#### **National Center for Emerging and Zoonotic Infectious Diseases**



# Patient Safety Component Surgical Site Infection Surveillance – Where to Start?

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# **Objectives**

We will demonstrate elements of Surgical Site Infection (SSI) Surveillance and how to navigate the NHSN website effectively.

By the end of this lesson, you will be able to:

- Identify data points necessary to perform effective SSI surveillance and reporting to NHSN
- Navigate the NHSN website effectively to access protocols and resources
- Navigate the NHSN website effectively to report SSI events and procedures

# **Considerations for SSI Surveillance**

Where to start?

# **Considerations for Effective Surveillance**

- Infection Prevention Risk Assessment
- Actionable data
- Available resources
- Surveillance periods
- Denominator data
- Collaboration
- Surveillance methods
- Data points required in NHSN SSI protocols

# **Surveillance Methods**

- Active Passive
- Patient-based Laboratory-based
- Prospective Retrospective
- Priority-directed Comprehensive

# **Examples of SSI Surveillance Methods**

- Medical record review
- Consult with primary care staff
- Surgeon surveys via mail or telephone
- Patient surveys via mail or telephone
- Automated reports or alerts
- Unit rounding

# What is NHSN and Why Should I Use It?

- NHSN is a mechanism for collecting and analyzing surveillance data.
- NHSN does not have mandates for reporting, but expects specific data based on facility selections on the Monthly Reporting Plan (MRP)
- The decision to use NHSN may include:
  - Quality Reporting Program participation
  - Your facility internal risk assessment
  - Required reporting by your state or other organizations

# **NHSN SSI Resources**

# **NHSN Main Page**

#### National Healthcare Safety Network (NHSN)

#### Print

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

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



COVID-19 Modules and Dashboards

COVID-19 reporting and vaccination resources for all healthcare facilities.



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NHSN Requirements & Recommendations for Application Use

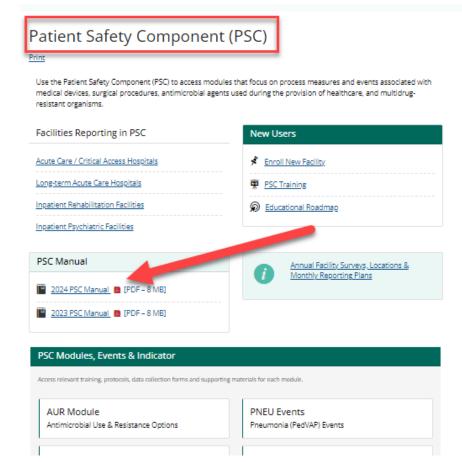


About NHSN NHSN Application CDC's NHSN is the largest HAI reporting system in U.S. NHSN Member Login AM I Enrolled? CMS Requirements Confirm if your facility is enrolled in NHSN CMS reporting requirements through NHSN Enroll New Facility Analysis Resources For first-time facility enrollment Analysis resources and guides for the PS Component NHSN Training Data Validation & Guidance Self-paced trainings, videos & quick learns Data Validation & Guidance Data & Reports CDA Submission Support (CSSP) See national and state reports using NHSN data Toolkits, FAOs, webinars & resources Email Updates Newsletters View NHSN newsletters View NHSN communications

https://www.cdc.gov/nhsn/acute-care-hospital/index.html

https://www.cdc.gov/nhsn/index.html

# Patient Safety Component (PSC) Page



#### January 2024

# **Chapter 9**



# National Healthcare Safety Network (NHSN) Patient Safety Component Manual

#### **Table of Contents**

Chapter 1: National Healthcare Safety Network (NHSN) Overview

Chapter 2: Identifying Healthcare-associated Infections (HAI) for NHSN Surveillance

Chapter 3: Patient Safety Monthly Reporting Plan and Annual Surveys

<u>Chapter 4: Bloodstream Infection Event (Central Line-Associated Bloodstream Infection and non-central line-associated Bloodstream Infection)</u>

Chapter 5: Central Line Insertion Practices (CLIP) Adherence Monitoring

Chapter 6: Pneumonia (Ventilator-associated [VAP] and non-ventilator-associated Pneumonia [PNEU]) Event

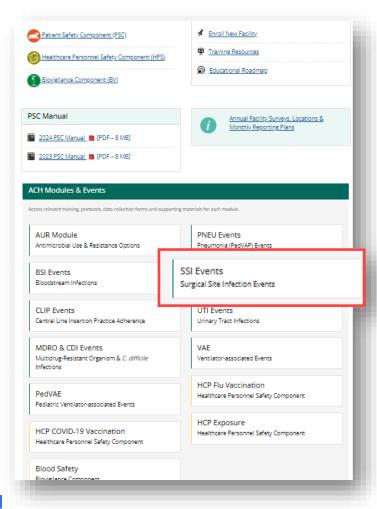
<u>Chapter 7: Urinary Tract Infection (Catheter-Associated Urinary Tract Infection [CAUTI] and non- catheter-associated Urinary Tract Infection [UTI]) and Other Urinary System Infection (USI) Events</u>

