

Alabama Healthcare-associated Infections Reporting and Prevention Program Module 3: CLABSI, CAUTI, and SSI NHSN Review Training

**Satellite Conference and Live Webcast
Thursday, August 19, 2010
1:00 - 3:00 p.m. Central Time**

Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division

Faculty

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Alabama Department of Public Health



Objectives

- **At the end of this module the learner will be able to:**
 - **Identify and define the required National Healthcare Associated Infection Targets to be reported by healthcare facilities in Alabama**
 - **CLABSI**
 - **CAUTI**
 - **SSI**

Objectives

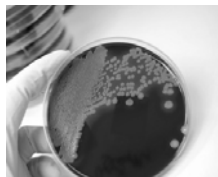
- **Discuss collection of denominator and numerator data employed by NHSN mentors**
 - **NHSN forms**
 - **Hospital facility specific data collection plan strategies**
 - **Provide examples of data collection tools and plans**

Objectives

- **Discuss entry of denominator and numerator data into NHSN**
- **Discuss the Implications of the Centers for Medicare & Medicaid**
- **Services (CMS) HAI reporting mandates for January 2011**

CLABSI Definition

- A Central Line Blood Stream Infection is a primary BSI in a patient that had a Central Line within the 48 hour period before the development of the BSI



What is a Central Line?

- An intravascular catheter that terminates at or close to the heart or in one of the great vessels which is used for infusion, withdrawal of blood, or hemodynamic monitoring



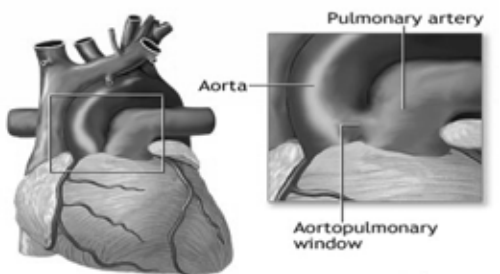
The Great Vessels as Noted by NHSN

- Aorta
- Superior Vena Cava
- Pulmonary Artery
- Brachiocephalic Veins
- Internal Jugular Veins
- Subclavian Veins

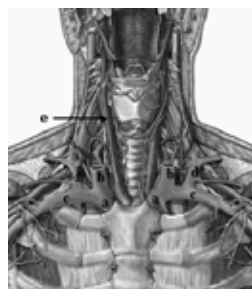
The Great Vessels as Noted by NHSN

- Inferior Vena Cava
- External Iliac Veins
- Common Femoral Veins

The Great Vessels as Noted by NHSN

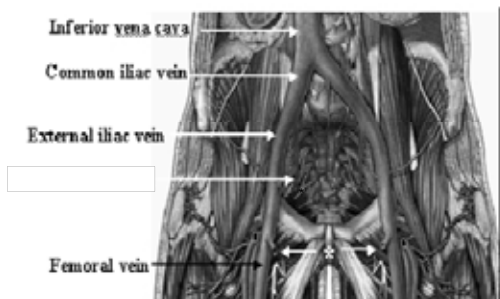


The Great Vessels as Noted by NHSN



- Brachiocephalic vein
- Internal jugular vein
- Subclavian vein

The Great Vessels as Noted by NHSN



NHSN Location Types Where CLABSI Events Can be Monitored

1. Intensive Care Unit (ICU)
2. Specialty Care Area (SCA)
 - a) Hematology/Oncology Unit
 - b) Bone Marrow/Stem Cell Transplant Unit
 - c) Solid Organ Transplant Unit

NHSN Location Types Where CLABSI Events Can be Monitored

- d) Acute Inpatient Dialysis Unit
- e) Long-Term Acute Care
- f) Neonatal Intensive Care Unit
- g) Any other inpatient care location in which central line days and patient days can be collected
 - Surgical ward

Alabama Location Types Where CLABSI Events Will be Monitored

- Central Line-associated Bloodstream Infections (CLABSI) from the following critical care units within a healthcare facility
 1. Medical Critical Care Units
 2. Surgical Critical Care Units

Alabama Location Types Where CLABSI Events Will be Monitored

3. Medical/Surgical Critical Care Units
4. Pediatric Critical Care Units

Alabama Location Types Where CLABSI Events Will be Monitored

- “Critical Care Unit” means a care area that provides intensive observation, diagnosis, and therapeutic procedures for adults or children or both who are critically ill

Alabama Location Types Where CLABSI Events Will be Monitored

– Care areas that provide step-down, intermediate care, or telemetry only, and specialty care areas are excluded

Steps to Determining if a Patient has a CLABSI

- 1a. Did the patient have a Central Line or umbilical catheter at the time of or within 48 hours before the onset of the event?
- 1b. Does the patient's S/S meet criterion 1, 2, or 3 of the NHSN CLABSI protocol?

To Which Location Should the CLABSI be Attributed?

- 2a. Where was the patient located on the date the first clinical evidence appeared or the date the specimen used to meet the BSI criteria was collected, whichever came first? _____

To Which Location Should the CLABSI be Attributed?

- 2b. Is this location different from the client's present location?

If yes, proceed to 2c. If no, skip to 2e.

To Which Location Should the CLABSI be Attributed?

- 2c. Was the patient transferred with the CL/UC or after the CL/UC was removed, to the present location in the same facility within 48 hours?

If yes, the transferring unit will be attributed with the CLABSI proceed to 2e. If no, proceed to 2d.

To Which Location Should the CLABSI be Attributed?

- 2d. Was the patient transferred with the CL/UC or after a CL/UC was removed to the present location from an external facility within 48 hours?

