NHSN Surgical Site Infection Surveillance in 2019

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What Tools Are Needed To Accurately Perform SSI Surveillance?

Goals for Today:

- Understand the burden of SSI
- Locate SSI surveillance resources
- Review SSI definitions, key terms, reporting instructions, FAQs
  - Review the SSI Event form and the SSI Denominator for Procedure form
- Accurately apply the 2019 SSI protocol through knowledge checks
- SSI Surveillance and Analysis Group Exercise 1-1:30 (after lunch)

Goals will be reviewed within the context of 2019 NHSN protocols.
**SSI – Burden**

- SSIs are a substantial cause of morbidity, prolonged hospitalization, unplanned readmissions after surgery and death\(^{(1)}\)

- Estimated 157,500 SSI infections in U.S. per year\(^{(2)}\)

- SSI is the most costly HAI type – estimated annual cost of $3.3 billion, and is associated with nearly 1 million additional inpatient-days\(^{(3,4)}\)

- Number of operative procedures performed in the U.S. continues to rise\(^{(5)}\)

- Increase of complex comorbidities seen in surgical patients\(^{(5)}\)

- Estimated approximately half of SSIs are deemed preventable using evidence-based strategies\(^{(5)}\)

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Where Do I Locate SSI Surveillance Resources?
NHSN Educational Roadmaps

Welcome to the NHSN Educational Roadmaps. The NHSN Educational Roadmaps will provide a guided tour of the training materials and information needed to provide a solid foundation of NHSN—from the basics to more advanced training for each individual component or protocol. Below is a list of NHSN components, in each component is a selection of educational and supplemental materials and tools to improve your comprehension of NHSN surveillance definitions, reporting, and analysis (while supporting your work as an NHSN user). To begin this learning experience, select the component below. This training should be used after the enrollment/activation process. If you have not enrolled into NHSN please [enroll here].

Select Roadmap for a Component:

- Patient Safety Component
- Biologic Component
- Diagnosis Component
- Healthcare Personnel Safety Component
- Long-term Care Facility Component
- Outpatient Procedure Component

https://www.cdc.gov/nhsn/training/roadmap/index.html
Surveillance for Surgical Site Infection (SSI) Events

HAI Checklists

The CDC National Healthcare Safety Network (NHSN) offers HAI checklists that have been adapted from the Tennessee Department of Health HAI checklists. These checklists are designed to help healthcare facilities assess their infection control practices and identify areas for improvement.

For use with Organ/Space SSI criteria

https://www.cdc.gov/nhsn/hai-checklists/index.html
HAI Checklists – NHSN Surgical Site Infection (SSI) Checklist

2019 NHSN Surgical Site Infection (SSI) Checklist

Surgical Site Infection (SSI) Documentation Review Checklist

**Definition of an NHSN Operative Procedure**

An NHSN Operative Procedure is a procedure

- that is included in the ICD-10-PCS or CPT NHSN operative procedure code mapping:
  - [www.cdc.gov/nhsn/xls/cpt-pcm-nhsn.xlsx](http://www.cdc.gov/nhsn/xls/cpt-pcm-nhsn.xlsx)

  And

- takes place during an operation where at least one incision (including laparoscopic approach holes) is made through the skin or mucous membrane, or reoperation via an incision that was on a prior operative procedure

  And

- takes place in an operating room (OR), defined as a patient care area that met the Facilities Guidelines Institute’s (FGI) or American Institute of Architects’ (AIA) criteria for an operating room when constructed or renovated. This may include an operating room, C-section room, intervention suite, or a cardiac catheterization lab.

**Exclusions:** Otherwise eligible procedures that are assigned an ASA score of 6 are not eligible for surveillance.

**Note:** Incisional closure method is NOT a part of the NHSN operative procedure definition; all other procedures that are eligible procedures are included, regardless of closure type. Therefore both primarily closed procedures, those that are not closed primarily should be entered into the denominator for procedures in the monthly reporting plan. Any SSIs attributable to either primarily closed or non-primarily closed procedures should be reported.

**PROCEDURE DETAILS:**

- Date of Procedure:
- ICD-10-PCS/CPT Operative Procedure Code(s) Assigned:
- NHSN Operative Procedure Category(ies) (COLO, HYST, etc.):

**SSI EVENT DETAILS:**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Criterion Met</th>
<th>Date of Event</th>
<th>Procedure of Attribution</th>
<th>PATOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Surgical Site Infection (SSI)**

**Superficial Incisional SSI (SIP, SIS)**

- Must meet the following criteria:
  
  - Date of event occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date)

**AND**

- Involves only skin and subcutaneous tissue of the incision

**Deep incisional SSI (DIP, DIS)**

- Must meet the following criteria:
  
  - Date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2 (see below)

**AND**

- Involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure

**AND**

- Patient has at least one of the following:
  
  a. Purulent drainage from a drain that is placed into the organ/spaces for example, closed suction drainage system, open drain, T-tube drain, CT guided drainage).
  
  b. Organism(s) identified from fluid or tissue in the organ/spaces by a culture or non-culture based microbiologic testing method, which is performed for purposes of clinical diagnosis or treatment
HAI Checklists – NHSN Chapter 17 Site Specific Infections (for use with Organ/Space SSI criteria)
SSI Protocols and Guidance Documents – Previous Years

NHSN Data Validation

Internal Validation: Active efforts by a reporting facility to assure completeness and accuracy of NHSN data.

External Validation: Survey and audit process by external agency to assure quality of NHSN surveillance and reporting.

NHSN Validation Guidance and Resources for 2018

For Reporting Facilities: 2018 Internal Validation Guidance and Toolkit
For Auditors: 2018 External Validation Guidance and Toolkit

2018 Resources

NHSN Validation Guidance and Resources for 2017

For Reporting Facilities: 2017 Internal Validation Guidance and Toolkit
For Auditors: 2017 External Validation Guidance and Toolkit

2017 Resources

NHSN Validation Guidance and Resources for 2016

For Reporting Facilities: 2016 Internal Validation Guidance and Toolkit
For Auditors: 2016 External Validation Guidance and Toolkit

2016 Resources
SSI Reporting and Surveillance Methods
SSI Reporting Requirements:

**Setting:** Any inpatient facility and or/hospital outpatient procedure department where the selected NHSN operative procedure(s) are performed.

- Perform surveillance for SSI following at least one NHSN operative procedure category (that is included in ICD-10-PCS and/or CPT NHSN operative procedure code mapping) as indicated in the *Patient Safety Monthly Reporting Plan* (must have a reporting plan for every month of the year).

- Collect SSI event (numerator) and operative procedure category (denominator) data on all procedures included in the selected operative procedure categories indicated on the facility’s monthly reporting plan.

**NOTE:** SSI surveillance in Ambulatory Surgery Centers (ASCs) should be performed using the new Outpatient Procedure Component (OPC). The OPC replaces the use of the SSI protocol for ASCs.
SSI Reporting Requirements:

- A procedure must meet the definition of an NHSN Operative Procedure to be included in SSI surveillance.
  - All procedures included in the monthly reporting plan must be followed for superficial incisional, deep incisional, and organ/space SSI events.
  - The type of SSI reported must reflect the deepest tissue level where SSI criteria is met during the surveillance period.
- SSI events are reportable by the facility where the procedure to which it is linked was performed.
- Only data included “in-plan” will be used by CDC in aggregate data analysis.
What NHSN Operative Procedures Am I Required to Report?

- NHSN does not mandate reporting.

- NHSN is a mechanism for data you enter based on what you select on your monthly reporting plan.

- What you have in your monthly reporting plan may depend on:
  - Your facility internal risk assessment
  - Any state or CMS required reporting
  - Required reporting by other organizations
SSI Surveillance Methods

SSI monitoring requires active, patient-based, prospective surveillance.

Examples:
- Review of medical records or surgery clinic patient records:
  - Admission, readmission, ED, and OR logs
  - Patient charts for signs and symptoms of SSI
  - Lab, imaging, other diagnostic test reports
  - Clinician notes
  - ICD-10-CM Infection Diagnosis Codes to prompt further review
- Visit the ICU and wards – talk to primary care staff
- Surgeon and/or patient surveys by mail or telephone
- Communication between facilities

Note: Any combination of surveillance methods that identifies all events is acceptable.
Definition of an NHSN Operative Procedure
NHSN Operative Procedure

An NHSN operative procedure is a procedure:

- that is included in the ICD-10-PCS and/or CPT NHSN operative procedure code mapping

and

- takes place during an operation where at least one incision (including laparoscopic approach and cranial Burr holes) is made through the skin or mucous membrane, or reoperation via an incision that was left open during a prior operative procedure

and

- takes place in an operating room [OR], defined as a patient care area that met the Facilities Guidelines Institute’s (FGI) or American Institute of Architects’ (AIA) criteria for an operating room when it was constructed or renovated. This may include an operating room, C-section room, interventional radiology room, or a cardiac catheterization lab.
NHSN Operative Procedure Codes (ICD-10-PCS and CPT Codes)

- Operative procedure codes are used in health care settings as a way to communicate uniform information.
- Operative procedure codes allow NHSN to standardize NHSN SSI surveillance reporting.
- Operative procedure codes are required to determine the correct NHSN operative procedure category to be reported.
  - Entering the operative procedure code into the NHSN application is optional.
2019 NHSN ICD-10-PCS and CPT operative procedure code documents location: “Supporting Materials” section

- A general definition for each NHSN operative procedure category.
- Description for each individual operative procedure code is included in each mapping document.
2019 Operative Procedure Code Updates

- The 2019 ICD-10-PCS and CPT code documents should be used for operative procedures performed in 2019.

- 2018 ICD-10-PCS and CPT codes documents are listed under the **2018 Resources** section on the **Data Validation** page and should be used for operative procedures performed in 2018.
39 NHSN Operative Procedure Categories

2019 ICD-10-PCS and CPT NHSN Operative Procedure Code Mappings

Table 2 Chapter 9 SSI Protocol Page 9-12
Denominator for Procedure Details
**SSI – Surveillance Forms**

**Denominator for Procedure**

<table>
<thead>
<tr>
<th>Denominator for Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility ID</strong></td>
</tr>
<tr>
<td><strong>Patient ID:</strong></td>
</tr>
<tr>
<td><strong>Secondary ID:</strong></td>
</tr>
<tr>
<td><strong>Patient Name, Last:</strong></td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
</tr>
<tr>
<td><strong>Ethnicity (Specify):</strong></td>
</tr>
<tr>
<td><strong>Event Type: PROC</strong></td>
</tr>
<tr>
<td><strong>Date of Procedure:</strong></td>
</tr>
</tbody>
</table>

**Procedure denominator data are collected using this form**

**SSI Event data are collected using this form**

**Surgical Site Infection (SSI)**

<table>
<thead>
<tr>
<th>Surgical Site Infection (SSI)</th>
</tr>
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<tbody>
<tr>
<td><strong>Facility ID:</strong></td>
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<tr>
<td><strong>Patient ID:</strong></td>
</tr>
<tr>
<td><strong>Secondary ID:</strong></td>
</tr>
<tr>
<td><strong>Patient Name, Last:</strong></td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
</tr>
<tr>
<td><strong>Ethnicity (Specify):</strong></td>
</tr>
<tr>
<td><strong>Event Type: SSI</strong></td>
</tr>
<tr>
<td><strong>NHSN Procedure Code:</strong></td>
</tr>
<tr>
<td><strong>Date of Procedure:</strong></td>
</tr>
</tbody>
</table>
Denominator for Procedure Form and Denominator for Procedure Table of Instructions (TOI)

Denominator For Procedure Form

Instructions for Denominator for Procedure Data Collection

Complete a Surgical Site Infection (SSI) form for each patient found to have an SSI using the definitions.