Chapter 9: Surgical Site Infection (SSI) Event

Chapter 10: Ventilator-Associated Event (VAE)

Chapter 11: Pediatric Ventilator-Associated Event (PedVAE)

## **SSI Protocol**



# **SSI Protocol**

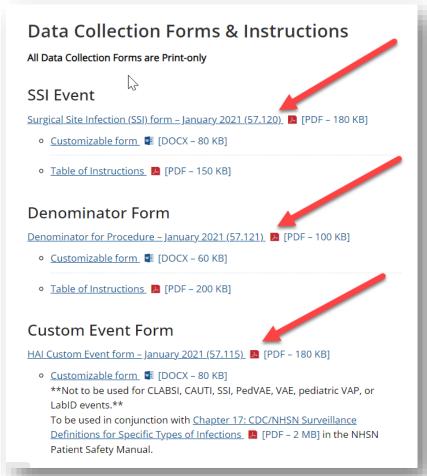


#### **Surgical Site Infection Event (SSI)**

#### **Table of Contents**

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### **Data Collection Forms and Instructions**



# **SSI Event Form**



#### **Denominator for Procedure**

| Page 1 of 2  | *required for saving                           |  |  |
|--|--|--|--|
| Facility ID  | Procedure #:                                   |  |  |
| *Patient ID:   | Social Security #:                             |  |  |
| Secondary ID:  | Medicare #:                                    |  |  |
| Patient Name, Last:  | First: Middle:                                 |  |  |
| *Gender: F M Other   | *Date of Birth:                                |  |  |
| Ethnicity (Specify):   | Race (Specify):                                |  |  |
| Event Type: PROC   | *NHSN Procedure Code:                          |  |  |
| *Date of Procedure:  | ICD-10-PCS or CPT Procedure Code:              |  |  |
| Procedure Details  |  |  |  |
| *Outpatient: Yes No  | *Duration:HoursMinutes                         |  |  |
| *Wound Class: C CC CO D  | *General Anesthesia: Yes No                    |  |  |
| ASA Score: 1 2 3 4 5   | *Emergency: Yes No                             |  |  |
| *Trauma: Yes No *Scope: Yes  | No *Diabetes Mellitus: Yes No                  |  |  |
| *Height:feetinches   | *Closure Technique: Primary Other than primary |  |  |
| (choose one)meters  *Weight:lbs/kg (circle one)                              | Surgeon Code:                                  |  |  |
| CSEC: *Duration of Labor:hours   |  |  |  |
| Circle one: FUSN  *Spinal Level (check one)  Atlas-axis  Atlas-axis/Cervical | *Approach/Technique (check one)                |  |  |

https://www.cdc.gov/nhsn/for ms/57.120\_SSI\_BLANK.pdf

# **SSI Event Table of Instructions**



January 2024

# Instructions for Completion of Surgical Site Infection (SSI) Form (CDC 57.120)

| Data Field        | Instructions for Data Collection  |  |  |
|-------------------|---|--|--|
| Facility ID       | The NHSN-assigned facility ID will be auto-entered by the computer.       |  |  |
| Event #           | 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.  |  |  |
| Sex at Birth      | Optional. Select the patient's sex assigned at birth.                     |  |  |
| (Birth Sex)       | Male  |  |  |
|                   | Female  |  |  |
|                   | Unknown   |  |  |
|                   |   |  |  |