*If yes, the transferring hospital should report the CLABSI; if a healthcare facility in AL, the transferring facility should proceed to 2e if no, STOP***

To Which Location Should the CLABSI be Attributed?

□2e. Is the location noted in items 2a, 2c or 2d, a *critical care unit?

If yes, this data is required for CLABSI reporting by ADPH.

****If no, not required to report for ADPH.**

Key Points for CLABSI

- All criterion require that the signs or symptoms are not related to an infection in another part of the body
- Criterion 1 and 2 both require positive culture results
 - Positive for recognized pathogen for criterion 1 versus common skin contaminant as with criterion 2

KEY Points for CLABSI

- Criterion 2 requires positive culture and symptoms
 - Blood cultures should be drawn using acceptable techniques
- Criterion 3 only for patient's < 1 year of age

Reference

- Common skin contaminants: diphtheroids [*Corynebacterium* spp.], *Bacillus* [not *B. anthracis*] spp., *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., *Micrococcus* spp.

Reference

- Recognized pathogens: *S. aureus*, *Enterococcus* spp., *E. coli*, *Pseudomonas* spp., *Kebsiella* spp., *Candida* spp., etc.
- Refer to Patient Protocol Manual Section 4

CENTRAL LINE - ASSOCIATED BLOODSTREAM INFECTION (CLABSI) EVENT
ADPH REPORTING ALGORITHM

1. Does the patient have an infection?
The Patient has a Central Line or Umbilical Catheter in place at the time of, or within 48 hours before onset of the event.
_____insertion date/time _____date clinical evidence noted of SSI or _____specimen collect date event noted (earliest date)

AND the patient meets the criterion for:

<p>Criterion 1</p> <p><input type="checkbox"/> One or more cultures with recognized pathogen(not common skin contaminant) that is not related to infection at another site for patient at any age. OR</p> <p>Criterion 2</p> <p><input type="checkbox"/> Fever ($\geq 38^{\circ}\text{C}$, 100.4°F), or chills or hypotension, AND <input type="checkbox"/> S/S and positive lab results are not related to another infection at another site for patient at any age. AND <input type="checkbox"/> common skin contaminant is cultured from two or more cultures drawn within 2 days of each other. AND <input type="checkbox"/> at least one bottle from each lab draw is reported as the same common skin contaminant OR</p> <p>Criterion 3</p> <p><input type="checkbox"/> Fever ($\geq 38^{\circ}\text{C}$, 100.4°F core), or hypotension($\geq 30^{\circ}\text{C}$, 90°F core), or apnea, or bradycardia, AND <input type="checkbox"/> S/S and positive lab results are not related to an infection at another site; AND <input type="checkbox"/> the patient is ≤ 2 years. AND <input type="checkbox"/> common skin contaminant is cultured from two or more blood cultures drawn within 2 days of each other; AND <input type="checkbox"/> at least one bottle from each lab draw is reported as the same common skin contaminant</p>
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If you checked one of the above criterion items, PROCEED to step 2. If not, _____ does not meet criteria for CLABSI reporting.

2a. Was the unit the patient received on the date that their clinical evidence appeared? or the date that symptoms onset to meet the skin criteria were collected, subsequently closed, and _____

2b. Is the location listed on the chart or present history? _____

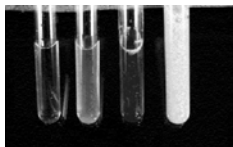
2c. Was the patient transferred with the CLABSI or after the CLABSI was diagnosed, to the present location in the same facility within 48 hours? _____ the transferring unit will be attributed with the CLABSI reported to the _____

2d. Was the patient transferred with the CLABSI or after a CLABSI was removed to the present location from an external facility within 48 hours? _____ the transferring hospital should report the CLABSI if a healthcare facility or the transferring facility should proceed to the _____

2e. Is the location noted in items 2a or 2d, a "critical care unit"? If yes, this date is required for CLABSI reporting by ADPH. _____ not required to report for ADPH.

CAUTI Definition

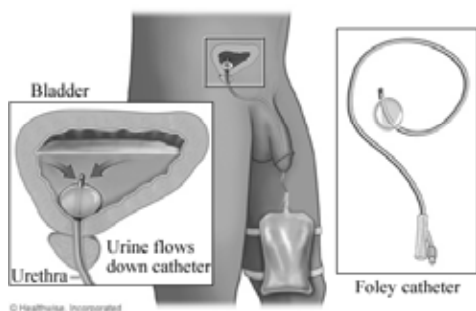
- A catheter-associated urinary tract infection is a UTI that occurs in a patient who had an indwelling urethral urinary catheter in place within the ____ period before the onset of the UTI



What is a Urethral Urinary Catheter?

- An indwelling catheter is a drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a closed collection system
 - Also called a Foley catheter

What is a Urethral Urinary Catheter?



NHSN Location Types Where CAUTI Events Can Be Monitored

1. Intensive Care Unit (ICU)
2. Specialty Care Area (SCA)
 - a) Hematology/Oncology Unit
 - b) Bone Marrow/Stem Cell Transplant Unit
 - c) Solid Organ Transplant Unit

NHSN Location Types Where CAUTI Events Can Be Monitored

- d) Acute Inpatient Dialysis Unit
 - e) Long-Term Acute Care
 - f) Neonatal Intensive Care Unit
3. Any other inpatient care location in which catheter days and patient days can be collected
 - Surgical ward

Alabama Location Types Where CAUTI Events Will be Monitored

- Catheter-associated Urinary Tract Infections (CAUTI) from the following general care wards within a healthcare facility
 1. General Medical Wards
 2. General Surgical Wards
 3. General Medical/Surgical Wards

Alabama Location Types Where CAUTI Events Will be Monitored

- “General Care Ward” means a multidisciplinary care area that provides moderate observation, diagnosis, and therapeutic procedures for adults or children or both who are ill

Steps to Determining if a Patient Has a CAUTI

- 1a. Did the patient have an urinary catheter in place at the time of the specimen collection or was an urinary catheter removed within 48 hours prior to the specimen collection?