* Fields are required fields
Denominator for Procedure Details*

Required data fields for denominator entry:

- Outpatient
- Duration
- Wound Class
- General Anesthesia
- ASA Score
- Emergency
- Trauma
- Scope
- Diabetes Mellitus
- Height/Weight
- Closure Technique

Supplemental Fields Required

- CSEC: Duration of Labor
- FUSN: Spinal Level and Approach
- HPRO & KPRO: Additional Procedure Details

* Instructions for Data Field Completion can be found here:
Instructions for Completion of Denominator for Procedure Form (CDC 57.121)
Denominator for Procedure Detail:

Inpatient operative procedure vs. an outpatient operative procedure

**NHSN Inpatient Operative Procedure:** An NHSN operative procedure performed on a patient whose date of admission to the healthcare facility and the date of discharge are different calendar days.

**NHSN Outpatient Operative Procedure:** An NHSN operative procedure performed on a patient whose date of admission to the healthcare facility and date of discharge are the same calendar day.
Assessment of the degree of contamination of a surgical wound at time of operative procedure

- Four wound classifications:
  - Clean (C)
  - Clean-Contaminated (CC)
  - Contaminated (CO)
  - Dirty/Infected (D)

- Wound class should be assigned by a person involved in the surgical procedure based on the findings of each case:
  - NHSN does not endorse the IP modifying the wound class.

**Note:** Procedures cannot have Clean (C) wound class: APPY, BILI, CHOL, COLO, REC, SB, and VHYS.
Denominator for Procedure Detail: **Emergency**

- A procedure that is documented per the facility’s protocol to be an Emergency or Urgent procedure.
Denominator for Procedure Detail: Trauma

- Blunt or penetrating injury occurring prior to the start of the procedure.

- Complex trauma cases may require multiple trips to the OR during the same admission to repair the initial trauma. In such cases, trauma = Yes.
Denominator for Procedure Detail: **Scope**

- Use of a scope involves creation of several small incisions to perform or assist in the performance of an operation rather than use of a traditional larger incision (open approach).
  - NHSN operative procedures performed using laparoscope: scope = YES.

- ICD-10-PCS codes can be helpful in answering the scope question.

The **fifth** character indicates the approach to reach the procedure site:

<table>
<thead>
<tr>
<th>ICD-10 5th Character</th>
<th>Approach</th>
<th>Scope Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Open approach</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Percutaneous endoscopic approach</td>
<td>Yes</td>
</tr>
<tr>
<td>F</td>
<td>Via natural or artificial opening with endoscopic assistance approach</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Scope Update

- NHSN removed guidance “For CBGB, if the donor vessel was harvested using a scope, enter as Scope= YES” found in the Instructions for Completion of Denominator for Procedure (TOI) Form (CDC 57.121). This guidance was specific to the former ICD-9 coding system.

  - If a procedure is coded as open and scope then the procedure should be entered into NHSN as Scope = NO. The open designation is considered a higher risk procedure.
Denominator for Procedure Detail: Closure Technique

**Primary Closure**: The closure of the skin level during the original surgery, regardless of the presence of wires, wicks, drains, or other devices or objects extruding through the incision.

- If any portion of the incision is closed at the skin level, by any manner, a designation of primary closure should be assigned to the surgery.
- If a procedure has multiple incision/laparoscopic trocar sites and any of the incisions are closed primarily then the procedure technique is recorded as primary closed.
Denominator for Procedure Detail: Closure Technique

Non-primary Closure: The closure of the surgical wound in a way which leaves the skin level completely open following the surgery.

- The deep tissue layers may be closed by some means (with the skin level left open), or the deep and superficial layers may both be left completely open.

- Wounds with non-primary closure may or may not be described as "packed” with gauze or other material, and may or may not be covered with plastic, “wound vats,” or other synthetic devices or materials.
Denominator for Procedure Detail: Closure Technique

Primary Closure

Non-primary closure
Denominator for Procedure Details: Additional Fields Required for Specific Procedures
Denominator for Procedure Details:
Additional Fields for Specific Procedures

Additional risk factors are collected for these (4) NHSN operative procedure categories:
- Cesarean Section CSEC
- Spinal Fusion – FUSN
- Hip Arthroplasty – HPRO
- Knee Arthroplasty – KPRO
## Denominator for Procedure Detail: CSEC: Duration of Labor

Enter number of hours the patient labored in the hospital from beginning of active labor to delivery of the infant, expressed in hours.

<table>
<thead>
<tr>
<th>Procedure Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Outpatient: Yes  No</em></td>
</tr>
<tr>
<td><em>Wound Class: C  CC  CO  D</em></td>
</tr>
<tr>
<td><em>ASA Score: 1  2  3  4  5</em></td>
</tr>
<tr>
<td><em>Trauma: Yes  No</em></td>
</tr>
<tr>
<td><em>Height: ______feet ______inches</em></td>
</tr>
<tr>
<td>(choose one) ______meters</td>
</tr>
<tr>
<td><em>Weight: ______lbs/kg (circle one)</em></td>
</tr>
<tr>
<td><em>Duration: ______Hours ______Minutes</em></td>
</tr>
<tr>
<td><em>General Anesthesia: Yes  No</em></td>
</tr>
<tr>
<td><em>Emergency: Yes  No</em></td>
</tr>
<tr>
<td><em>Diabetes Mellitus: Yes  No</em></td>
</tr>
<tr>
<td><em>Closure Technique: Primary  Other than primary</em></td>
</tr>
<tr>
<td>Surgeon Code: ____________</td>
</tr>
</tbody>
</table>

**CSEC: *Duration of Labor: ______hours***
### Denominator for Procedure Detail: FUSN: Spinal Level and Approach

Circle one: FUSN

- **Spinal Level (check one)**
  - □ Atlas-axis
  - □ Atlas-axis/Cervical
  - □ Cervical
  - □ Cervical/Dorsal/Dorsolumbar
  - □ Dorsal/Dorsolumbar
  - □ Lumbar/Lumbosacral

- **Approach/Technique (check one)**
  - □ Anterior
  - □ Posterior
  - □ Anterior and Posterior

- If more than one level is fused, report category in which the most vertebra were fused.
- To use ICD-10-PCS mapping guidance to determine spinal level and approach refer to the link:
Denominator for Procedure Detail: HPRO and KPRO

Circle one: HPRO  KPRO

ICD-10-PCS Supplemental Procedure Code for HPRO/KPRO: ____________

*Check one:  □ Total  □ Hemi  □ Resurfacing (HPRO only)

If Total:  □ Total Primary  □ Total Revision
If Hemi:  □ Partial Primary  □ Partial Revision
If Resurfacing (HPRO only):  □ Total Primary  □ Partial Primary

*If total or partial revision, was the revision associated with prior infection at index joint?  □ Yes  □ No
Denominator for Procedure Reporting

Instructions
Denominator Reporting Instruction #3:
Different operative procedure categories during same trip to the OR

- If performed through the same or different incisions, a *Denominator for Procedure* form is reported for each NHSN operative procedure category being monitored.

**Examples**
- CARD and CBGC are done through the same incision, a Denominator for Procedure form is reported for each.
- Patient has an open reduction of fracture (FX) and splenectomy (SLE) performed during the same trip to the OR and both procedure categories are being monitored, complete a Denominator for Procedure form for each.

**EXCEPTION:**
- If a patient has both a CBGC and CBGB during the same trip to the OR, report only as a CBGB. Only report as a CBGC if there is only a chest incision. CBGB and CBGC are never reported for the same patient for the same trip to the OR.
Denominator Reporting Instruction #4:
Duration of the procedure when more than one category of NHSN operative procedure is performed through the same incision (during same trip to OR)

- Record the combined duration of all procedures
  - procedure/surgery start time (PST) to procedure/surgery finish time (FT).

Example: Patient had a colon resection (COLO) and also an abdominal hysterectomy (HYST). The time from PST to PF was 3 hours and 30 minutes. A Denominator for Procedure form is completed for the COLO and another for the HYST, indicating the duration as 3 hours and 30 minutes on each form.
Denominator Reporting Instruction #8:
Same NHSN operative procedure via separate incisions

- Separate Denominator for Procedure forms are completed for these procedures performed via separate incisions during same trip to OR:
  - AMP, BRST, CEA, FUSN, FX, HER, HPRO, KPRO, LAM, NEPH, OVRY, PVBY

- To document the duration of the procedures:
  - Indicate the PST to PF for each procedure separately or, alternatively,
  - Take the total time for the procedures and split it evenly between procedures.
Denominator Reporting Instruction #8:
Same NHSN operative procedure via separate incisions

Example:
- A patient underwent a bilateral KPRO during a single trip to the OR.
  - Left KPRO PST 8:23 AM and PF time at 9:50 AM
  - Right KPRO PST at 10:03 AM and PF time at 11:33 AM

- Two separate KPRO procedures should be reported:
  - Left KPRO with a duration of 1 hr 27 min
  - Right KPRO with a duration of 1 hr 30 min.
Denominator Reporting Instruction #9:
More than one operative procedure through same incision within 24 hours

- More than one operative procedure via the same incision and the second procedure PST is within 24 hours of the first procedure FT:
  - Report only one Denominator for Procedure form for the original procedure, combining the durations for both procedures based on the PST’s and FT’s for both procedures.
    - If the wound class has changed, report the higher wound class.
    - If the ASA class has changed, report the higher ASA class.
    - Assign the surgical wound closure technique that applies when the patient leaves the OR from the first operative procedure.
Denominator Reporting Instruction #9:
More than one operative procedure through same incision within 24 hours

Example:
- Mrs. Green underwent a COLO procedure on 2/2 that began at 1:00 PM and finished at 3:00 PM (2 hour duration). On 2/3, Mrs. Green returned to the OR for another COLO procedure that began at 7:00 AM and ended at 9:00 AM (2 hour duration).

- Since the 2/3 COLO start time was within 24 hours of the 2/2 COLO finish time, you report one denominator (for the 2/2 COLO)
  - Follow the 24-hour reporting instruction for procedure details.
  - Do not report the 2/3 COLO procedure.
Denominator Reporting Instruction #11: HYST or VHYS

Updated to reflect that hysterectomy procedures that involve an incision into the abdomen, including trocar insertion, are categorized as NHSN HYST - abdominal hysterectomy procedures.

- A few of the CPT codes that include “laparoscopy, surgical, with vaginal hysterectomy” in the procedure description are included in the HYST procedure category. The use of a laparoscopic approach indicates that an incision was made into the abdomen.