# Denominator for Procedure Form



| Denominator for Procedure                      |                                   |                            |                      |  |  |
|--|-----------------------------------|----------------------------|----------------------|--|--|
| Page 1 of 2                                    |                                   |                            | *required for saving |  |  |
| Facility ID                                    | Procedure #:                      |                            |                      |  |  |
| *Patient ID:                                   | Social Security #:                |                            |                      |  |  |
| Secondary ID:                                  | Medicare #:                       |                            |                      |  |  |
| Patient Name, Last:                            | First:                            | Middle:                    | 2                    |  |  |
| *Gender: F M Other                             | *Date of Birth:                   |                            |                      |  |  |
| Ethnicity (Specify):                           | Race (Specify):                   |                            |                      |  |  |
| Event Type: PROC                               | *NHSN Procedure Co                | ode:                       |                      |  |  |
| *Date of Procedure:                            | ICD-10-PCS or CPT Procedure Code: |                            |                      |  |  |
| Procedure Details                              |                                   |                            |                      |  |  |
| *Outpatient: Yes No                            | *Duratio                          | on:Minute                  | es                   |  |  |
| *Wound Class: C CC CO D                        | *Genera                           | al Anesthesia: Yes No      |                      |  |  |
| ASA Score: 1 2 3 4 5                           | *Emerge                           | ency: Yes No               |                      |  |  |
| *Trauma: Yes No *Scope: Yes                    | No *Diabete                       | es Mellitus: Yes No        |                      |  |  |
| *Height:feetinches                             | *Closure                          | e Technique: Primary Other | r than primary       |  |  |
| (choose one)meters *Weight:lbs/kg (circle one) | Surgeo                            | on Code:                   |                      |  |  |
| CSEC: *Duration of Labor:hours                 |                                   |                            |                      |  |  |
| Circle one: FUSN *Spinal Level (check one)     |                                   |                            |                      |  |  |
| ☐ Atlas-axis                                   |                                   |                            |                      |  |  |
| ☐ Atlas-axis/Cervical                          | *Approach/Technique               | (check one)                |                      |  |  |
|  |                                   |                            |                      |  |  |

## **NHSN Procedure Codes**

## **Operative Procedure Code Documents**

#### 2024 Operative Procedure Code Documents

The documents listed below should be used for procedures performed January 1, 2024 through December 2024.

<u>List of NHSN 2024 Procedure Code Updates – January 2024</u> [XLS – 19 KB]

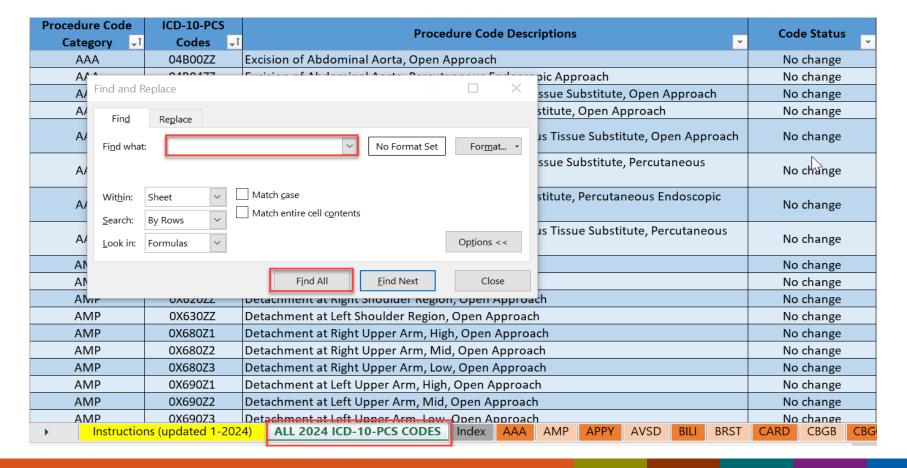
ICD-10-PCS Procedure Code Mapping to NHSN Operative Procedure Codes – January 2024 
☐ [XLS – 787 KB]

<u>Current Procedural Terminology (CPT) Procedure Code Mapping to NHSN</u>
<u>Operative Procedure Codes – January 2024</u> 
[IXLS – 346 KB]

# **Using the Procedure Code Documents**

#### 2024 NHSN ICD-10 Operative Procedure Code Mappings (updated 1-2024) This document replaces prior documents listing operative procedure codes associated with the NHSN Surgical Site Infection (SSI) Procedure-associated Protocol. Codes have been validated using current procedure code references in consultation with a trained coding professional. Codes are accurate at the time of posting, ICD-10-PCS procedure codes included in this code mapping document may be entered instead of the NHSN procedure category name (such as COLO, HYST or XLAP). Procedure codes may be entered in the following manner: • If the ICD-10-PCS procedure code is entered first, the NHSN procedure code name (such as COLO) will be auto-filled by the application. • If the NHSN procedure code name is entered first, the user will need to manually enter the correct ICD-10-PCS procedure code. • If there is a mismatch between the NHSN procedure code name and the ICD-10-PCS procedure code, the application will produce an error message. NOTES: X Although the procedure code field is optional, procedure codes maybe used in the application when entering NHSN procedures and SSI events. x For specific procedure details for reporting HPRO and KPRO procedures refer to the "ICD-10-PCS & CPT Codes -- Guidance for HPRO & KPRO Procedure Details" document found at https://www.cdc.gov/nhsn/xls/guidance-for-hpro-kpro-procedure-details.xlsx XFor specific procedure details for reporting FUSN procedures refer to the "FUSN ICD-10-PCS Codes - Guidance for Spinal Level and Approach" document found at https://www.cdc.gov/nhsn/xls/fusn-icd-10-pcs-codes.xlsx Layout of this procedure code document (see screen capture below) • Procedure categories are listed in alphabetical order along the bottom tabs of the workbook (see purple outline and arrow below), starting with AAA and ending with XLAP. •There is a worksheet for each procedure category. •The ICD-10-PCS procedure codes are listed in numerical order (see black outline and arrow below) for each procedure category. •Columns within each worksheet may be sorted and filtered. Instructions (updated 1-2024) ALL 2024 ICD-10-PCS CODES Index **CBGB**