Steps to Determining if a Patient Has a CAUTI

- 1b. Does the patient’s S/S meet criterion 1a, 2a, or the ABUTI criterion of the NHSN CAUTI protocol?

To Which Location Should the CAUTI be Attributed?

- The location where the patient was assigned on the date of the UTI event, which is further defined as the date when the first clinical evidence appeared or the date the specimen used to meet the criterion was collected, whichever came first

Key Points About CAUTI

- The criteria numbered 1 and 3 have a urinary culture positive for $\geq 10^5$ CFU/ml
 - The criteria numbered 2 and 4 have a urinary culture positive for $\geq 10^3$ and $<10^5$ CFU of organism/ml
 - Because of this lower colony count, supportive urinalysis is required

Key Points About CAUTI

- S/S differ if a catheter is in place versus removed
 - Example: A patient will not have difficulty voiding if catheter in place
- There are age parameters for each of the criteria
 - Any age patient can meet criteria 1-2, but only children ≤ 1 year of age can meet criteria 3 or 4

Key Points About CAUTI

- Also, the urine cultures can have no more than 2 microorganisms present
- Criteria 3 and 4 are for children 1 year of age or less and may or may not be associated with a catheter
- The ADPH Algorithms for CAUTI are age specific
 - There are two, one for >1 years of age, and one for <1 year old

CAUTI EVENT ADPH REPORTING ALGORITHM FOR PATIENT'S >1 y/o

1. Does the patient have an infection?
 The patient has an indwelling urinary catheter in place at the time of specimen collection or had an indwelling urinary catheter removed within 48 hours prior to specimen collection;
 And at least one of the following S/S: Fever ($\geq 38^{\circ}\text{C}$, 100.4°F); suprapubic tenderness;
 costovertebral pain or tenderness. Frequency; Dysuria; Urgency;
*S/S may be seen without infection

And the patient meets the criterion for:

Criteria 1a
 A positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganism; **OR**
Criteria 2a
 A positive urinalysis with a positive dipstick for leukocyte esterase and/or nitrite or pyuria (≥ 10 wbc/HPF or ≥ 3 WBC/high power field of unspun urine) or microorganisms seen on Gram stain of unspun urine
AND a positive urine culture of $\geq 10^4$ and $\geq 10^5$ CFU/ml with no more than 2 species of microorganism **OR**
Asymptomatic Bacteremic Urinary Tract Infection (ABUTI) Criterion = 1y/o
 No S/S of infection as listed above; **AND** a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of uropathogen microorganisms;
AND a positive blood culture with at least 1 matching uropathogen microorganism to the urine culture

If the criterion for 1a, 2a, or ABUTI as described above is met, **PROCEED** to step 2
 If not, **NO**, the patient does not meet criteria for CAUTI => 1y/o reporting

2a. Where was the patient located on the date the first clinical evidence appeared or the date the specimen used to meet the UTI criteria was collected, whichever came first?
2b. Is this location different from the client's present location? **If YES**, proceed to 2c; **NO**, skip to 2e
2c. Was the patient transferred to the present location in the same facility within 48 hours with the indwelling catheter or after the indwelling catheter was removed? **If YES**, the CAUTI is attributed to the transferring unit proceed to 2e; **NO**, proceed to 2d
2d. Was the patient transferred with the indwelling cath or after an indwelling cath was removed to the present location from an external facility within 48 hours? **If YES**, the transferring hospital should report the CAUTI; if a healthcare facility in AL the transferring facility should proceed to 2e
2e. Is the location noted in items 2a, 2b or 2d a "general medical/surgical wards"? **If yes**, this data is required for CAUTI reporting by ADPH - see definitions for locations that must report CAUTI

CAUTI EVENT ADPH REPORTING ALGORITHM FOR PATIENT'S <1 y/o

1. Does the INFANT have an infection?
 The patient has an indwelling urinary catheter in place at the time of specimen collection or had an indwelling urinary catheter removed within 48 hours prior to specimen collection;
 And at least one of the following S/S: Fever ($\geq 38^{\circ}\text{C}$, 100.4°F); hypothermia ($\leq 36^{\circ}\text{C}$, 96.8°F); Apnea; Bradycardia; Dysuria; Lethargy; Vomiting

And the patient meets the criterion for:

Criteria 3
 A positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganism; **OR**
Criteria 4
 A positive urinalysis with a positive dipstick for leukocyte esterase and/or nitrite or pyuria (≥ 10 wbc/HPF or ≥ 3 WBC/high power field of unspun urine) or microorganisms seen on Gram stain of unspun urine
AND a positive urine culture of $\geq 10^4$ and $\geq 10^5$ CFU/ml with no more than 2 species of microorganism **OR**
ABUTI Criterion = 1y/o
 No S/S of infection as listed above; **AND** a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of uropathogen microorganisms;
AND a positive blood culture with at least 1 matching uropathogen microorganism to the urine culture

If the criterion for 1a, 2a, or ABUTI as described above is met, **PROCEED** to step 2
 If not, **NO**, the patient does not meet criteria for CAUTI => 1y/o reporting