<table>
<thead>
<tr>
<th>Procedure Category</th>
<th>Procedure Code</th>
<th>Procedure Code Description</th>
<th>Code Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYST</td>
<td>58550</td>
<td>Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less</td>
<td>Moved from VHYS</td>
</tr>
<tr>
<td>HYST</td>
<td>58552</td>
<td>Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less; with removal of tubes(s) and/or ovary(s)</td>
<td>Moved from VHYS</td>
</tr>
<tr>
<td>HYST</td>
<td>58553</td>
<td>Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g</td>
<td>Moved from VHYS</td>
</tr>
<tr>
<td>HYST</td>
<td>58554</td>
<td>Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)</td>
<td>Moved from VHYS</td>
</tr>
</tbody>
</table>
Surgical Site Infection Criteria
Superficial Incisional SSI Criteria

<table>
<thead>
<tr>
<th>Surgical Site Infection (SSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Superficial incisional SSI</strong></td>
</tr>
<tr>
<td>Must meet the following criteria:</td>
</tr>
<tr>
<td><strong>Date of event occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date)</strong></td>
</tr>
<tr>
<td><strong>AND</strong></td>
</tr>
<tr>
<td>involves only skin and subcutaneous tissue of the incision</td>
</tr>
<tr>
<td><strong>AND</strong></td>
</tr>
<tr>
<td>patient has at least one of the following:</td>
</tr>
<tr>
<td>a. purulent drainage from the superficial incision.</td>
</tr>
<tr>
<td>b. organism(s) identified from an aseptically-obtained specimen from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).</td>
</tr>
<tr>
<td>c. superficial incision that is deliberately opened by a surgeon, attending physician* or other designee and culture or non-culture based testing of the superficial incision or subcutaneous tissue is not performed</td>
</tr>
<tr>
<td><strong>AND</strong></td>
</tr>
<tr>
<td>patient has at least one of the following signs or symptoms: localized pain or tenderness; localized swelling; erythema; or heat.</td>
</tr>
<tr>
<td>d. diagnosis of a superficial incisional SSI by the surgeon, attending physician* or other designee.</td>
</tr>
</tbody>
</table>

* The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician’s designee (nurse practitioner or physician’s assistant).
Two types of Superficial Incisional SSIs: SIP and SIS

Superficial incisional primary (SIP)

A superficial incisional SSI that is identified in the primary incision in a patient that has had an operation with one or more incisions (for example, C-section incision or chest incision for CBGB).

Superficial incisional secondary (SIS)

A superficial incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (for example, donor site incision for CBGB).
### Reporting Instructions for Superficial SSI

<table>
<thead>
<tr>
<th>Reporting Instructions for Superficial SSI</th>
<th>The following do not qualify as criteria for meeting the NHSN definition of superficial incisional SSI:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Diagnosis/treatment of cellulitis (redness/warmth/swelling), by itself, does not meet criterion “d” for superficial incisional SSI. Conversely, an incision that is draining or that has organisms identified by culture or non-culture based testing is not considered a cellulitis.</td>
</tr>
<tr>
<td></td>
<td>• A stitch abscess alone (minimal inflammation and discharge confined to the points of suture penetration).</td>
</tr>
<tr>
<td></td>
<td>• Circumcision is not an NHSN operative procedure. An infected circumcision site in newborns is classified as CIRC and is not an SSI.</td>
</tr>
<tr>
<td></td>
<td>• An infected burn wound is classified as BURN and is not an SSI.</td>
</tr>
<tr>
<td></td>
<td>• For an NHSN operative procedure, a laparoscopic trocar site is considered a surgical incision and not a stab wound.</td>
</tr>
<tr>
<td></td>
<td>• A localized stab wound or pin site infection is not considered an SSI; depending on the depth, these infections might be considered either a skin (SKIN) or soft tissue (ST) infection.</td>
</tr>
</tbody>
</table>
Superficial Incisional SSI – 30-Day SSI Surveillance Period

- Superficial incisional SSIs are only followed for a 30-day period for all procedure types.

- Secondary incisional SSIs (SIPs and DIPs) are only followed for a 30-day period regardless of the surveillance period for the primary site.

### Table 2. Surveillance Periods for SSI Following Selected NHSN Operative Procedure Categories. Day 1 = the date of the procedure.

<table>
<thead>
<tr>
<th>Category</th>
<th>Operative Procedure</th>
<th>Category</th>
<th>Operative Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Abdominal aortic aneurysm repair</td>
<td>LAM</td>
<td>Laminecotomy</td>
</tr>
<tr>
<td>AMP</td>
<td>Limb amputation</td>
<td>LTP</td>
<td>Liver transplant</td>
</tr>
<tr>
<td>APPY</td>
<td>Appendix surgery</td>
<td>NECK</td>
<td>Neck surgery</td>
</tr>
<tr>
<td>AVSD</td>
<td>Shunt for dialysis</td>
<td>NFPH</td>
<td>Kidney surgery</td>
</tr>
<tr>
<td>BILI</td>
<td>Bile duct, liver or pancreatic surgery</td>
<td>OVRY</td>
<td>Ovarian surgery</td>
</tr>
<tr>
<td>CEA</td>
<td>Carotid endarterectomy</td>
<td>FRST</td>
<td>Prostate surgery</td>
</tr>
<tr>
<td>CHOL</td>
<td>Gallbladder surgery</td>
<td>REC</td>
<td>Rectal surgery</td>
</tr>
<tr>
<td>COLO</td>
<td>Colon surgery</td>
<td>SB</td>
<td>Small bowel surgery</td>
</tr>
<tr>
<td>CSEC</td>
<td>Cesarean section</td>
<td>SPE</td>
<td>Splenic surgery</td>
</tr>
<tr>
<td>GAST</td>
<td>Gastric surgery</td>
<td>THOR</td>
<td>Thoracic surgery</td>
</tr>
<tr>
<td>HTP</td>
<td>Heart transplant</td>
<td>THYR</td>
<td>Thyroid and/or parathyroid surgery</td>
</tr>
<tr>
<td>HYST</td>
<td>Abdominal hysterectomy</td>
<td>VHYS</td>
<td>Vaginal hysterectomy</td>
</tr>
<tr>
<td>KTP</td>
<td>Kidney transplant</td>
<td>YLAP</td>
<td>Exploratory laparotomy</td>
</tr>
</tbody>
</table>

#### Notes:
- Superficial incisional SSIs are only followed for a 30-day period for all procedure types.
- Secondary incisional SSIs are only followed for a 30-day period regardless of the surveillance period for the primary site.
Deep Incisional SSI Criteria

Deep incisional SSI
Must meet the following criteria:
The date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2
AND
involves deep soft tissues of the incision (for example, fascial and muscle layers)
AND
patient has at least one of the following:
  a. purulent drainage from the deep incision.
  b. a deep incision that spontaneously dehisces, or is deliberately opened or aspirated by a surgeon, attending physician* or other designee
     AND
     organism(s) identified from the deep soft tissues of the incision by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)) or culture or non-culture based microbiologic testing method is not performed. A culture or non-culture based test from the deep soft tissues of the incision that has a negative finding does not meet this criterion.
     AND
     patient has at least one of the following signs or symptoms: fever (>38°C); localized pain or tenderness.
  c. an abscess or other evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test.

* The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician’s designee (nurse practitioner or physician’s assistant).
Two types of Deep Incisional SSIs: DIP and DIS

**Deep incisional primary (DIP)**
Deep Incisional Primary (DIP) – a deep incisional SSI that is identified in a primary incision in a patient that has had an operation with one or more incisions (for example, C-section incision or chest incision for CBGB)

**Deep incisional secondary (DIS)**
Deep Incisional Secondary (DIS) – a deep incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (for example, donor site incision for CBGB)
Deep Incisional SSI and Organ/Space SSI – 90-Day SSI Surveillance for these Categories Only

Table 2. Surveillance Periods for SSI Following Selected NHSN Operative Procedure Categories. Day 1 = the date of the procedure.

<table>
<thead>
<tr>
<th>Category</th>
<th>Operative Procedure</th>
<th>Category</th>
<th>Operative Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Abdominal aortic aneurysm repair</td>
<td>LAM</td>
<td>Laminectomy</td>
</tr>
<tr>
<td>AMP</td>
<td>Appendectomy</td>
<td>LTP</td>
<td>Liver transplant</td>
</tr>
<tr>
<td>APPY</td>
<td>Appendectomy</td>
<td>NECK</td>
<td>Neck surgery</td>
</tr>
<tr>
<td>AVSD</td>
<td>Suture for drains</td>
<td>NEPH</td>
<td>Kidney surgery</td>
</tr>
<tr>
<td>BILI</td>
<td>Bile duct, liver or pancreatic surgery</td>
<td>OVRY</td>
<td>Ovarian surgery</td>
</tr>
<tr>
<td>CEA</td>
<td>Carotid endarterectomy</td>
<td>PRST</td>
<td>Prostate surgery</td>
</tr>
<tr>
<td>CROE</td>
<td>Cholecystectomy</td>
<td>RSC</td>
<td>Rectal surgery</td>
</tr>
<tr>
<td>COLO</td>
<td>Colon surgery</td>
<td>SB</td>
<td>Small bowel surgery</td>
</tr>
<tr>
<td>CSEC</td>
<td>Cesarean section</td>
<td>SPLF</td>
<td>Spleen surgery</td>
</tr>
<tr>
<td>GAST</td>
<td>Gastric surgery</td>
<td>THOR</td>
<td>Thoracic surgery</td>
</tr>
<tr>
<td>HTF</td>
<td>Heart transplant</td>
<td>THYR</td>
<td>Thyroid and/or parathyroid surgery</td>
</tr>
<tr>
<td>HYST</td>
<td>Abdominal hysterectomy</td>
<td>VHYS</td>
<td>Vaginal hysterectomy</td>
</tr>
<tr>
<td>KTP</td>
<td>Kidney transplant</td>
<td>XLAP</td>
<td>Extracorporeal laparotomy</td>
</tr>
</tbody>
</table>

Note: 90-day surveillance for Deep Incisional SSI and Organ/Space SSI events in these categories only.