# **Using the Procedure Code Documents**



# Reporting Requirements and Monthly Reporting Plan

# **Monthly Reporting Plan (MRP)**

 Must have a MRP completed every month to inform NHSN which modules you planning on reporting.

# Monthly Reporting Plan (MRP)

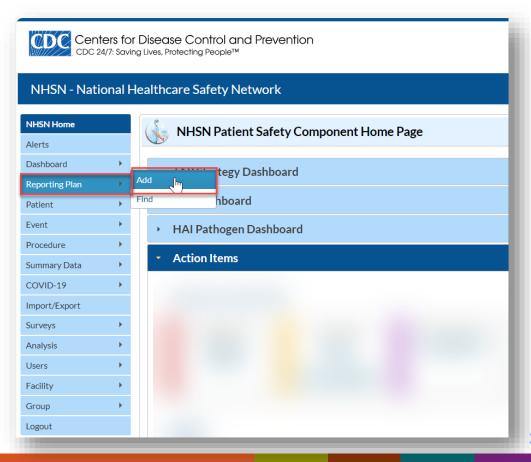
#### In-Plan

- Module included in the MRP
- NHSN Surveillance Protocol will be used in its entirety
- Data included in NHSN annual reports and other NHSN publications
- Submitted to CMS in accordance with CMS's Quality Reporting Program

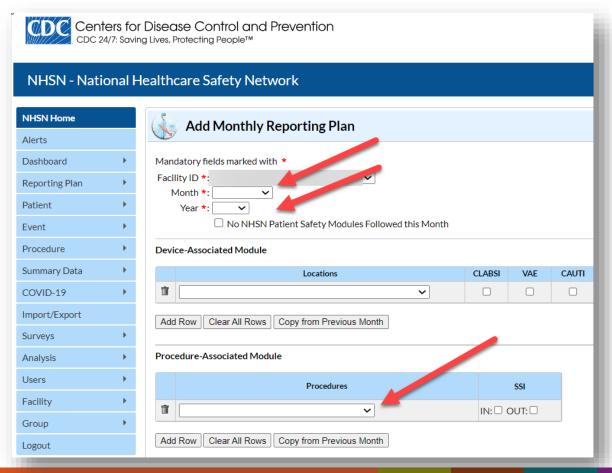
# Off-plan

- Not included in MRP
- No commitment to use NHSN
   Surveillance Protocol in its entirety
- Data is excluded from NHSN annual report and other NHSN publications
- Excluded from CMS Quality
   Reporting Program