2a. Where was the patient located on the date the first clinical evidence appeared or the date the specimen used to meet the UTI criteria was collected, whichever came first?
2b. Is this location different from the client's present location? **If YES**, proceed to 2c; **NO**, skip to 2e
2c. Was the patient transferred to the present location in the same facility within 48 hours with the indwelling catheter or after the indwelling catheter was removed? **If YES**, the CAUTI is attributed to the transferring unit proceed to 2e; **NO**, proceed to 2d
2d. Was the patient transferred with the indwelling cath or after an indwelling cath was removed to the present location from an external facility within 48 hours? **If YES**, the transferring hospital should report the CAUTI; if a healthcare facility in AL the transferring facility should proceed to 2e
2e. Is the location noted in items 2a, 2b or 2d a "general medical/surgical wards"? **If yes**, this data is required for CAUTI reporting by ADPH - see definitions for locations that must report CAUTI

SSI Definitions

- A Surgical Site Infection occurs following an operation as listed in table 1 (pg. 9-2 of protocol)
- The operation may include inpatient or outpatient procedures



SSI Definitions

- An operation is defined as a single trip to the operating room (OR) where a surgeon makes at least one incision through the skin or mucous membrane, including laparoscopic approach, and closes the incision before the patient leaves the OR

What is an Operation?

- A Surgical Site Infection occurs following an operation as listed in table 1
- The operation may include inpatient or outpatient procedures



What is an Operation?

- An operation is defined as a single trip to the operating room (OR) where a surgeon makes at least one incision through the skin or mucous membrane, including laparoscopic approach, and closes the incision before the patient leaves the OR

Alabama Surgery Types to be Monitored for SSIs

- Will be monitored
 - Colon surgery (COLO)
 - Incision, resection, or anastomosis of the large intestine
 - Includes large-to-small and small-to-large bowel anastomosis

Alabama Surgery Types to be Monitored for SSIs

- Does not include rectal operations
- ICD-9 codes: 17.31-17.36, 17.39, 45.03, 45.26, 45.41, 45.49, 45.52, 45.71- 45.76, 45.79, 45.81- 45.83, 45.92- 45.95, 46.03, 46.04, 46.10, 46.11, 46.13, 46.14, 46.43, 46.52, 46.75, 46.76, 46.94

Alabama Surgery Types to be Monitored for SSIs

- Abdominal Hysterectomy
 - Removal of uterus through an abdominal incision
 - ICD-9 codes: 68.31, 68.39, 68.41, 68.49, 68.61, 68.69

NHSN Location Types Where SSI Events Can Be Monitored

- Surveillance will occur with surgical patients in any inpatient/outpatient setting where the selected NHSN operative procedure(s) are performed

Steps to Determining if a Patient has a SSI

- 1a. Did the patient have an infection within 30 days after the surgery if no implant in place or within one year if implant is in place?
- 1b. Does the infection appear to be related to the operative procedure?

Steps to Determining if a Patient has a SSI

- 1c. Does the patient's S/S meet criterion for a Superficial incisional infection (primary or secondary), Deep incisional infection (primary or secondary), Organ/space SSI infection, or some combination of these?

Steps to Determining if a Patient has a SSI

- 1d. How is the wound classified?
Clean, clean contaminated, contaminated, dirty/infected

DEFINITION: ADVERSE EVENT ALGORITHM

1. Does the patient have an infection?
The Patient has an infection that occurs within 30 days after the date of AS. **Hyperbolicity:**
AND The patient meets the criteria for:

Superficial Incisional SSI Superficial incision (Primary) or Superficial incision (Secondary) site
 Only the skin and subcutaneous tissue of the primary or secondary incision are involved **AND**
The patient has at least one of the following: purulent drainage from the superficial incision; Or
 organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision; Or at least one of the following (3) of infection: pain or tenderness; or
 localized swelling; or redness; or heat; or the superficial incision is deliberately opened by surgeon; and the culture results are not cultured

Or Diagnosis of superficial incisional SSI by the surgeon or attending physician.

Deep Incisional SSI Deep incision (Primary) or Deep Incision (Secondary) site
 Involves deep soft tissues (fascial and muscle layers) of the primary or secondary incision;
AND
 An implant is left in place or with one year if implant is in place and the infection appears to be related to the operative procedure
AND
Patient has at least one of the following: purulent drainage from the deep incision but not from the superficial; Or
 A deep incision spontaneously dehisces or is deliberately opened by a surgeon and is culture-positive or not cultured refers the patient has at least one of the following: or
 Fever or (3) or localized pain or tenderness; Or An abscess or
 Other evidence of infection involving the deep incision is found on direct examination, during inspection; or by histopathologic or radiologic examination; Or
 Diagnosis of a deep incisional SSI by a surgeon or attending physician.

Organ/space SSI
 Infection involves any part of the body, excluding the skin incision, fascia, or muscle layers, that is opened or manipulated during the operative procedure; **AND**
Patient has at least one of the following: purulent drainage from a drain that is placed through a site related to the organ/space; or
 Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space; or
 An abscess or other evidence of infection involving the organ space that is found on direct examination, during inspection, or by histopathologic or radiologic examination; or
 Diagnosis of an organ/space SSI by a surgeon or attending physician.

To Which Location Should the SSI Attributed?

- Do you attribute a SSI to a specific location?
– Yes or No
- Can you monitor SSIs per Surgeon?
– Yes or No

Key Points Related to SSIs

- Do not include a stitch abscess
- Do not include a localized stab wound infection as SSI
- “Cellulitis” alone does not meet criteria for SSI
- If infection includes both superficial and deep incision sites, classify as deep incisional

Key Points Related to SSIs

- Circumcision or infected burn not included as SSI
- Colonization's (presence of microorganisms on skin, mucous membranes, in open wounds, or in excretions or secretions, but are not causing adverse clinical S/S) are not an infection

Key Points Related to SSIs

- Inflammation that results from tissue response to injury or stimulation of noninfectious agents such as chemicals are not considered an infection

Numerator and Denominator Data



NO SHERMAN. The denominator was not sent from the future to find Sarah Conner.