Notes:
Superficial incisional SSIs are only followed for a 30-day period for all procedure types.
Secondary incisional SSIs are only followed for a 30-day period regardless of the surveillance period for the primary site.
**Organ/Space SSI Criteria**

<table>
<thead>
<tr>
<th>Organ/Space SSI</th>
<th>Must meet the following criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in <a href="#">Table 2</a></td>
</tr>
<tr>
<td></td>
<td><strong>AND</strong></td>
</tr>
<tr>
<td></td>
<td>involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure <strong>AND</strong></td>
</tr>
<tr>
<td></td>
<td>patient has at least <strong>one</strong> of the following:</td>
</tr>
<tr>
<td></td>
<td>a. purulent drainage from a drain that is placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage).</td>
</tr>
<tr>
<td></td>
<td>b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).</td>
</tr>
<tr>
<td></td>
<td>c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection. <strong>AND</strong></td>
</tr>
<tr>
<td></td>
<td>meets at least <strong>one</strong> criterion for a specific organ/space infection site listed in <a href="#">Table 3</a>. These criteria are found in the <a href="#">Surveillance Definitions for Specific Types of Infections chapter</a>.</td>
</tr>
</tbody>
</table>
Organ/Space SSI Criteria

Two different criteria must be met for Organ/Space SSI:

- SSI organ/space criteria (chapter 9)
- Site-specific criteria (chapter 17)
## Table 3. Specific Sites of an Organ/Space SSI

<table>
<thead>
<tr>
<th>Category</th>
<th>Specific Site</th>
<th>Category</th>
<th>Specific Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONE</td>
<td>Osteomyelitis</td>
<td>MED</td>
<td>Mediastinitis</td>
</tr>
<tr>
<td>BRST</td>
<td>Breast abscess or mastitis</td>
<td>MEN</td>
<td>Meningitis or ventriculitis</td>
</tr>
<tr>
<td>CARD</td>
<td>Myocarditis or pericarditis</td>
<td>ORAL</td>
<td>Oral cavity infection (mouth, tongue, or gums)</td>
</tr>
<tr>
<td>DISC</td>
<td>Disc space infection</td>
<td>OREP</td>
<td>Deep pelvic tissue infection or other infection of the male or female reproductive tract</td>
</tr>
<tr>
<td>EAR</td>
<td>Ear, mastoid infection</td>
<td>PJI</td>
<td>Periprosthetic joint infection</td>
</tr>
<tr>
<td>EMET</td>
<td>Endometritis</td>
<td>SA</td>
<td>Spinal abscess/infection</td>
</tr>
<tr>
<td>ENDO</td>
<td>Endocarditis</td>
<td>SINU</td>
<td>Sinusitis</td>
</tr>
<tr>
<td>GIT</td>
<td>Gastrointestinal (GI) tract infection</td>
<td>UR</td>
<td>Upper respiratory tract, pharyngitis, laryngitis, epiglottitis</td>
</tr>
<tr>
<td>IAB</td>
<td>Intraabdominal infection, not specified elsewhere</td>
<td>USI</td>
<td>Urinary System Infection</td>
</tr>
<tr>
<td>IC</td>
<td>Intracranial infection</td>
<td>VASC</td>
<td>Arterial or venous infection</td>
</tr>
<tr>
<td>JNT</td>
<td>Joint or bursa infection</td>
<td>VCUF</td>
<td>Vaginal cuff infection</td>
</tr>
<tr>
<td>LUNG</td>
<td>Other infection of the lower respiratory tract</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Criteria for these sites can be found in the Surveillance Definitions for Specific Types of Infections chapter.)

Note: Appendix contains a list of all NHSN operative procedure categories and the site specific SSIs that may be attributable to each category.)
### APPENDIX SSI specific event types attributed to each NSHN procedure category

<table>
<thead>
<tr>
<th>Operative Procedure Category</th>
<th>Specific Event Type</th>
</tr>
</thead>
</table>
| AAA - Abdominal aortic aneurysm repair | DIP - Deep Incisional Primary  
Endo - Endocarditis  
GIT - Gastrointestinal tract  
IAB - Intraabdominal, not specified elsewhere  
SIP - Superficial Incisional Primary  
VASC - Arterial or venous |
| AMP - Limb amputation | BONE - Osteomyelitis  
DIP - Deep Incisional Primary  
JNT - Joint or bursa  
SIP - Superficial Incisional Primary |
| APPY - Appendix surgery | DIP - Deep Incisional Primary  
GIT - Gastrointestinal tract  
IAB - Intraabdominal, not specified elsewhere  
SIP - Superficial Incisional Primary  
**AVSD - AV shunt for dialysis** |
| AVSD - AV shunt for dialysis | DIP - Deep Incisional Primary  
SIP - Superficial Incisional Primary  
VASC - Arterial or venous infection |
| BILI - Bile duct, liver or pancreatic surgery | DIP - Deep Incisional Primary  
GIT - Gastrointestinal tract  
IAB - Intraabdominal, not specified elsewhere  
SIP - Superficial Incisional |
| BRST - Breast surgery | BRST - Breast abscess or mastitis  
DIP - Deep Incisional Primary  
DIS - Deep Incisional Secondary  
SIP - Superficial Incisional Primary  
SIS - Superficial Incisional Secondary |
SSI Numerator (SSI Event) Reporting

Numerator Data:
All patients having any of the procedures included in the selected NSQIN operative procedure category(ies) are monitored for SSI. The Surgical Site Infection (SSI) form is completed for each SSI. If no SSI events are identified during the surveillance month, check the “Report No Events” field in the Missing PA Events tab of the Incomplete/Missing List.

The Instructions for Completion of the Surgical Site Infection (CDC 37 120) form include brief instructions for collection and entry of each data element on the form. The SSI form includes patient demographic information and specific event details that pertain to the SSI event.

January 2019
9:13
SSI – Procedure-associated Module

The SSI surveillance protocol has its own definitions for classifying infections. Refer to the SSI protocol for specific guidance for SSI event determination.

<table>
<thead>
<tr>
<th></th>
<th>SSI</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infection Window Period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date of Event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeat Infection Timeframe (RIT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary BSI Attribution Period</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SSI Event Detail: Surveillance Period

**Question**: Does each trip to the OR via the same site start a new surveillance period?

**Answer**: Generally, each return trip to the OR via the same site ends the surveillance period from prior infection and resets the new surveillance period. SSIs are normally attributed to the most recent trip to the OR.
SSI Event Detail: Date of Event (DOE)

The date when the first element used to meet the SSI infection criterion occurs for the first time during the SSI surveillance period.

- DOE must fall within the SSI surveillance period to meet SSI criteria.

- Type of SSI (superficial incisional, deep incisional, or organ/space) reported and the DOE assigned must reflect the deepest tissue level where SSI criteria are met during the surveillance period.
SSI Event Detail: DOE, cont.

- All elements required to meet an SSI criterion usually occur within a 7-10 day timeframe with no more than 2-3 days between elements.

- The elements must be relational to each other
  - Ensure the elements all associate to the SSI, and this can only happen if elements occur in a relatively tight timeframe.

- Each case differs based on the individual elements occurring and the type of SSI.
SSI Event Detail: **DOE**

**Timeline:**
- Day 1 – **COLO** procedure
- Day 6 – DOE for meeting a superficial incisional SSI
- Day 25 – DOE for the meeting an organ/space IAB SSI
SSI Event Detail: **DOE**

**Knowledge Check #1:**

SSI criteria is met. What is the DOE?

A. Day 1 – **COLO** procedure

B. Day 6 – DOE for meeting superficial incisional SSI

C. Day 25 – DOE for meeting organ/space IAB SSI

D. Report two SSI events – one Superficial Incisional SSI with DOE Day 6 **and** one Organ/Space SSI with DOE Day 25.
SSI Event Detail: **DOE**

**Knowledge Check #1:**
SSI criteria is met. What is the DOE?

C. Day 25 – DOE for meeting organ/space IAB SSI

**Rationale:**

- Only one SSI event gets reported and **Day 25 is the DOE**.
- **Day 25** reflects the deepest tissue level where SSI criteria are met during the SSI surveillance period.
SSI Event Detail: Secondary BSI Scenarios

**Scenario 1:** At least one organism from the blood specimen matches an organism used in meeting SSI criteria.

**Scenario 2:** An organism identified in the blood specimen is an element that is used to meet the SSI organ/space site-specific infection criterion.
### SSI Secondary BSI Attribution Period

(3 days before Date of Event + Date of Event + 13 days after Date of Event)

<table>
<thead>
<tr>
<th>Post-Op Day</th>
<th>SSI Secondary BSI Attribution Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>DOE for an SSI</td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
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<td>17</td>
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<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>
SSI Event Detail: Aseptic Technique

**Question:** What is an aseptically obtained culture?

**Answer:** Specimens "obtained in a manner to prevent introduction of organisms from the surrounding tissues into the specimen being collected”.

Culture results “Mixed flora” or “Mixed cutaneous flora” alone cannot be reported to NHSN as there is no such pathogen option in this list of pathogens.

- Wound culture results with this finding may require review for proper technique based on the facility/lab protocol for proper wound specimen collection.
SSI Event Detail: Pathogen Assignment

**Question:** Are common commensal organisms excluded from meeting SSI criteria?

**Answer:** No. There are few excluded organisms in SSI surveillance. The only excluded organisms are found in Chapter 9 SSI protocol numerator reporting instruction #1 on page 9-14.

- Organisms identified from “broth only” are not excluded
- SSI surveillance is based on surveillance definitions that don’t judge organisms isolated as ‘contaminants’ or ‘clinically significant’
SSI Event Detail: Gross Anatomical Exam

Evidence of infection elicited or visualized on physical examination or observed during an invasive procedure. This includes findings elicited on physical examination of a patient during admission or subsequent assessments of the patient and may include findings noted during a medical/invasive procedure dependent upon the location of the infection as well as the NHSN infection criterion.

Examples:
- An intraabdominal abscess will require an invasive procedure to actually visualize the abscess.
- Visualization of pus or purulent drainage (includes from a drain).
- **SSI only**: Abdominal pain elicited on physical exam post CSEC or hysterectomy (HYST or VHYS) is sufficient evidence of infection detected without an invasive procedure to meet general Organ Space SSI criterion C. Allowing abdominal pain elicited on physical exam as gross anatomic evidence of infection to meet general Organ Space SSI criterion C allows you to move on to meeting a site-specific organ/space infection criteria.

**NOTE**: Imaging test evidence of infection cannot be applied to meet gross anatomic evidence of infection. Imaging test evidence has distinct findings in the HAI definitions. (For example, IAB 3b).
SSI Event Detail: Purulence

**Question**: Does NHSN have a definition for purulence?

**Answer**: NHSN does not define purulence as there is no standard, clinically agreed upon definition. Documentation that includes descriptors such as thick, viscous, creamy, opaque, or pus/purulence would be accepted evidence of purulence.

NHSN does not use any gram stain results such as WBCs or PMN’s to define purulence for the SSI protocol.
SSI Event Detail: Clinical Correlation

Physician documentation of antimicrobial treatment for site-specific infection.

- Used with site-specific criteria
  - Example: IAB, GIT
    - Used with equivocal imaging
SSI Event Detail: Infection Present at Time of Surgery (PATOS) – (SSI Event Reporting Instruction #3)

- PATOS is a required YES/NO field on the SSI Event (numerator) form and is only considered if an SSI is determined within the surveillance period following an NHSN operative procedure. PATOS is not a data field on the denominator for procedure form.

- PATOS denotes that there is evidence of an infection or abscess ‘seen’ during the index operative procedure (in other words, it is present preoperatively) and must be documented within the intraoperative note (immediate post-operative note).
SSI Event Detail: **PATOS**, cont.

- Only select PATOS = YES if it applies to the **depth** of SSI that is being attributed to the procedure

  **Example:**
  - If a patient had evidence of an intraabdominal infection at the time of surgery and then later returns with an organ/ space SSI, the PATOS field would be selected as a **YES**.
  - If the patient returned with a superficial or deep incisional SSI, the PATOS field would be selected as a **NO**.
Question: Where within the patient medical record can I find the documentation I need to answer the PATOS question on the SSI event form?

Answer: The PATOS response (YES/NO) is determined by evidence of infection documented in the operative procedure report. This documentation is commonly noted in the narrative of the operative procedure report. The language/verbiage in the operative procedure report must clearly reflect infection is ‘seen’ during the operative procedure and should additionally include reference to the tissue level where the infection is seen.
SSI Event Detail: PATOS, cont.

**Question:** If a patient has an SSI and it is found to meet criteria for a PATOS = YES do I need to enter this SSI into NHSN?