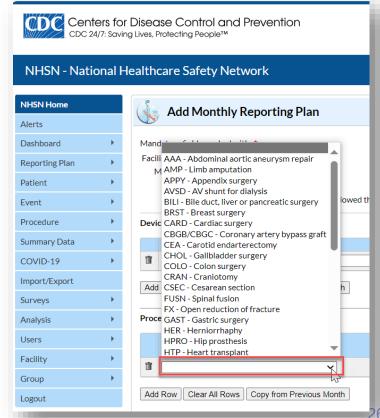
# **Adding Monthly Reporting Plan**



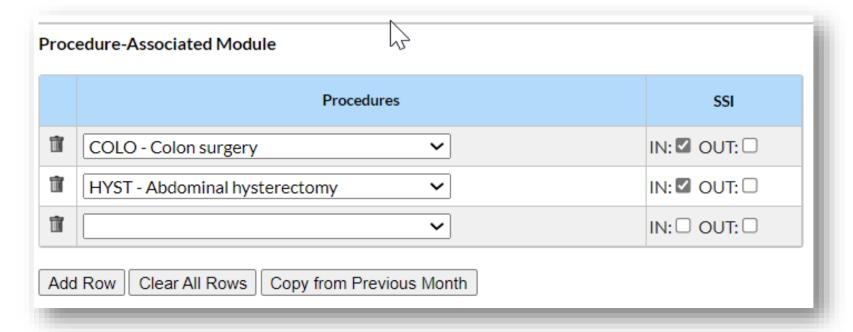
# **Adding Monthly Reporting Plan**



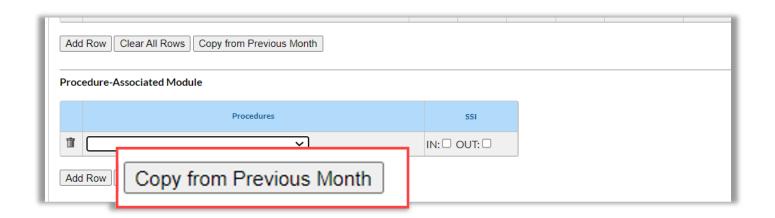
# Adding Monthly Reporting Plan for Procedure-Associated Module: Example



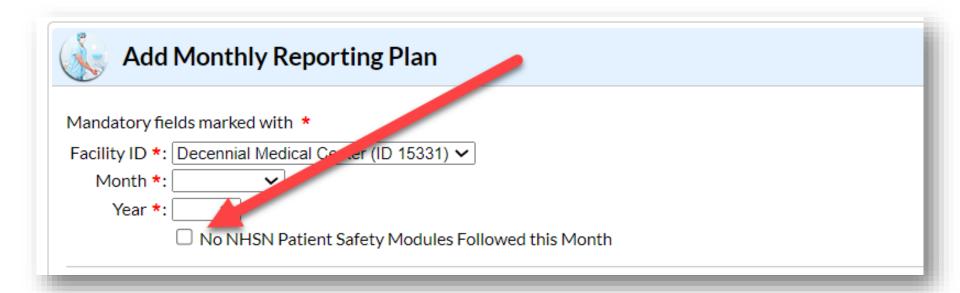
# Adding Monthly Reporting Plan for Procedure-Associated Module: Example