Denominators for CLABSI

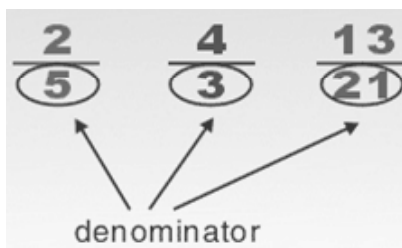
- Device days and patient days are used for denominators
- Device-day denominator data that are collected differ according to the location of the patients being monitored

Denominators for CLABSI

- For ICUs and locations other than specialty care areas (SCAs) and NICUs, the number of patients with one or more central lines of any type is collected daily, at the same time each day, during the month and recorded on the *Denominators for Intensive Care Unit (ICU)/Other Locations (Not NICU or Specialty Care Area (SCA)) (CDC 57.118)*.

Denominators for CLABSI

- Only the totals for the month are entered into NHSN



NHSN Denominators for Intensive Care Unit (ICU)/ Other locations (not NICU or SCA) * required for scoring

Facility ID:	Location Code:	Month:	Year:
Date	*Number of patients with one or more central lines	*Number of patients with urinary catheter	*Number of patients on ventilator
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
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30			
31			
Totals			

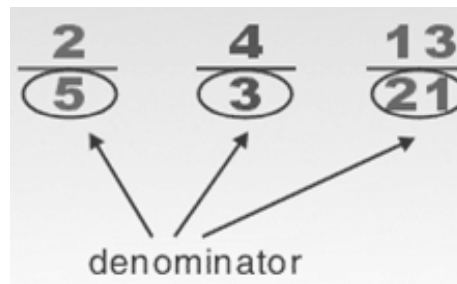
†† Conditional totals according to the events listed in Part 1 of the CDC 57.118

CDC 57.118

Denominators for SSI

- For all patients having a procedure selected for surveillance during the month (Colon and Abdominal Hysterectomies), complete the **Denominator for Procedure form (CDC 57.121)**. The data are collected individually for each operative procedure performed during the month specified on the Patient Safety Monthly Surveillance Plan (CDC 57.106)

Denominators for SSI



N-NSN Denominator for Procedure

Facility ID: _____ Procedure # _____

Patient Name: Last, First, Middle _____

Gender: M F _____

DOB: _____

Event Type: _____

ICD-9-CM Procedure Code: _____

ICD-9-CM Procedure Code: _____

Outpatient: Yes No _____

Wound Class: C CC CO D U _____

ASA Score: 1 2 3 4 5 _____

Trauma: Yes No _____

Endoscope: Yes No _____

General Anesthesia: Yes No _____

Emergency: Yes No _____

Non-autologous Transplant: Yes No _____

Height: _____ inches _____ weight: _____ lbs _____

Duration of Labor: _____ hours _____ minutes _____

Estimated Blood Loss: _____ ml _____

Circle one: FUSN RFUSN

General Layout: Abdominal Anterior Cervical Cervical/Dorsal/Dorsolumbar Lumbar/Lumbosacral Lateral Not specified

Diabetes Mellitus: Yes No

Approach/Technique: Anterior Posterior Anterior and Posterior Lateral/transverse Not specified

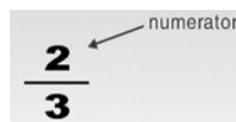
MRPO: (check one) Total Primary Partial Primary Total Revision Partial Revision

MRPO: (check one) Primary (Total) Revision (Total or Partial)

Label: _____

Numerators for SSI

- Numerator Data: The **Surgical Site Infection (SSI) Form (CDC 57.120)** is used to collect and report each SSI that is identified during the month selected for surveillance



N-NSN Surgical Site Infection (SSI)

Facility ID: _____ Event # _____

Patient Name: Last, First, Middle _____

Gender: M F _____

DOB: _____

Event Type: _____

ICD-9-CM Procedure Code: _____

ICD-9-CM Procedure Code: _____

MRPO Infection Surveillance: Yes, this event's pathogen & location are in-plan for the MRPO/CDAD Module No, this event's pathogen & location are **not** in-plan for the MRPO/CDAD Module

Date Admitted to Facility: _____

Specific Event: Superficial Incisional Primary (SIP) Deep Incisional Primary (DIP) Superficial Incisional Secondary (SIS) Deep Incisional Secondary (DIS)

Organ/Site (specify site): _____

Specify Criteria Used (check all that apply):

Signs & Symptoms: Purulent drainage or material Pain or tenderness Localized swelling Redness Heat Erythema deliberately opened by surgeon Wound spontaneously dehiscence Abscess Hypertrophic Hematoma Lymphangitis Cough Nausea Dysuria

Other evidence of infection found on direct exam, smearing surgery, or by diagnostic tests: _____

Other signs & symptoms: _____

Physician diagnosis of this event type: _____

Physician institutes appropriate antimicrobial therapy: Yes No

SSI Contributed to Death: Yes No

Detected: A (during admission) P (post-discharge surveillance) R (readmission)

Secondary bloodstream infection: Yes No

Discharge Date: _____

N-NSN Surgical Site Infection (SSI)