**Answer:** An SSI that meets criteria for the PATOS should have the PATOS field selected as YES. This SSI is not excluded from reporting and it must be entered into NHSN if you are following this procedure in your monthly reporting plan.
Surveillance for Surgical Site Infection (SSI) Events

Resources for NHSN Users Already Enrolled

- **Surgical Site Infections (SSI) Training [CBT – 60 min]**
- SSI Surveillance and Case Studies Part 1 – 2018
  - YouTube Link [Video – 59 min]
  - Slideset [PDF – 11 MB]
- SSI Surveillance with Case Studies Part 2 – 2018
  - YouTube Link [Video – 83 min]
  - Slideset [PDF – 11 MB]
- **New!** Patient Safety Component (PSC) Updates to the 2018 Annual Facility Survey – January 2019
  - YouTube Link [Video – 42 min]
  - YouTube Link [Video – 6 min]
- **Surgical Site Infections (SSI) Event form for PATOS – June 2017**
  - YouTube Link [Video – 6 min]
SSI Event Detail: **PATOS** – Example 1

2/1 – Patient presents to ED with acute abdomen and goes directly to the OR for colon resection (COLO). A peritoneal abscess is documented intraoperatively and drained and a thorough abdominal washout is performed. Incision is loosely closed with some packing between staples and a JP drain is placed in an adjacent stab wound.

2/4 – Patient is discharged with wounds healing well.

2/8 – Patient presents to ED with fever, abdominal pain and an abdominal CT is performed. The abdominal CT identifies a left lower quadrant abscess with a subsequent CT-guided drainage of the abscess which identifies (+) for *E.coli*.

This is reported as an SSI-IAB (meets IAB criterion 1).

The PATOS field would be entered as a YES.
2/1 – Patient presents to ED with acute abdomen and goes directly to the OR for colon resection (COLO). A peritoneal abscess is documented intraoperatively and drained and a thorough abdominal washout is performed. Incision is loosely closed with some packing between staples and a JP drain is placed in an adjacent stab wound.

2/4 – Patient is discharged with wounds healing well.

2/8 – Patient presents to ED with fever, abdominal pain and an abdominal CT is performed. The abdominal CT identifies a left lower quadrant abscess with a subsequent CT-guided drainage of the abscess which identifies (+) for E.coli.

This is reported as an SSI-IAB (meets IAB criterion 1).

The PATOS field would be entered as a YES.
SSI Event Detail: PATOS – Example 2

2/1 – Patient presents to ED with acute abdomen and goes directly to the OR for colon resection (COLO). A peritoneal abscess is documented intraoperatively and drained and a thorough abdominal washout is performed. Incision is loosely closed with some packing between staples and a JP drain is placed in an adjacent stab wound.

2/4 – Patient is discharged with wounds healing well.

2/8 – Patient presents to ED with purulent drainage from the deep incision.

This is reported as an SSI-DIP (meets DIP criterion a).

The PATOS field would be entered as a NO.
SSI Event Detail: **PATOS** – Example 2 Rationale

2/1 – Patient presents to ED with acute abdomen and goes directly to the OR for colon resection (COLO). A *peritoneal abscess is documented intraoperatively* and drained and a thorough abdominal washout is performed. Incision is loosely closed with some packing between staples and a JP drain is placed in an adjacent stab wound.

2/4 – Patient is discharged with wounds healing well.

2/8 – Patient presents to ED with *purulent drainage from the deep incision*. This is reported as an SSI-DIP (meets DIP criterion a).

The **PATOS** field would be entered as a NO.
Application of the SSI Criteria: Through Knowledge Checks
What can the user provide to NHSN for a complete (SSI) case review request?

**Question:** What can the user provide to NHSN for a complete SSI case review request?

Please let NHSN know what your question(s) are and what your thoughts are regarding the case. Including:

- OR procedure(s) and date(s) of all procedures including reoperations:
  - Whether the operative procedures are coded as NHSN operative procedures (if so, provide the NHSN operative procedure code(s) and category(s))
  - If a return to OR via same incision, was the start time of the return to OR procedure within 24 hours of finish time of the prior operative procedure?
- Signs and symptoms? Please include dates of signs and symptoms.
- Tissue levels involved- Superficial, Deep and/or Organ/Space?
What can the user provide to NHSN for a complete (SSI) case review request? Cont.

- Was any imaging testing performed and described? Please include dates of any imaging performed.
- Fluid collections or drainage?
  - CT guided drainage performed? Drainage from JP drain? Drainage from wound?
  - How was the drainage described? Purulent?
- Culture Results
  - What site was the specimen collected from?
  - What tissue level (depth) was the specimen collected from? If you are unsure NHSN recommends consulting with the surgeon/physician to make that determination.
- Other evidence of infection?
Scenario #1
Scenario #1:

11/1 – 43-year-old Mr. Green was involved in an MVC and underwent emergent exploratory laparotomy (XLAP) and colectomy (COLO). Operative report states blunt colonic perforation with gross fecal contamination. At conclusion of procedure, it was noted that the “Skin was loosely approximated with staples and a wound vac was applied to the incision”.

11/5 – While in hospital, the patient began to complain of a hot incision site. MD removed 2 staples and opened up and probed superficial wound. No cultures were performed. Patient started on antibiotics.
Knowledge Check #2: What is the Closure Technique that should be assigned?

A. Primary Closure
B. Non-Primary Closure
Knowledge Check #2:
What is the Closure Technique that should be assigned?

✅ A. Primary Closure

**Rationale:**
Portions of the incision are closed at the skin level. If any portion of the incision is closed at the skin level, by any manner, a designation of primary closure should be assigned to the surgery.
Knowledge Check #3:
Operative report states *blunt colonic perforation with gross fecal contamination*. What wound class should the IP recommend be assigned?

A. Clean (C)
B. Clean-Contaminated (CC)
C. Contaminated (CO)
D. Dirty/Infected (D)
E. IP should not recommend assignment of wound class
Knowledge Check #3:
Operative report states *blunt colonic perforation with gross fecal contamination*. What wound class should the IP recommend be assigned?

E. IP should not recommend assignment of wound class

*Rationale*:
Wound class should be assigned by a person involved in the surgical procedure based on the findings of each case:
– NHSN does not endorse the IP modifying the wound class after it has been assigned.
Knowledge Check #4: What SSI criteria is met?

A. Superficial Incisional SSI criterion a
B. Superficial Incisional SSI criterion b
C. Superficial Incisional SSI criterion c
D. This is not an SSI – the patient was involved in a trauma
Knowledge Check #4: What SSI criteria is met?

C. Superficial Incisional SSI criterion C.

**Rationale:**
A deliberate opening made into the superficial tissue level, a culture or non-culture based test is not performed, and heat at incision site

- **Trauma = YES** does not exclude reporting the procedure nor the SSI event. Trauma field on denominator form is used in risk adjustment.
Knowledge Check #5:
What procedure gets the SSI attribution?

A. XLAP
B. COLO
C. This is not an SSI
Knowledge Check #5:
What procedure gets the SSI attribution?

✅ B. COLO

Rationale:
Because procedure attribution is not clear, use the NHSN Principal Operative Procedure Selection Lists (*Table 4) to select which operative procedure to which the SSI should be attributed.
SSI Event Reporting Instruction #9:
SSI Attribution after Multiple types of NHSN procedures are performed during a single trip to the OR

9. SSI attribution after multiple types of NHSN procedures are performed during a single trip to the OR: If more than one NHSN operative procedure category was performed through a single incision/laparoscopic sites during a single trip to the operating room, attribute the SSI to the procedure that is thought to be associated with the infection. If it is not clear, as is often the case when the infection is an incisional SSI, use the NHSN Principal Operative Procedure Category Selection Lists (Table 4) to select the operative procedure to which the SSI should be attributed. For example, if a patient develops SSI after a single trip to the OR in which both a COLO and SB were performed, and the source of the SSI is not apparent, assign the SSI to the COLO procedure.

Table 4. NHSN Principal Operative Procedure Category Selection List
(The categories with the highest risk of SSI are listed before those with lower risks.)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Category</th>
<th>Abdominal Operative Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LT</td>
<td>Liver transplant</td>
</tr>
<tr>
<td>2</td>
<td>COLO</td>
<td>Colorectal surgery</td>
</tr>
<tr>
<td>3</td>
<td>BILL</td>
<td>Bile duct, liver or pancreatic surgery</td>
</tr>
<tr>
<td>4</td>
<td>SB</td>
<td>Small bowel surgery</td>
</tr>
<tr>
<td>5</td>
<td>REC</td>
<td>Rectal surgery</td>
</tr>
<tr>
<td>6</td>
<td>KTP</td>
<td>Kidney transplant</td>
</tr>
<tr>
<td>7</td>
<td>GAST</td>
<td>Gastric surgery</td>
</tr>
<tr>
<td>8</td>
<td>AAA</td>
<td>Abdominal aortic aneurysm repair</td>
</tr>
<tr>
<td>9</td>
<td>HYST</td>
<td>Abdominal hysterectomy</td>
</tr>
<tr>
<td>10</td>
<td>CSFC</td>
<td>Cesarean section</td>
</tr>
<tr>
<td>11</td>
<td>XLAP</td>
<td>Laparotomy</td>
</tr>
<tr>
<td>12</td>
<td>APPY</td>
<td>Appendix surgery</td>
</tr>
<tr>
<td>13</td>
<td>HER</td>
<td>Herniorrhaphy</td>
</tr>
<tr>
<td>14</td>
<td>NEPIS</td>
<td>Kidney surgery</td>
</tr>
<tr>
<td>15</td>
<td>VHYS</td>
<td>Vaginal hysterectomy</td>
</tr>
<tr>
<td>16</td>
<td>SPLE</td>
<td>Splenectomy</td>
</tr>
<tr>
<td>17</td>
<td>CRBL</td>
<td>Gall bladder surgery</td>
</tr>
<tr>
<td>18</td>
<td>OVY</td>
<td>Ovarian surgery</td>
</tr>
</tbody>
</table>

Table 4. NHSN Principal Operative Procedure Category Selection List
(The categories with the highest risk of SSI are listed before those with lower risks.)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Category</th>
<th>Thoracic Operative Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HTP</td>
<td>Heart transplant</td>
</tr>
<tr>
<td>2</td>
<td>CBGB</td>
<td>Coronary artery bypass graft with donor incision(s)</td>
</tr>
<tr>
<td>3</td>
<td>CBGC</td>
<td>Coronary artery bypass graft, chest incision only</td>
</tr>
<tr>
<td>4</td>
<td>CARD</td>
<td>Cardiac surgery</td>
</tr>
<tr>
<td>5</td>
<td>THOR</td>
<td>Thoracic surgery</td>
</tr>
</tbody>
</table>

Table 4. NHSN Principal Operative Procedure Category Selection List
(The categories with the highest risk of SSI are listed before those with lower risks.)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Category</th>
<th>Neurosurgical (Brain/Spine) Operative Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VSNH</td>
<td>Ventricular shunt</td>
</tr>
<tr>
<td>2</td>
<td>CRAN</td>
<td>Craniootomy</td>
</tr>
<tr>
<td>3</td>
<td>FUSN</td>
<td>Spinal fusion</td>
</tr>
<tr>
<td>4</td>
<td>LAM</td>
<td>Lumbar laminectomy</td>
</tr>
</tbody>
</table>

Table 4. NHSN Principal Operative Procedure Category Selection List
(The categories with the highest risk of SSI are listed before those with lower risks.)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Category</th>
<th>Neck Operative Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NECK</td>
<td>Neck surgery</td>
</tr>
<tr>
<td>2</td>
<td>THRY</td>
<td>Thyroid and or parathyroid surgery</td>
</tr>
</tbody>
</table>

Table 4. NHSN Principal Operative Procedure Category Selection List
(The categories with the highest risk of SSI are listed before those with lower risks.)
Scenario #2
6/5 – Mrs. Blue was admitted to facility and underwent HYST procedure. ICD-10-PCS code assigned = 0UT94ZZ

6/6 – Mrs. Blue was discharged.