# Adding Monthly Reporting Plan for Procedure Associated Module: Copy from Previous Month

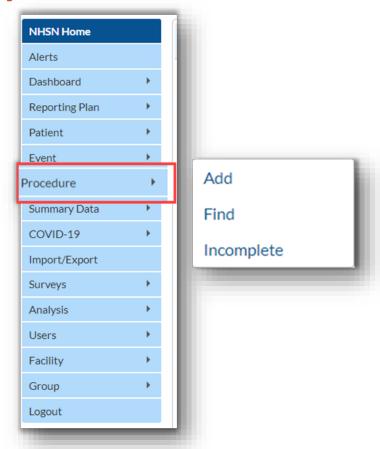


# **Adding Monthly Reporting Plan**

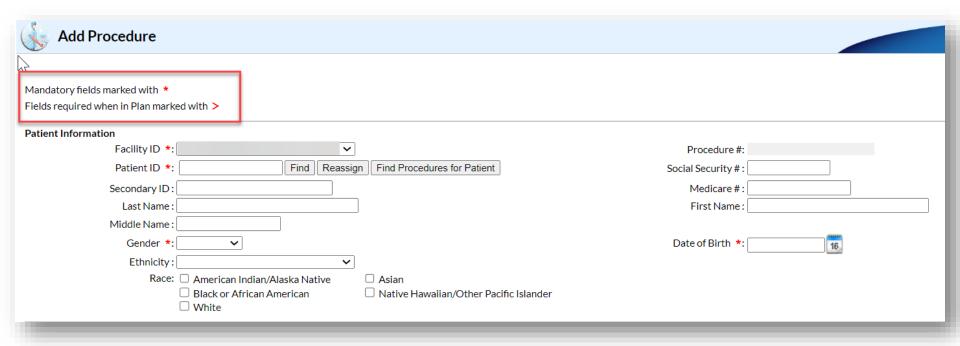


# Completing the Procedure (Denominator) Form

# **Data Entry Sources: Procedure**



# **Procedure Information**



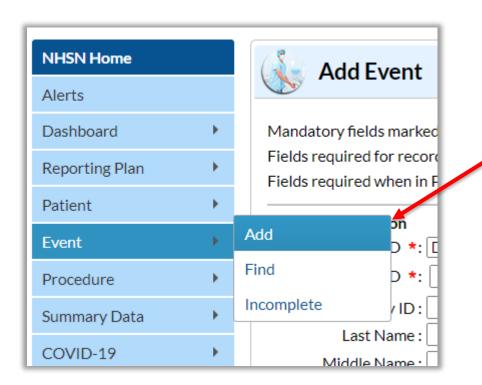
## **Procedure Form:**

# **Required and Conditional Data Points**

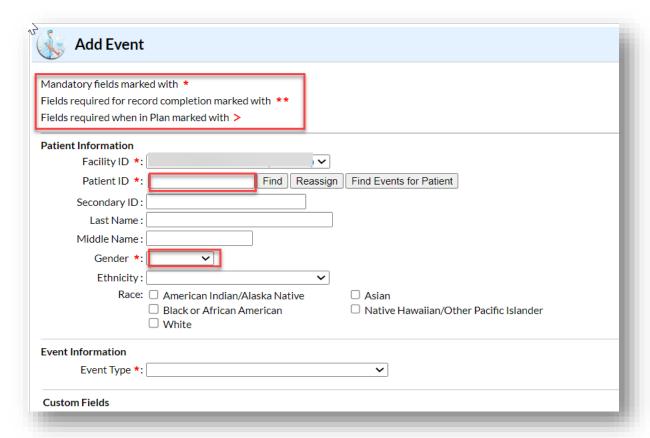
| Procedure Details    |                           |
|----------------------|---------------------------|
| Outpatient *:        | Duration (Hrs:Mins) *:    |
| Wound Class *:       | ✓ General Anesthesia *: ✓ |
| ASA Score:           | ~                         |
| Emergency *:         | Trauma *: Scope *: V      |
| Diabetes Mellitus *: | Closure Technique *:      |
| Surgeon Code:        | ~                         |
| Height *:            | orm                       |
| Weight *:            | Ibs or kg BMI             |

# Completing the SSI Event (Numerator) Form

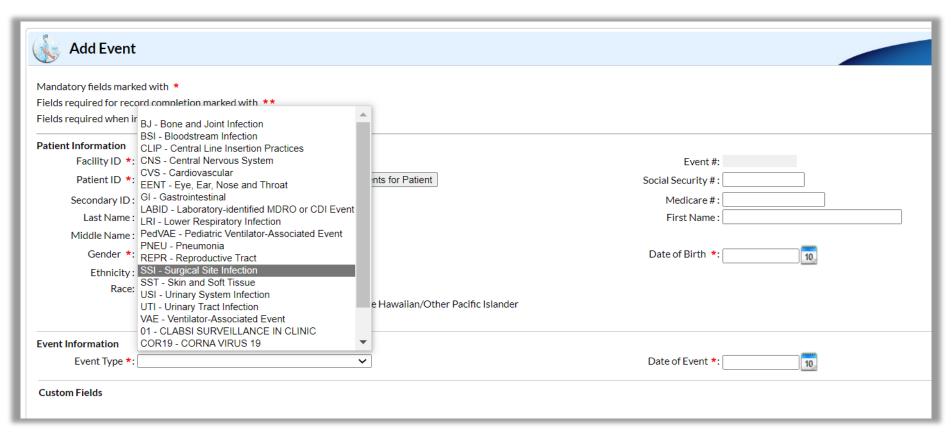
# **Data Entry Sources: Event**



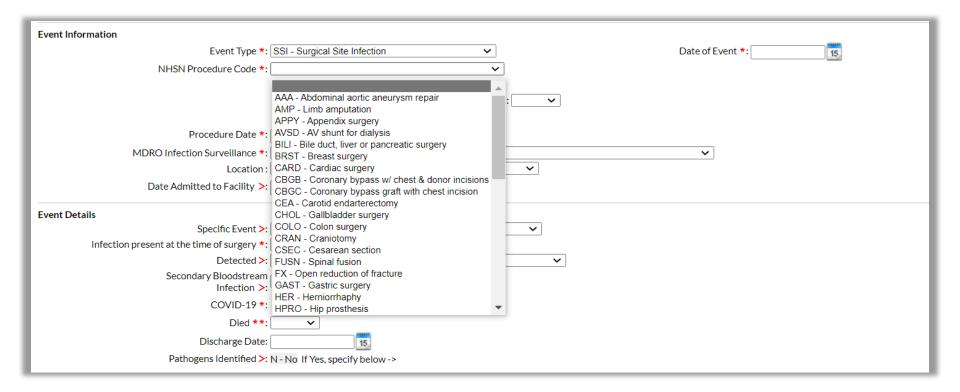
# **SSI Event Form: Patient Level Data**