Pathogen #1: _____

Organism 1: _____

Organism 2: _____

Organism 3: _____

Pathogen #2: _____

Pathogen #3: _____

Pathogen #4: _____

Organism 4: _____

Organism 5: _____

Organism 6: _____

Organism 7: _____

Organism 8: _____

Organism 9: _____

Organism 10: _____

Organism 11: _____

Organism 12: _____

Organism 13: _____

Organism 14: _____

Organism 15: _____

Organism 16: _____

Organism 17: _____

Organism 18: _____

Organism 19: _____

Organism 20: _____

Organism 21: _____

Organism 22: _____

Organism 23: _____

Organism 24: _____

Organism 25: _____

Organism 26: _____

Organism 27: _____

Organism 28: _____

Organism 29: _____

Organism 30: _____

Organism 31: _____

Organism 32: _____

Organism 33: _____

Organism 34: _____

Organism 35: _____

Organism 36: _____

Organism 37: _____

Organism 38: _____

Organism 39: _____

Organism 40: _____

Organism 41: _____

Organism 42: _____

Organism 43: _____

Organism 44: _____

Organism 45: _____

Organism 46: _____

Organism 47: _____

Organism 48: _____

Organism 49: _____

Organism 50: _____

Organism 51: _____

Organism 52: _____

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Organism 84: _____

Organism 85: _____

Organism 86: _____

Organism 87: _____

Organism 88: _____

Organism 89: _____

Organism 90: _____

Organism 91: _____

Organism 92: _____

Organism 93: _____

Organism 94: _____

Organism 95: _____

Organism 96: _____

Organism 97: _____

Organism 98: _____

Organism 99: _____

Organism 100: _____

Data Entry

General Information About Data Entry

- Data entered into NHSN is available to both CDC and to the facility as soon as it is saved
 - No “transmission”
- Data can be edited after it is saved
 - Exceptions Patient ID and Linked records

General Information About Data Entry

- Records can be deleted
 - Reference: Andrus, M. (2006), Monthly reporting plan data entry linking other features. Retrieved at http://www.cdc.gov/nhsn/wc_dataEntry_imprt_cost.html#3

Data Entered in NHSN

- Patient demographics
- Denominators
 - Summary data (device-associated)
 - Denominators for procedures
- Events
 - CLABSI, VAP, SSI, etc.
- Custom data

Requirements for Data Fields

- Required
 - Must be completed on every data field
 - A red asterisk (*) appears next to the field label

Requirements for Data Fields

- Conditionally required
 - When the requirement depends on one of these conditions
 - Response given in another field
 - Events identified in your Monthly Reporting Plan

Requirements for Data Fields

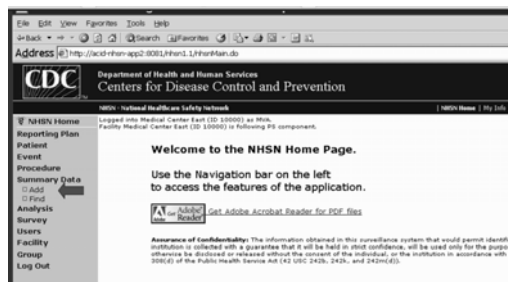
- **Optional**
 - NHSN does not require the data and the information will not be used
 - e.g., surgeon code

Entering Denominator and Numerator Data

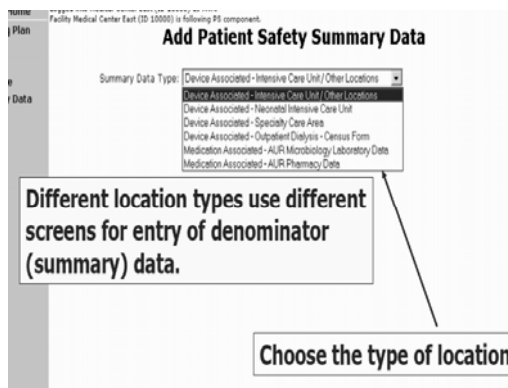
- **Entering Denominators for Device-Associated Events**
- **Adding summary data**
- **Finding summary data**
- **Editing/deleting summary data**

Device-associated Denominators

- **Patient days**
- **Device days by type of unit**



- http://www.cdc.gov/nhsn/PDFs/slides/NHSN_trainingDec12DataEntry.pdf



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Logged into Medical Center East (ID 10000) as MHA.
Facility Medical Center East (ID 10000) is following PS component.

Add Patient Safety Summary Data

Summary Data Type: **Device Associated - Intensive Care Unit / Other Locations**

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Logged into Medical Center East (ID 10000) as MHA.
Facility Medical Center East (ID 10000) is following PS component.

Denominators for Intensive Care Unit (ICU)/ Other locations (not NICU or SCA)

Mandatory fields marked with *

Facility ID*: 10000 (Medical Center East)

Location Code*: 3N-3 NORTH

Month*: August

Year*: 2008

Total Patient Days: 3305

Central Line Days: 2003

Urinary Catheter Days: 2001

Ventilator Days: 2001

Choose the location code, the month and the year for the denominator data

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Logged into Medical Center East (ID 10000) as MHA.
Facility Medical Center East (ID 10000) is following PS component.

Denominators for Intensive Care Unit (ICU)/ Other locations (not NICU or SCA)

Mandatory fields marked with *

Facility ID*: 10000 (Medical Center East)

Location Code*: 3N-3 NORTH

Month*: August

Year*: 2008

Total Patient Days*: 435

Central Line Days*: 212

Urinary Catheter Days*: 161

Ventilator Days*: 54

Required fields are noted with a red asterisk (*)
These are fields that are identified as required, but can be entered

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Logged into Medical Center East (ID 10000) as MHA.
Facility Medical Center East (ID 10000) is following PS component.