6/14 – Mrs. Blue was seen by her surgeon for a post-op check-up. Mrs. Blue noted that her incision site had become red over the past couple of days with some slight drainage. The surgeon dictated that she observed serous-colored drainage from Mrs. Blue’s superficial incision site and collected a culture of the drainage. Antibiotics were prescribed and Mrs. Blue was sent home.

6/16 – Culture results: Staph epidermidis
Knowledge Check #6: How would you answer the scope field on the denominator for procedure form?

A. Scope = No
B. Scope = Yes
Knowledge Check #7: Does Mrs. Blue have an SSI?

A. Yes. Superficial Incisional SSI criterion a is met
B. Yes. Superficial Incisional SSI criterion b is met
C. Yes. Superficial Incisional SSI criterion c is met
D. No. SSI criteria is not met because the organism isolated is common skin flora.
Scenario #2

Knowledge Check #7: Does Mrs. Blue have an SSI?

✔ B. Yes. = Superficial Incisional SSI criterion b is met.

Rationale:
Because an organism was identified (S. epidermidis), even if considered a ‘common skin flora’, the organism is still eligible for SSI surveillance.

<table>
<thead>
<tr>
<th>Surgical Site Infection (SSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superficial incisional SSI</td>
</tr>
<tr>
<td>Must meet the following criteria:</td>
</tr>
<tr>
<td>Date of event occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date)</td>
</tr>
<tr>
<td>AND</td>
</tr>
<tr>
<td>involves only skin and subcutaneous tissue of the incision</td>
</tr>
<tr>
<td>AND</td>
</tr>
<tr>
<td>patient has at least one of the following:</td>
</tr>
<tr>
<td>a. purulent drainage from the superficial incision.</td>
</tr>
<tr>
<td>b. organism(s) identified from an aseptically-obtained specimen from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).</td>
</tr>
<tr>
<td>c. superficial incision that is deliberately opened by a surgeon, attending physician* or other designee and culture or non-culture based testing of the superficial incision or subcutaneous tissue is not performed</td>
</tr>
<tr>
<td>AND</td>
</tr>
<tr>
<td>patient has at least one of the following signs or symptoms: localized pain or tenderness; localized swelling; erythema; or heat.</td>
</tr>
<tr>
<td>d. diagnosis of a superficial incisional SSI by the surgeon, attending physician* or other designee.</td>
</tr>
</tbody>
</table>

* The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician’s designee (nurse practitioner or physician’s assistant).
Scenario #3
Scenario #3:

3/20 – Mr. Sweetheart underwent CABG x3 with saphenous vein graft (CBGB). His pre-operative nares MRSA screening was positive. No documentation of infection within the operative procedure report.

3/27 – Mr. Sweetheart is discharged.
4/10 – Mr. Sweetheart went to the Emergency Department with complaints of acute incisional pain and opening of sternal incision. He also complained his leg incision had been becoming hot and swollen over the past week and complained of a small amount of blood-tinged drainage from incision. The Emergency Room MD diagnosed and documented a superficial wound infection of the leg incision. Mr. Sweetheart is admitted.

4/11 – Mr. Sweetheart is taken to the OR and the surgeon documented the sternal incision had dehisced down to just above the sternal bone. Intraoperative deep wound culture was collected and positive for MRSA. Leg incision site not manipulated or cultured.
Knowledge Check #8: What Should Be Reported?

A. Two SSI events – SIP and DIP
B. Two SSI events – SIS and DIP
C. One SSI event – DIP
D. One SSI event – SIP
E. Nothing. The patient was colonized with MRSA prior to surgery.
Knowledge Check #8: What Should Be Reported?

B. Two SSI events – SIS and DIP

**Rationale:**

**SIS SSI criterion d:**

Diagnosis of a superficial incisional SSI of secondary incision site by the ED physician

- MRSA colonization does not eliminate the patient from SSI surveillance!

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<tr>
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<td>c. superficial incision that is deliberately opened by a surgeon, attending physician* or other designee and culture or non-culture based testing of the superficial incision or subcutaneous tissue is not performed</td>
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* The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician’s designee (nurse practitioner or physician’s assistant).
Scenario #3

Knowledge Check #8: What Should Be Reported?

Rationale:

DIP SSI criterion b:

Deep incision spontaneously dehisces, organism identified from the deep soft tissues of the incision by culture, localized pain

- MRSA colonization does not eliminate the patient from SSI surveillance!
Denominator Reporting Instruction #7

Attributing SSI to NHSN procedures that have secondary incision sites

- Procedures that can involve secondary incisions: BRST, CBGB, CEA, FUSN, PVBY, REC, VSHN
- The surveillance period for all secondary incision sites is 30 days
- Procedures meeting this designation are reported as only one operative procedure.

**Example:**

- A saphenous vein harvest incision site in a CBGB procedure is considered the secondary incision site.
- One CBGB procedure is reported, the saphenous vein harvest site is monitored for 30 days after surgery for SSI, and the chest incision is monitored for 90 days after surgery for SSI.
- If the patient develops an SSI of the leg site (such as a superficial incisional SSI) and an SSI of the chest site (such as a deep incisional SSI) two SSIs are reported.
How do I determine the level of infection for the sternal site after cardiac procedures?

- Apply the superficial incisional SSI criteria if the infection involves the skin or subcutaneous tissue.

- If the infection goes to the sternum but does not involve the bone apply the deep incisional criteria.

- If the infection is of the sternal bone apply the organ/space BONE criteria.

- If the infection is below the sternum in the mediastinal space apply the MED – Mediastinitis criteria. These cultures are often named mediastinal fluid or tissue.

**NOTE:** If a patient meets both BONE and MED you call it an organ/space MED – Mediastinitis infection.
**Knowledge Check #9:**
Do you mark PATOS = YES on the SSI event form?

A. Yes, the patient was colonized with MRSA at the time of the index operative procedure.

B. No, there was no evidence of infection of the surgical site documented in the operative procedure report.

C. This is not an SSI so PATOS does not matter.
Knowledge Check #9:
Do you mark PATOS = YES on the SSI event form?

✅ B. PATOS = No, there was no evidence of infection of the surgical site documented in the operative procedure report.

Rationale:
MRSA colonization is not evidence of infection of the surgical site.
- Since there was no documentation within the operative procedure report of infection ‘seen’ involving the surgical site, PATOS = NO.
Scenario #4:

4/15 – A 34-year-old female underwent an unscheduled CSEC.

4/17 – Patient vitals declined, a bleed is suspected and patient taken back to the OR where a **HYST** is performed.

4/19 – Patient spiked a temperature of 38.2.

4/20 – At the bedside, the surgeon noted that the patients incision dehisced through the fascia. Culture was collected from the deep tissues. The surgeon did not enter beyond the deep tissue level.

4/21 – Deep wound culture returned positive for *E.coli*. 
Knowledge Check #10: What Should Be Reported?

A. Deep Incisional SSI criterion b DOE - 4/19
B. Deep Incisional SSI criterion b DOE - 4/20
C. SSI criteria is not met
Knowledge Check #10: What Should Be Reported?

A. Deep Incisional SSI criterion b

Rationale:
Deep incision spontaneously dehisces, organism identified from the deep soft tissues of the incision by culture, fever.

4/19 DOE: First element used to meet the SSI criteria (fever) occurred on this date.
Knowledge Check #11:
This SSI event is linked to what procedure?

A. 4/15 CSEC
B. 4/17 HYST
C. SSI criteria is not met
Knowledge Check #11: This SSI event is linked to what procedure?

B. 4/17 HYST

Rationale:
- The SSI event goes to the operative procedure that was performed most closely in time to the SSI event: HYST
- The CSEC SSI surveillance period ended at the conclusion of the HYST procedure.

5. Attributing SSI to a NHSN procedure when several are performed on different dates: If a patient has several NHSN operative procedures performed on different dates prior to an infection, attribute the SSI to the operative procedure that was performed most closely in time prior to the infection date, unless there is evidence that the infection was associated with a different operation.
Scenario #4 Evolves:

4/23 – Fever continues. CT of abdomen/pelvis is performed - findings include suspected abscess in the deep pelvis with inflammatory stranding. CT-guided abscess drainage is performed and 150 cc of purulent fluid from the pelvic space is aspirated. Culture is sent of this fluid.

4/25 – Pelvic fluid culture results return and is positive for *E. coli*. 
Knowledge Check #12: What should you do next?

A. Nothing. The patient already met criteria for a Deep Incisional SSI event

B. Organ/Space SSI criteria should now be reviewed to determine if the Deep Incisional SSI event should be modified to reflect an organ/space SSI event

C. Organ/Space SSI criteria should now be reviewed to determine if a second SSI event should be attributed to the 4/17 HYST procedure
Knowledge Check #12: What should you do next?

B. Organ/Space SSI criteria should now be reviewed to determine if the Deep Incisional SSI event should be modified to reflect an organ/space SSI event.

Rationale:
The SSI surveillance period for the HYST procedure is 30 days. Continue to monitor for Organ/Space SSI event.
Scenario #4

Knowledge Check #13:
Does the patient meet criteria for an Organ/Space SSI?

A. Yes – Organ/Space SSI criteria is met
B. No – Organ/Space SSI criteria is not met
Knowledge Check #13:
Does the patient meet criteria for an Organ/Space SSI?

A. Yes – Organ/Space SSI criteria is met

Rationale:
O/S criterion a, b and c are all met:
- Imaging test suggests pelvic abscess, purulent fluid from a pelvic abscess is aspirated and organisms (E.coli) are identified.

Organ/Space SSI
Must meet the following criteria:
- Date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2
- AND
- involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure
- AND
- patient has at least one of the following:
  - a. purulent drainage from a drain that is placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage).
  - b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).
  - c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection.
- AND
- meets at least one criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections chapter.
Scenario #4

**Knowledge Check #14:**
What site-specific criteria is met?

A. IAB  
B. OREP  
C. EMET  
D. VCUF
Knowledge Check #14: What site-specific criteria is met?

B. OREP

Rationale:
OREP criterion 1 and 2 met:
- Infection is localized to the pelvic space (deep pelvic tissue infection)
- Organisms are identified from purulent fluid from abscess within the pelvic space (deep pelvic tissue infection)

OREP - Deep pelvic tissue infection or other infection of the male or female reproductive tract (for example, epididymis, testes, prostate, vagina, ovaries, uterus) including chorioamnionitis, but excluding vaginitis, endometritis or vaginal cuff infections

Other infections of the male or female reproductive tract must meet at least one of the following criteria:

1. Patient has organism(s) identified from tissue or fluid from affected site (excludes urine and vaginal swabs) by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. Patient has an abscess or other evidence of infection of affected site on gross anatomic or histopathologic exam.
3. Patient has suspected infection of one of the listed OREP sites and two of the following localized signs or symptoms: fever (>38.0°C), nausea*, vomiting*, pain or tenderness*, or dysuria*

And at least one of the following:
   a. organism(s) identified from blood by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
   b. physician initiates antimicrobial therapy within two days of onset or worsening of symptoms

* With no other recognized cause

Reporting instructions:
- Report endometritis as EMET.
- Report vaginal cuff infections as VCUF.
- If patient has epididymitis, prostatitis, or orchitis and meets OREP criteria, and they also meet UTI criteria, report UTI only, unless the OREP is a surgical site organ/space infection, in which case, only OREP should be reported.
Knowledge Check #15:
Both Deep Incisional SSI criteria and Organ/Space (OREP) SSI criteria are met in the HYST SSI surveillance period. What do you report?