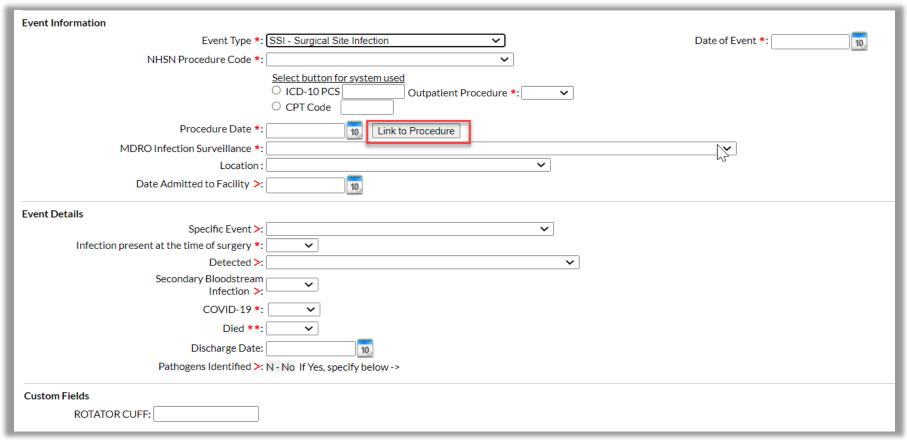
### **Event information**



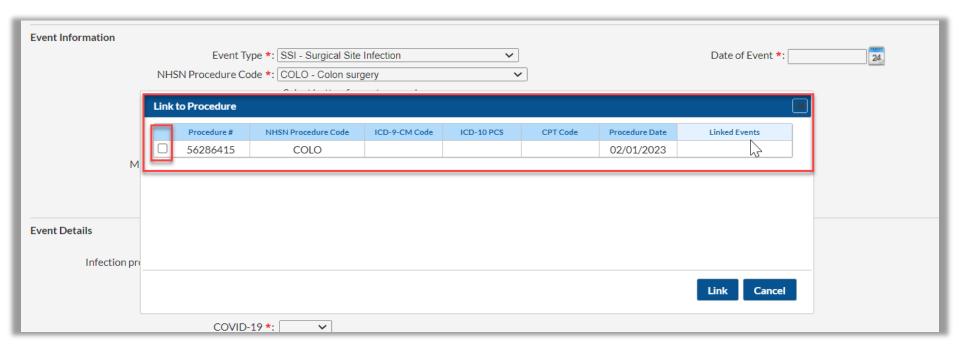
### **Event information, continued.**



### **Event information, continued.**



### **Link Event to Procedure**

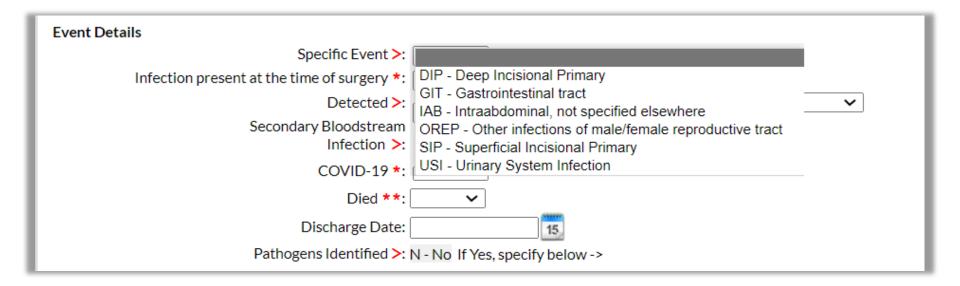


### **Link Event to Procedure**



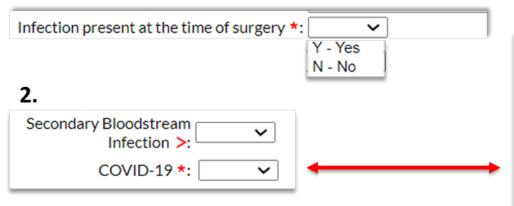
| Event Information   |                     |
|---|---------------------|
| Event Type *: SSI - Surgical Site Infection   | Date of Event *: 24 |
| NHSN Procedure Code *: COLO - Colon surgery   | _                   |
| Select button for system used  ICD-10 PCS  Outpatient Procedure *: N - No  CPT Code |                     |
| Procedure Date *: 02/01/2023 Link/Unlink Procedure Event Linked                     |                     |
| MDRO Infection Surveillance *:  |                     |
| Location:   |                     |
| Date Admitted to Facility >: 24   |                     |

### **Event Details**



#### **Event Detail**

#### 1.

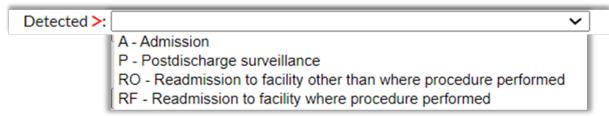


Required. Check Y if the patient met the definition of confirmed COVID-19 on the date of event; otherwise, check N.

Confirmed: A patient with a positive COVID-19 (SARS CoV-2) laboratory viral test indicating current infection (**NOTE**: this does not include serology testing for antibody).

