender	admitDate	eventID	eventDate	eventType	location	pathogenDesc1	pathogenDesc2	pathogenDesc3
7425	09/22/1961	M	06/06/2005	1676	06/11/2005	BSI	BMT	MORCA - Moraxella catarrhalis		
MD-4937	09/19/1922	F	05/30/2005	1678	06/21/2005	BSI	BMT	ENTFS - Enterococcus faecalis	CA - Candida albicans	CNS - Staphylococcus coagulase negative
85613	04/18/1951	M	07/08/2005	1685	07/13/2005	BSI	S-ICU	CNS - Staphylococcus coagulase negative	CA - Candida albicans	
10222	01/04/1978	F	08/01/2005	1927	08/08/2005	BSI	MICU	ACBA - Acinetobacter baumannii		
01-88-145	10/07/1939	M	03/17/2006	3321	03/21/2006	BSI	S-ICU	ACBA - Acinetobacter baumannii		
122-501	02/29/1952	M	02/21/2006	4265	02/23/2006	BSI	S-ICU	ENTFM - Enterococcus		



Questions?

For more information:

- Visit
<http://www.cdc.gov/nhsn>
- Email nhsn@cdc.gov