Denominators for Intensive Care Unit (ICU)/ Other locations (not NICU or SCA)

Save of Summary Data successful. Note that data has been provided that is not required as part of the Facility's current plan for this month and year. Please consider expanding the current plan.

Mandatory fields marked with *

Facility ID*: 10000 (Medical Center East)

Location Code*: 3N - 3 NORTH

Month*: August

Year*: 2008

Total Patient Days*: 435

Central Line Days*: 212

Urinary Catheter Days*: 161

Ventilator Days*: 54

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Logged into Medical Center East (ID 10000) as MHA.
Facility Medical Center East (ID 10000) is following PS component.

Add Patient Safety Summary Data

Summary Data Type: **Device Associated - Neonatal Intensive Care Unit**

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Logged into Medical Center East (ID 10000) as MHA.
Facility Medical Center East (ID 10000) is following PS component.

Neonatal Intensive Care Unit

Mandatory fields marked with *

Facility ID*: 10000 (Medical Center East)

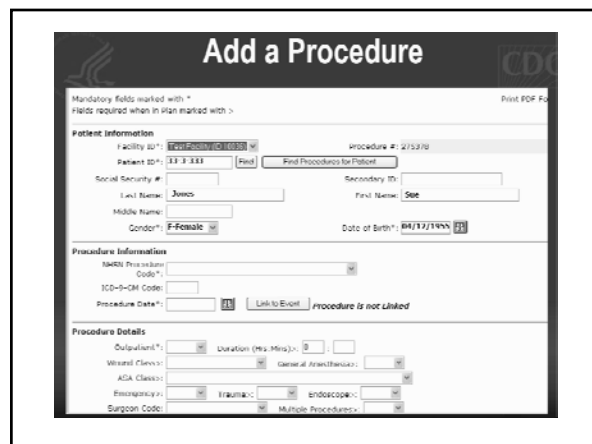
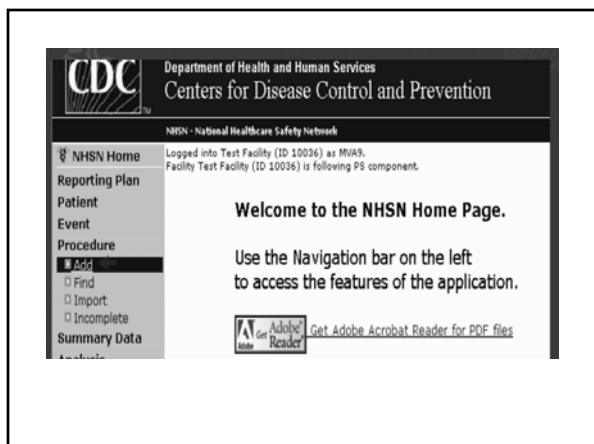
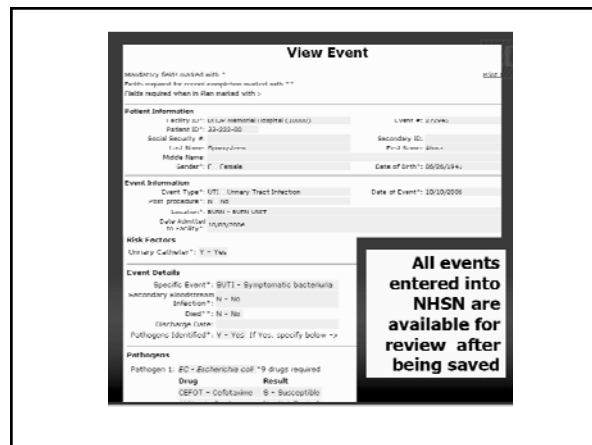
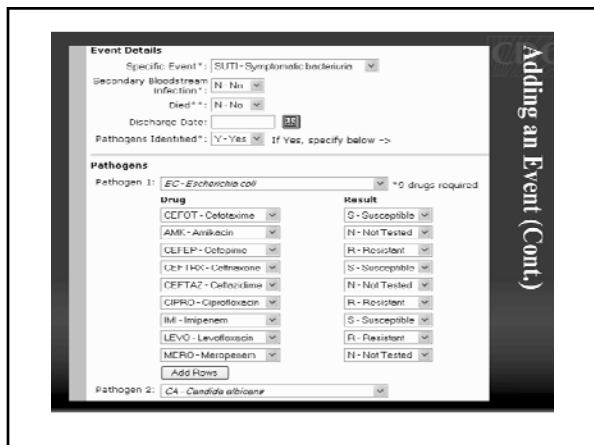
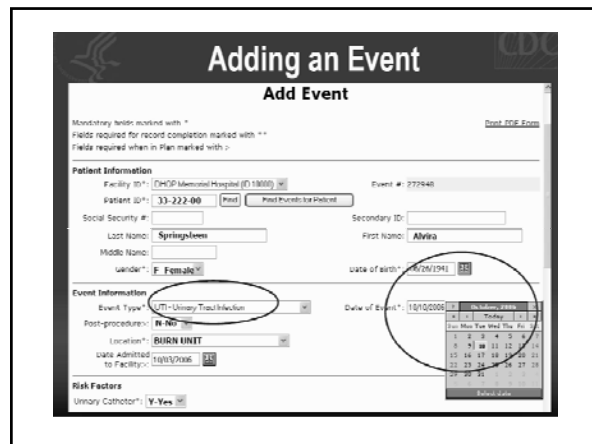
Location Code*: NICU_3 - NEONATAL CRITICAL CARE LEVEL 3/B