- Answer COVID-19 as 'YES' if the patient's lab test confirmed COVID-19 prior to or on the SSI date of event. Keep in mind that patients may undergo repeat testing post-treatment and may move from a 'confirmed' to 'negative' COVID-19 status.
- Answer COVID-19 as 'NO' if the most recent lab test prior to or on the SSI date of event is negative.

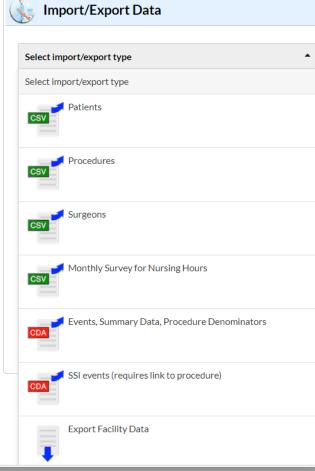
3



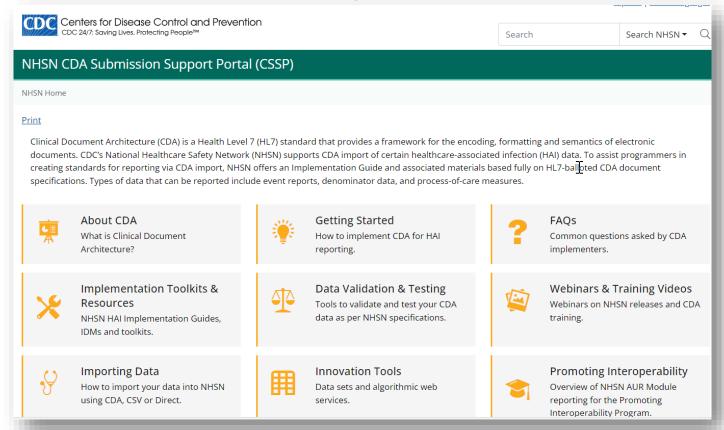
## Data Upload via CSV or CDA

### **CSV** or **CDA** file upload





### **Resources for CDA or CSV Upload**



## **Other Important Resources**

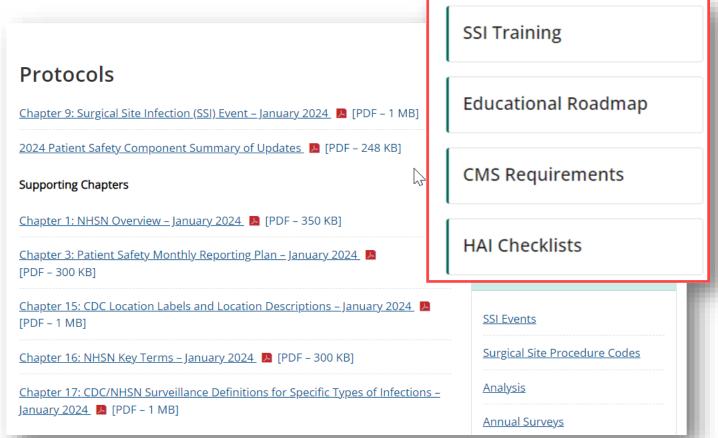
### **FAQs**

### **Protocols** Chapter 9: Surgical Site Infection (SSI) Event – January 2024 [PDF – 1 MB] 2024 Patient Safety Component Summary of Updates [PDF - 248 KB] Supporting Chapters Chapter 3: Patient Safety Monthly Reporting Plan - January 2024 [PDF - 300 KB] Chapter 15: CDC Location Labels and Location Descriptions – January 2024 [PDF - 1 MB] Chapter 16: NHSN Key Terms – January 2024 P [PDF – 300 KB] Chapter 17: CDC/NHSN Surveillance Definitions for Specific Types of Infections January 2024 🔼 [PDF – 1 MB] Top of P Data Collection Forms & Instructions All Data Collection Forms are Print-only SSI Event

SSI Training **Educational Roadmap CMS Requirements FAQs SSI Events Surgical Site Procedure Codes** 



**Training Resources** 



# For any questions or concerns, contact the NHSN Helpdesk using

NHSN-ServiceNow to submit questions to the NHSN Help Desk.

The new portal can be accessed at https://servicedesk.cdc.gov/nhsncsp.

Users will be authenticated using CDC's Secure Access Management Services (SAMS) the same way you access NHSN. If you do not have a SAMS login, or are unable to access ServiceNow, you can still email the NHSN Help Desk at nhsn@cdc.gov.

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: <a href="mailto:cdcinfo@cdc.gov">cdcinfo@cdc.gov</a> Web: <a href="mailto:www.cdc.gov">www.cdc.gov</a>