A. Deep Incisional SSI DOE 4/19 attributed to the 4/17 HYST
B. Organ/Space OREP SSI DOE 4/23 attributed to the 4/17 HYST
C. Both the Deep Incisional SSI event and Organ/Space OREP SSI event attributed to the 4/17 HYST
Knowledge Check #15:
Both Deep Incisional SSI criteria and Organ/Space (OREP) SSI criteria are met in the HYST SSI surveillance period. What do you report?

B. Organ/Space OREP SSI DOE 4/24 attributed to the 4/17 HYST

Rationale:
The SSI-OREP reflects the deepest tissue level where SSI criteria are met during the SSI surveillance period.
Scenario #5
Scenario #5:

8/13 – Mr. Spine underwent L4-L5 Posterior Lumbar Fusion (FUSN)

8/17 – Post-op course unremarkable and Mr. Spine discharged to rehab

8/20 – During rehab assessment, MD noted clear fluid leaking from incision line without any evidence of infection. Discharged back to hospital for lumbar drain placement.

8/21 – Mr. Spine underwent lumbar drain placement in IR. Drain placed just left of the midline incision at L4-L5 for treatment of leak. Mr. Spine still without any evidence of infection at that time.

8/23 – Mr. Spine developed low-grade fevers and intense pain at his L4-L5 FUSN site.

8/24 – Decision was made to return to OR. FUSN site re-explored and purulence seen in and around the L4-L5 epidural space.
Knowledge Check #16:
Is there an SSI attributable to the 8/13 FUSN?

A. Yes
B. No
Knowledge Check #16:
Is there an SSI attributable to the 8/13 FUSN?

B. No

Rationale:
FUSN organ/space operative procedure site accessed on 8/21 – without evidence of infection at that time.
Because invasive manipulation occurred on 8/21, no longer would you monitor for an organ-space SSI event following the lumbar drain placement.
- Can review for meeting HAI criteria but not SSI criteria
Knowledge Check #16: Invasive Manipulation Rationale

10. SSI following invasive manipulation/accession of the operative site: An SSI will not be attributed if the following 3 criteria are ALL met:
   - during the post-operative period the surgical site is without evidence of infection and,
   - an invasive manipulation/accession of the site is performed for diagnostic or therapeutic purposes (for example, needle aspiration, accession of ventricular shunts, accession of breast expanders) and,
   - an infection subsequently develops in a tissue level which was entered during the manipulation/accession.

Tissue levels that are BELOW the deepest entered level will be eligible for SSI. For example, a superficial debridement following a COLO procedure, where the muscle/fascia and organ/space was not entered, a subsequent organ/space SSI following the debridement may be an SSI attributable to the index COLO procedure. This reporting instruction does NOT apply to closed manipulation (for example, closed reduction of a dislocated hip after an orthopedic procedure). Invasive manipulation does not include wound packing, or changing of wound packing materials as part of postoperative care.
Scenario #5 (slightly modified):

8/13 – Mr. Spine underwent L4-L5 Posterior Lumbar Fusion (**FUSN**); a lumbar drain is placed at the time of surgery.

8/15 – Post-op Mr. Spine doing well and discharged to rehab.

8/16 – While on rehab, Mr. Spine developed low-grade fevers and sudden intense pain at his L4-L5 **FUSN** site. Lumbar drain still in place and remained unaccessed. Discharged back to hospital for assessment.

8/17 – Decision was made to return to OR. **FUSN** site re-explored and purulence seen in and around the L4-L5 epidural space.
Knowledge Check #17:  
Is there an SSI attributable to the 8/13 FUSN?

A. Yes
B. No
Scenario #5

Knowledge Check #17: Is there an SSI attributable to the 8/13 FUSN?

A. Yes

Rationale:
O/S SSI criterion c:
Purulence seen in the organ/space.
- Invasive manipulation did not occur following the 8/13 FUSN procedure.
- The lumbar drain was placed at time of FUSN and remained unaccessed.

Organ/Space SSI
Must meet the following criteria:
Date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2
AND
involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure
AND
patient has at least one of the following:
   a. purulent drainage from a drain that is placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage).
   b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).
   c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection.

AND meets at least one criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections chapter.
Knowledge Check #18:
What site-specific criteria should be applied?

A. SA – Spinal Abscess
B. BONE – Osteomyelitis
C. DISC – Disc Space Infection
D. MEN – Meningitis or Ventriculitis
Knowledge Check #18:
What site-specific criteria should be applied?

A. SSI SA – Spinal Abscess

Rationale:
SA Criterion 2 met
Purulence seen in epidural space on gross anatomic exam (in OR)
Chapter 17 – Spinal Abscess/Infection (SA)

- Title “Spinal Abscess without Meningitis” (SA) has been renamed to “Spinal Abscess/infection” (SA) to be inclusive of infections where “abscess” is not documented.
  - “purulent material” added to criterion 1 as possible source of organism identification
  - SA criteria include “infection” in addition to “abscess”
  - SSI Reporting Instruction will continue to state: Report as SA if meningitis (MEN) and spinal abscess/infection (SA) are present together after operation
Scenario #6
Scenario #6:


10/20 – Patient is discharged to skilled nursing facility.

10/24 – Patient readmitted with complaints of severe abdominal pain and shortness of breath. CT reveals free air and fluid in abdomen. Patient returns to OR where gross fecal contamination was documented upon entrance into the abdominal cavity with sigmoid colon perforation. Partial colectomy and an end colostomy was performed. XLAP and COLO codes assigned.
Knowledge Check #19: Is an SSI identified?

A. SSI-Organ/Space IAB with DOE 10/3
B. SSI-Organ/Space IAB with DOE 10/24
C. SSI-Organ/Space GIT with DOE 10/24
D. SSI is not identified
Knowledge Check #19: Is an SSI identified?

✅ D. SSI is not identified

Rationale:
- There is no evidence of infection noted on 10/24 in the operative procedure report. Fecal contamination is not evidence of infection. SSI criteria is not met.
- 10/3 procedure findings cannot be used to assign an SSI event to that same 10/3 procedure. The SSI surveillance period begins once the 10/3 procedure concludes to monitor for an SSI event.

Clarification of IAB Criterion

Q14: If a patient is found to have for example stool or blood in the abdomen but there is no documentation of an abscess, purulence, or other infection can this meet the “other evidence of infection” for criterion 2 of the IAB – intraabdominal definition?

The presence of stool or blood in the intraabdominal cavity without evidence of actual infection such as pus or an abscess does not meet criterion 2 of the IAB definition. The leak or bleed may have been small or very recent and infection in the abdominal space has not developed. This case may have a high wound class which is a risk factor used for NHSN denominator data but it would not meet criterion 2. If a patient has no evidence of infection and a (+) blood culture criterion IAB 2b cannot be used, as this criterion requires evidence on gross anatomic or histopathology.
Knowledge Check #19: Is an SSI identified?

D. SSI is not identified.

Organ/Space SSI
Must meet the following criteria:
Date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2
AND
involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure
AND
patient has at least one of the following:
  a. purulent drainage from a drain placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage).
  b. organism(s) identified in situ in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).
  c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection.
AND
meets at least one criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections chapter.
Scenario #6 Evolves:

10/27 – Patient noted to be hypotensive per facility parameters. Fever of 38.5 documented. Blood cultures drawn and CT performed. CT reveals possible developing abscess in the posterior left lower abdomen. Antibiotics initiated for intraabdominal infection.

10/30 – Blood cultures resulted 2/2 C. albicans
Scenario #6

**Knowledge Check #20: Is an SSI identified?**

A. SSI-Organ/Space criterion c and IAB criterion 2b with DOE 10/24
B. SSI-Organ/Space criterion c and IAB criterion 3b with DOE 10/27
C. SSI-Organ/Space criterion c and GIT criterion 2c with DOE 10/27
D. SSI is not identified.
Knowledge Check #20: Is an SSI identified?

B. SSI-Organ/Space criterion **c** and IAB criterion **3b** with DOE 10/27

**Organ/Space SSI**
Must meet the following criteria:
- Date of event occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2
- AND
- involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure
- patient has at least one of the following:
  - a. purulent drainage from a drain that is placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage).
  - b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)).
  - c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection.
- AND
  - meets at least one criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections chapter.

**Rationale:**
Organ/Space SSI criterion C is met: CT reveals possible developing abscess in the posterior left lower abdomen.
Scenario #6

Knowledge Check #20: Is an SSI identified?

✓ B. SSI-Organ/Space criterion c and IAB criterion 3b with DOE 10/27

Rationale:

IAB criterion 3b is met: fever, hypotension, *C. albicans* in blood (MBI organism), imaging test evidence equivocal for infection with physician documentation of antimicrobial treatment for IAB infection.
Knowledge Check #20: Why isn’t this an SSI – GIT?

 GIT- Gastrointestinal tract infection (esophagus, stomach, small and large bowel, and rectum) excluding gastroenteritis, appendicitis, and C. difficile infection.
Knowledge Check #21:
What operative procedure gets the SSI attribution?

A. 10/3 XLAP
B. 10/3 SB
C. 10/24 COLO
D. 10/24 XLAP
E. SSI is not identified so SSI attribution doesn’t matter
Knowledge Check #21: What operative procedure gets the SSI attribution?

C. 10/24 COLO

Rationale:
- The return to OR on 10/24 for COLO & XLAP begins a new SSI surveillance period.
- SSI attribution goes to the 10/24 COLO procedure based on Table 4.
Knowledge Check #22: An SSI is identified. Does PATOS = YES or NO?

A. PATOS = YES. There is infection seen during the 10/3 procedure and documented in OP note.

B. PATOS = YES. There is infection seen during the 10/24 procedure and documented in OP note.

C. PATOS = NO. There is no infection seen during the 10/24 procedure and documented in OP note.

D. This is not an SSI so PATOS doesn’t matter.
**Knowledge Check #22:** An SSI is identified. Does PATOS = YES or NO?

**C.** PATOS = **NO**. There is no infection seen during the 10/24 procedure and documented in OP note.

**Rationale:**

- **Fecal contamination is not evidence of infection.**
- You cannot use the operative findings from the 10/3 procedure to answer the PATOS question for this 10/27 SSI-IAB event.
  - A new SSI surveillance period began at the conclusion of the 10/24 procedure and therefore you can only use the findings from the 10/24 procedure to answer the PATOS question for the 10/27 SSI-IAB event.
Scenario #7:

1/15 – 67-year-old Mr. Nees underwent a right KPRO due to severe osteoarthritis, post-op course uneventful. Discharged to rehab on 1/20.

1/28 – Patient discharged home from rehab and his knee was “healing well”.

2/25 – While home, patient began to notice mild swelling and tenderness of his knee. He iced his knee and called his surgeon for an appointment.

2/26 – During the exam in the surgeon’s office swelling and tenderness was noted. 3 cc serosanguinous fluid was aspirated from the right knee joint space and sent for culture. Patient sent to hospital for admission and IV antibiotics.
Scenario, Cont.:

2/27 – Vital signs were stable with a slight fever (100.1°F), right knee was slightly warm to the touch and swelling was present. The surgeon aspirated 5cc blood-tinged serous fluid from the joint and the fluid was sent to lab for culture. Blood cultures were also drawn.

3/1 – Both joint fluid cultures were reported as rare growth of MSSA. Blood cultures were also reported positive 2/2 MSSA. The patient remained hospitalized for an additional 5 days for IV antibiotics and was discharged on home health for 6 weeks of IV antibiotics.
Knowledge Check #23:
Does this patient meet criteria for an Organ/Space SSI?

A. Yes – Organ/Space criterion a
B. Yes – Organ/Space criterion b
C. Yes – Organ/Space criterion c
D. No – None of the O/S criterion can be met
Knowledge Check #23:
Does this patient meet criteria for an Organ/Space SSI?

B. Yes - Organ/Space SSI criterion b is met

Rationale:
Organisms (MSSA) are identified from joint fluid.
Knowledge Check #24:
Which site-specific organ/space definition is applied?

A. PJI – Periprosthetic Joint Infection
B. JNT – Joint or Bursa Infection
C. Neither PJI or JNT should be reviewed
Scenario #7

Knowledge Check #24:
Which site-specific organ/space definition is applied?

A. PJI Site-specific PJI criterion 1 is met
   (for a periprosthetic joint infection following a HPRO or KPRO, PJI is applied (not JNT)).

Rationale:

PJI – Periprosthetic Joint Infection (for use as Organ/Space SSI following HPRO and KPRO only)

Joint or bursa infections must meet at least one of the following criteria:

1. Two positive periprosthetic specimens (tissue or fluid) with at least one matching organism, identified by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
Knowledge Check #25:
What is the Date of Event (DOE) for this SSI?

A. 2/25
B. 2/26
C. 2/27
D. 3/1
E. There is no DOE. This is not an SSI.
Knowledge Check #25:
What is the Date of Event (DOE) for this SSI?

B. 2/26

Rationale:
SSI-PJI Date of Event (DOE): 2/26.
- On 2/26, the first element (first positive periprosthetic culture) used to meet the SSI infection criterion occurred for the first time during the SSI surveillance period.
Knowledge Check #26:
Does the patient have a secondary BSI?

A. Yes
B. No
Knowledge Check #26: Does the patient have a secondary BSI?

A. Yes

Rationale:

2\textsuperscript{nd} BSI Scenario 1 is met:

- (+) blood cultures fall within the secondary BSI attribution period for this SSI event.
- Organism identified from blood cultures (MSSA) match organism identified from deep tissues of surgical site culture (MSSA).
Completing the SSI Event (Numerator) Form
SSI – Surveillance Forms

**Denominator for Procedure**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility ID</td>
<td>Procedure #:</td>
</tr>
<tr>
<td>*Patient ID:</td>
<td>Social Security #:</td>
</tr>
<tr>
<td>Secondary ID:</td>
<td>Medicare #:</td>
</tr>
<tr>
<td>Patient Name, Last:</td>
<td>First:</td>
</tr>
<tr>
<td>*Gender: F M Other</td>
<td>Middle:</td>
</tr>
<tr>
<td>Ethnicity (Specify):</td>
<td>*Date of Birth:</td>
</tr>
<tr>
<td>Event Type: PROC</td>
<td>*NHSN Procedure Code:</td>
</tr>
<tr>
<td>*Date of Procedure:</td>
<td>ICD-10-PCS or CPT Procedure Code:</td>
</tr>
</tbody>
</table>

**Procedure denominator data are collected using this form**

**SSI Event data are collected using this form**

**Surgical Site Infection (SSI)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility ID:</td>
<td>Event #:</td>
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<td>*Patient ID:</td>
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<td>Secondary ID:</td>
<td>Medicare #:</td>
</tr>
<tr>
<td>Patient Name, Last:</td>
<td>First:</td>
</tr>
<tr>
<td>*Gender: F M Other</td>
<td>Middle:</td>
</tr>
<tr>
<td>Ethnicity (Specify):</td>
<td>*Date of Birth:</td>
</tr>
<tr>
<td>*Event Type: SSI</td>
<td>*Date of Event:</td>
</tr>
<tr>
<td>*NHSN Procedure Code:</td>
<td>ICD-10-PCS or CPT Procedure Code:</td>
</tr>
<tr>
<td>*Date of Procedure:</td>
<td>*Outpatient Procedure: Yes No</td>
</tr>
</tbody>
</table>
SSI Event form and SSI Table of Instructions (TOI)

**SSI Event form (Numerator) Form**

**Instructions for SSI Event (Numerator) Data Collection**

- **Data Field**
  - **Facility ID**: The NHSSN-assigned facility ID will be auto-entered by the computer.
  - **Event ID**: Event ID number will be auto-entered by the computer.
  - **Patient ID**: Required. Enter the alphanumeric patient ID number. This is the patient identifier assigned by the hospital and may consist of any combination of numbers and/or letters.
  - **Social Security #: Optional. Enter the 9-digit numeric patient Social Security Number.
  - **Secondary ID**: Optional. Enter the alphanumeric ID number assigned by the facility.
  - **Medicare #: Optional. Enter the patient’s Medicare number.
  - **Patient Name**: Optional. Enter the last, first, and middle name of the patient.
  - **Gender**: Required. Check Female, Male, or Other to indicate the gender of the patient.
  - **Date of Birth**: Required. Record the date of the patient birth using this format: MM/DD/YYYY.
  - **Ethnicity**: Optional. Specify if the patient is either Hispanic or Latino, or Not Hispanic or Not Latino.
  - **Race**: Optional. Specify one or more of the choices below to identify the patient’s race: American Indian/Alaska Native, Asian, Black or African American, Native Hawaiian/Other Pacific Islander, White.
  - **Event Type**: Required. Enter SSI.
  - **Date of Event**: Required. The date when the first element used to meet the SSI infection criteria occurred for the first time during the surveillance period.
  - **Procedure Code**: Required. Enter the appropriate NHSSN procedure code name (for example, COL0, HYPh). For detailed instructions on how to report NHSSN operative procedures, see the NHSSN protocol. Note: An SSI cannot be “linked” to an operative procedure unless that procedure has already been added to NHSSN. If the procedure was previously added, and the “Link to Procedure” button is clicked, the fields pertaining to the procedure will be auto-entered by the computer.
# SSI Event Form – Patient Demographics and Information

**Surgical Site Infection (SSI)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
</table>
| Facility ID | Event #:
| Patient ID | Social Security #:
| Secondary ID | Medicare #:
| Patient Name, Last | First: Middle:
| Gender | Date of Birth:
| Ethnicity (Specify) | Race (Specify):
| Event Type | Date of Event:
| NHSN Procedure Code | ICD-10-PCS or CPT Procedure Code:
| Date of Procedure | Outpatient Procedure: Yes No
| MDRO Infection Surveillance: | |
| Yes | ☐ ☐ ☐ |
| No | ☐ ☐ ☐ |
| this infection's pathogen & location are in-plan for Infection Surveillance in the MDRO/CDI Module | not in-plan for Infection Surveillance in the MDRO/CDI Module |
| Date Admitted to Facility | Location:

---

Form Approved
OMB No. 0920-0666
Exp. Date: 11/30/2021
www.cdc.gov/nhsn
SSI Event Form – Event Details

- Remember to select all criteria used to meet the specific SSI event (in order to avoid Validation Error alert) when entering SSI event
  - Only select applicable signs and symptoms
- For Organ/Space SSI events, select criteria used to meet general organ/space definition (chapter 9) and criteria used to meet the site-specific definition (chapter 17).

<table>
<thead>
<tr>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Specific Event:</em></td>
</tr>
<tr>
<td>□ Superficial Incisional Primary (SIP)</td>
</tr>
<tr>
<td>□ Superficial Incisional Secondary (SIS)</td>
</tr>
<tr>
<td>□ Organ/Space (specify site):</td>
</tr>
</tbody>
</table>

| *Infection present at the time of surgery (PATOS):* | □ Yes | □ No |

| *Specify Criteria Used (check all that apply):* |
| Signs & Symptoms |
| □ Drainage or material† | □ Sinus tract |
| □ Pain or tenderness | □ Hypothermia |
| □ Swelling or inflammation | □ Apnea |
| □ Erythema or redness | □ Bradycardia |
| □ Heat | □ Lethargy |
| □ Fever | □ Cough |
| □ Incision deliberately opened/drainaged | □ Nausea |
| □ Wound spontaneously dehisces | □ Vomiting |
| □ Abscess | □ Dysuria |
| □ Other evidence of infection found on invasive procedure, gross anatomic exam, or histopathologic exam† | |
| □ Other signs & symptoms† | |

| Laboratory |
| □ Organism(s) identified |
| □ Culture or non-culture based testing not performed |
| □ Organism(s) identified from blood specimen |
| □ Organism(s) identified from ≥ 2 periprosthetic specimens |
| □ Other positive laboratory tests† |
| □ Imaging test evidence of infection |

| Clinical Diagnosis |
| □ Physician diagnosis of this event type |
| □ Physician institutes appropriate antimicrobial therapy† |

† per specific site criteria
### SSI Event Form – Event Details

<table>
<thead>
<tr>
<th>Detected:</th>
<th>A (During admission)</th>
<th>P (Post-discharge surveillance)</th>
<th>RF (Readmission to facility where procedure performed)</th>
<th>RO (Readmission to facility other than where procedure was performed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Bloodstream Infection:</td>
<td>Yes</td>
<td>No</td>
<td><strong>Died:</strong></td>
<td>Yes</td>
</tr>
<tr>
<td>Pathogens Identified:</td>
<td>Yes</td>
<td>No</td>
<td>If Yes, specify on pages 2-3.</td>
<td></td>
</tr>
</tbody>
</table>

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Public reporting burden of this collection of information is estimated to average 35 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666).
Linking SSI Event to Procedure
Denominator for Procedure and SSI records must be LINKED so that the correct risk factor data are matched to the SSI for a given patient.
Linking SSI Event to Procedure

- When SSI is selected from the Event Type field, Click on the “Link to Procedure” button.
- The application finds the patient data and links the SSI event to the Denominator for Procedure Record.
Linking SSI Event to Procedure

Check the box next to the appropriate procedure, and click “Link” button
After linking the SSI to its corresponding procedure, make sure the remainder of the SSI form is completed and the record saved for linking to occur.
After clicking SAVE...

Hit Save and Data Linked Together
Pay Attention to Alerts!

NHSN Patient Safety Component Home Page

- TAP Strategy Dashboard
  - Action Items

COMPLETE THESE ITEMS

- Confer Rights
  - Not Accepted

ALERTS

- 1 Incomplete Events
- 44 Missing Events
- 22 Incomplete Summary Items
- 288 Missing Summary Items
- 4 Incomplete Procedures
- 36 Missing Procedures
- 17 Missing Procedure-Associated Events
- 7 Unusual Susceptibility Profiles
Thank You!

Questions?