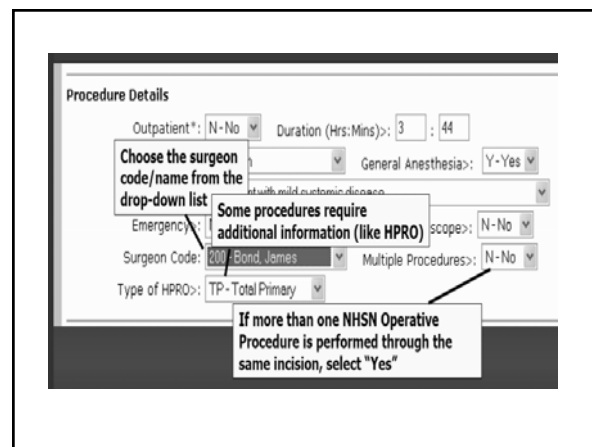
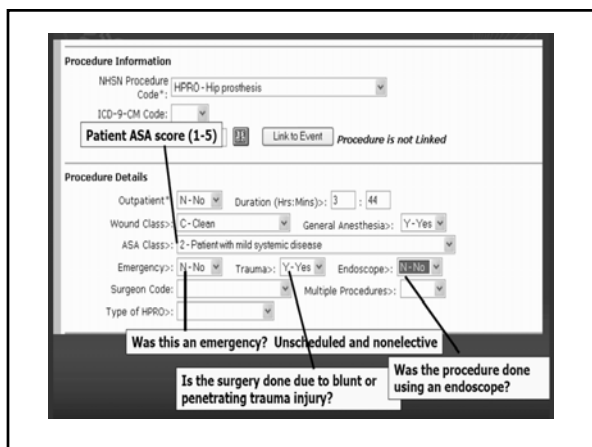
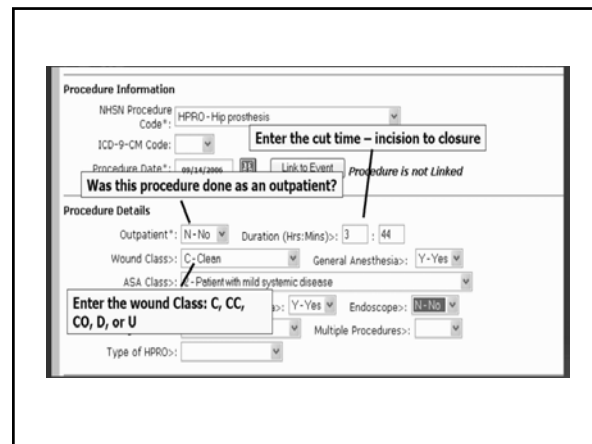
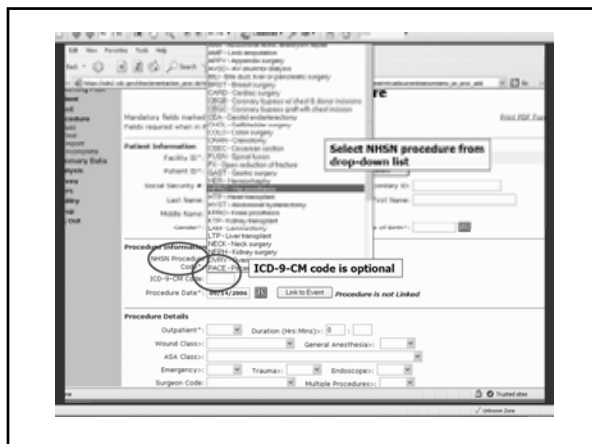
Month*: August

Year*: 2008

Remember, for each day, if a patient has both an umbilical line and a central line, only the umbilical line is counted

Birth Wt.	Patient Days*	U/C Days	CL Days	Vent Days
<750	81	18	24	70
751-1000	56	20	11	38
1001-1500	104	28	39	86
1501-2500	66	30	29	44
>2500	116	76	20	81





Linking an Event to a Procedure

- The procedure must be entered in the system before an event can be linked to it
- When an event is linked to a procedure, the data from the procedure will be automatically associated with the event

Linking an Event to a Procedure

- Used primarily with SSI and PPP, but can be used with Device-Associated events also

NHSN - National Healthcare Safety Network

Logged into Test Facility (ID 10036) as MHAAC
 Facility Test Facility (ID 10036) is following PS component.

Add Event

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

Patient Information

Facility ID*: Event #: 275417
 Patient ID*:
 Social Security #:
 Last Name:
 Middle Name:
 Gender*:

Event Information

Event Type*:
 Post-procedure:
 Location:
 Date Admitted to Facility:

When the patient ID is entered, NHSN will automatically complete the demographic information for the patient

Select the Event Type from the drop-down list

Event Information

Event Type*: Date of Event*:
 NHSN Procedure Code*:
 ICD-9-CM Code:
 Procedure Date*: **Event is not Linked**
 Location:
 Date Admitted to Facility:

A list of procedures for that patient will appear

Link Procedure List

If No exact match was found. The following procedure(s) were found for the selected facility and patient.

Check the procedure to link this Event to and click Link

Patient ID: 33-3-333

Link	Event #	NHSN Procedure Code	ICD-9-CM Code	Procedure Date	Linked Events
<input type="checkbox"/>	275413	H490		09/14/2006	

Click in the box next to the appropriate procedure and then the link button.

Linking an Event to a Procedure

The data related to the procedure will be automatically filled in

Notice now that the Event has been Linked to the Procedure

You still need to enter the date of the SSI, the patient location and the patient date of admission

Event Information

Event Type*: Date of Event*:
 NHSN Procedure Code*:
 ICD-9-CM Code:
 Procedure Date*: **Event Linked**
 Location:
 Date Admitted to Facility*: