National Center for Emerging and Zoonotic Infectious Diseases



Patient Safety Component Navigating SSI Reporting in NHSN

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NHSN Protocol and Training Team

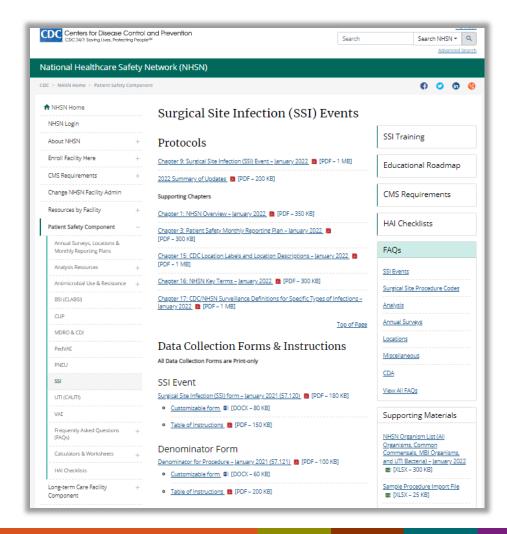
March 2022

Objectives

- Demonstrate how to locate SSI resources available on the SSI Landing Page
- Review data entry into NSHN
- Review Alerts and Generating Datasets
- Demonstrate entering an SSI event and linking this event to a procedure

SSI Resources

SSI Landing Page



Protocol

Protocols

Chapter 9: Surgical Site Infection (SSI) Event – January 2022 🖪 [PDF – 1 MB]

2022 Summary of Updates D [PDF - 200 KB]

Data Collection Forms and Instructions

Data Collection Forms & Instructions

All Data Collection Forms are Print-only

SSI Event

Surgical Site Infection (SSI) form – January 2021 (57.120) 🖪 [PDF – 180 KB]

- Table of Instructions [[PDF 150 KB]

Denominator Form

Denominator for Procedure - January 2021 (57.121) 🙍 [PDF - 100 KB]

- <u>Customizable form</u> I [DOCX 60 KB]
- Table of Instructions [B [PDF 200 KB]

SSI Event Form



Form Approved OMB No. 0920-0666 Exp. Date: 01/31/24 www.cdc.gov/nhsn

Surgical Site Infection (SSI)

Page 1 of 4					
*required for saving **required for completion					
Facility ID:		Event #:			
*Patient ID:			Social Security #:		
		Medicare #			
Patient Name, Last:		First:	Middle:		
*Gender: F M Other		*Date of Bi			
Ethnicity (Specify):		Race (Spe			
*Event Type: SSI *NHSN Procedure Code:		*Date of E	S or CPT Procedure Code:		
*Date of Procedure:			t Procedure: Yes No		
*MDRO Infection Surveillance:		Outpatien	r Flocedule. Tes No		
	otion ore	la alaa far l	Infection Surveillance in the MDRO/CDI Module		
, , , , , , , , , , , , , , , , , , , ,					
	ition are n	iot in-plan f	or Infection Surveillance in the MDRO/CDI Module		
*Date Admitted to Facility:			Location:		
Event Details					
*Specific Event:					
□ Superficial Incisional Primary (SIP)			□ Deep Incisional Primary (DIP)		
□ Superficial Incisional Secondary (SIS)			□ Deep Incisional Secondary (DIS)		
□ Organ/Space (specify site):					
*Infection present at the time of surgery ((PATOS):	□ Yes □	□ No		
*Specify Criteria Used (check all that app	oly):				
Signs & Symptoms			Laboratory		
□ Drainage or material†	☐ Sinus t	tract	□ Organism(s) identified		
-	□ Hypothermia		Culture or non-culture based testing not performed		
	□ Apnea		☐ Organism(s) identified from blood specimen		
•	□ Bradycardia				
*			□ Organism(s) identified from ≥ 2 periprosthetic		
□ Heat	□ Lethar	gy	specimens		
□ Fever	□ Cough		□ Other positive laboratory tests [†]		
 □ Incision deliberately opened/drained 	□ Nause	а	☐ Imaging test evidence of infection		
			Oll-lead Diseased		
□ Abscess	□ Dysuri	a	Clinical Diagnosis		
□ Other evidence of infection found on in	nunchun ne	rocoduro	□ Physician diagnosis of this event type		
gross anatomic exam, or histopatholo			□ Physician institutes appropriate antimicrobial therapy [†]		
☐ Other signs & symptoms†					
†per specific site criteria					
*Detected: A (During admission)	□ P (P)	ost-dischar	ge surveillance)		
□ RF (Readmission to fa	acility whe	re procedu	re performed)		
,					
□ RO (Readmission to facility other than where procedure was performed) *Secondary Bloodstream Infection: Yes No I**Died: Yes No SSI Contributed to Death: Yes No					
Discharge Date:			ns Identified: Yes *If Yes, specify on pages 2-3.		
COVID-19: Yes No		140			
If Yes: □Confirmed □Suspected	Mahard In M.				
Assumes of Confedentially. This existentity provided information obtained in this surveillance system that sends germs it extensions and any individual or institution in seclected with a guestate brattly with be half in this colorism, will be used only the purposes stated, and self-or institution in secretarises with Sections 304, 308 and 308(s) of the Public Hearth Service (ALI (USC 2010, 2010, and 2014(s)). Sections 304, 308 and 308(s) of the Public Hearth Service (ALI (USC 2010, 2010, and 2014(s)). Public sporting Section of the sculicture of information is estimated to severage 20 invitates per versions, including the time for reviewing instructions, associating data sources, gathering and					

Section 354-328 and 268(g) of the Public Health Service As (12 USC 2600, 2400, and 12 GHz(g)). The birth Service As (12 USC 2600, 2400, and 12 GHz(g)) are by a reviewing that claim, as othing a certain gold and accurate, galaxier and a comparison of the service and a comparison of the

SSI Event Table of Instructions



January 2022

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.	
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 (DOE)	Required. The date when the first element used to meet the SSI infection criterion occurred for the first time during the surveillance period. The DOE must occur within 30 days or 90 days after the NHSN operative procedure (where Day 1 = procedure date), depending on the NHSN operative	
	procedure (where Day 1 = procedure date), depending on the WISH operation procedure category. The DOE must reflect the deepest tissue level where SSI criteria are met during the surveillance period.	

Denominator for Procedure Form



Form Approved OMB No. 0920-0666 Exp. Date: 01/31/24 www.cdc.gov/nhsn

Denominator for Procedure

Procedure #: Patient ID:	Page 1 of 2	required for saving	
Medicare #: Patient Name, Last: First: Middle:	Facility ID	Procedure #:	
Patient Name, Last:	*Patient ID:	Social Security #:	
"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 "Height:feetinches "Closure Technique: Primary Other than primary (choose one)meters "Weight:lbs/kg (circle one) Surgeon Code: CSEC: "Duration of Labor:hours Surgeon Code: Circle one: FUSN "Spinal Level (check one) Atlas-axis Approach/Technique (check one) Atlas-axis/Cervical Anterior Anterior Cervical/Dorsal/Dorsolumbar Anterior and Posterior	Secondary ID:	Medicare #:	
Ethnicity (Specify):	Patient Name, Last:	First: Middle:	
Event Type: PROC	*Gender: F M Other	*Date of Birth:	
*Date of Procedure: ICD-10-PCS or CPT Procedure Code: Procedure Details *Outpatient: Yes No	Ethnicity (Specify):	Race (Specify):	
Procedure Details *Outpatient: Yes No	**	*NHSN Procedure Code:	
**Outpatient: Yes No	*Date of Procedure:	ICD-10-PCS or CPT Procedure Code:	
"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 "Closure Technique: Primary Other than primary (choose one)meters	Procedure Details		
ASA Score: 1 2 3 4 5	*Outpatient: Yes No	*Duration:HoursMinutes	
*Trauma: Yes No	*Wound Class: C CC CO D	*General Anesthesia: Yes No	
"Height:feetinches	ASA Score: 1 2 3 4 5	*Emergency: Yes No	
(choose one)meters	*Trauma: Yes No *Scope: Yes	No *Diabetes Mellitus: Yes No	
"Weight:ibs/kg (drcle one) Surgeon code: CSEC: "Duration of Labor:hours Circle one: FUSN "Spinal Level (check one)	*Height:feetinches	*Closure Technique: Primary Other than primary	
CSEC: *Duration of Labor:hours Circle one: FUSN *Spinal Level (check one) Altas-axis Atlas-axis/Cervical Cervical Cervical Cervical/Dorsolumbar Dorsal/Dorsolumbar Anterior Anterior Anterior	(choose one)meters *Weight:lbs/kg (circle one)	Surgeon Code:	
Circle one: FUSN *Spinal Level (check one) Atlas-axis Atlas-axis/Cervical Cervical Cervical Cervical/Dorsal/Dorsolumbar Dorsal/Dorsolumbar Anterior Anterior Anterior			
*Spinal Level (check one) Atlas-axis Atlas-axis/Cervical *Approach/Technique (check one) Cervical Anterior Cervical/Dorsal/Dorsolumbar Posterior Anterior Anterior			
□ Atlas-axis □ Atlas-axis/Cervical □ Cervical □ Cervical/Dorsal/Dorsolumbar □ Dorsal/Dorsolumbar □ Dorsal/Dorsolumbar □ Anterior □ Dorsal/Dorsolumbar □ Anterior and Posterior	Circle one: FUSN		
□ Allas-axis/Cervical *Approach/Technique (check one) □ Cervical □ Anterior □ Cervical/Dorsal/Dorsolumbar □ Posterior □ Dorsal/Dorsolumbar □ Anterior and Posterior	*Spinal Level (check one)		
□ Cervical □ Anterior □ Cervical/Dorsal/Dorsolumbar □ Posterior □ Dorsal/Dorsolumbar □ Anterior and Posterior	☐ Atlas-axis		
□ Cervical/Dorsolumbar □ Posterior □ Dorsal/Dorsolumbar □ Anterior and Posterior	☐ Atlas-axis/Cervical	*Approach/Technique (check one)	
□ Dorsal/Dorsolumbar □ Anterior and Posterior	☐ Cervical	☐ Anterior	
	☐ Cervical/Dorsal/Dorsolumbar	□ Posterior	
□ Lumbar/Lumbosacral	□ Dorsal/Dorsolumbar	☐ Anterior and Posterior	
La company company del	□ Lumbar/Lumbosacral		
	E Editibal/Editibusacial		
	ICD-10-PCS Supplemental Procedure Code	e for HPRO/KPRO:	
ICD-10-PCS Supplemental Procedure Code for HPRO/KPRO:			
ICD-10-PCS Supplemental Procedure Code for HPRO/KPRO: "Check one: Total Hemi Resurfacing (HPRO only)		31 77	
*Check one: Total Resurfacing (HPRO only)	ıπ ι σταl: □ Total Primary □ Total F	Revision	
•	If Hemi: Partial Primary Partial	Revision	
*Check one: Total Resurfacing (HPRO only)	If Resurfacing (HPRO only): Total Primary Partial Primary		
*Check one:	*If total or partial revision, was the revision	associated with prior infection at index joint? Yes No	

Denominator for Procedure Table of Instructions



January 2022

Instructions for Completion of Denominator for Procedure Form (CDC 57.121)

This form is used for reporting data on each patient having one of the NHSN operative procedures selected for monitoring.

Data Field	Instructions for Data Collection
Facility ID	The NHSN-assigned facility ID will be auto-entered by the computer.
Procedure #	The NHSN-assigned Procedure # 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 o the patient.
Date of birth	Required. Record the date of the patient birth using this format: MM/DD/YYYY.
Ethnicity Hispanic or Latino	Optional. If patient is Hispanic or Latino, check this box.
Not Hispanic or Not Latino	If patient is not Hispanic or not Latino, check this box.
Race	Optional. Check all the boxes that apply to identify the patient's race.
Event type	Required. Enter the code for procedure (PROC).

FAQs

Surgical Site Infection (SSI) Events SSI Training Protocols Chapter 9: Surgical Site Infection (SSI) Event - January 2022 8 [PDF - 1 MB] Educational Roadmap 2022 Summary of Updates 📙 [PDF - 200 KB] CMS Requirements Supporting Chapters Chapter 1: NHSN Overview - January 2022 [PDF - 350 KB] HAI Checklists Chapter 3: Patient Safety Monthly Reporting Plan - January 2022 [PDF - 300 KB] FAQs Chapter 15: CDC Location Labels and Location Descriptions - January 2022 D [PDF - 1 MB] SSI Events Chapter 16: NHSN Key Terms - January 2022 D [PDF - 300 KB] Surgical Site Procedure Codes Chapter 17: CDC/NHSN Surveillance Definitions for Specific Types of Infections -Analysis January 2022 D [PDF - 1 MB] Annual Surveys Top of Page Locations Data Collection Forms & Instructions Miscellaneous All Data Collection Forms are Print-only CDA SSI Event View All FAQs Surgical Site Infection (SSI) form – January 2021 (57.120) 🖪 [PDF – 180 KB]

Operative Procedure Code Documents

Operative Procedure Code Documents

2022 Operative Procedure Code Documents

The documents listed below should be used for procedures performed January 1, 2022 through December 2022.

List of NHSN 2022 ICD-10 Procedure Code Updates – January 2022 [XLS – 30 KB]

ICD-10-PCS Procedure Code Mapping to NHSN Operative Procedure Codes – January 2022 E [XLSX – 800 KB]

Additional Guidance for use with NHSN Operative Procedure Codes

This guidance document may be used for completing the NH5N procedure details for HPRO – hip arthroplasty and/or KPRO – Knee arthroplasty operative procedures.

This supplemental guidance may be used to complete the spinal level and approach fields in the Operative Procedure Details section for FUSN procedures.

ICD-10 CM Diabetes Diagnostic Codes - January 2022 E [XLSX - 40 KB]

ICD-10-CM codes included in this spreadsheet are acceptable for use to answer "YES" to "Diabetes Mellitus" for completing the NHSN Operative Procedure Details.

ICD-10-CM/PCS Codes for 'prior infection at hip or knee joint' denominator form question – January 2022.

[KLSX – 40 KB]

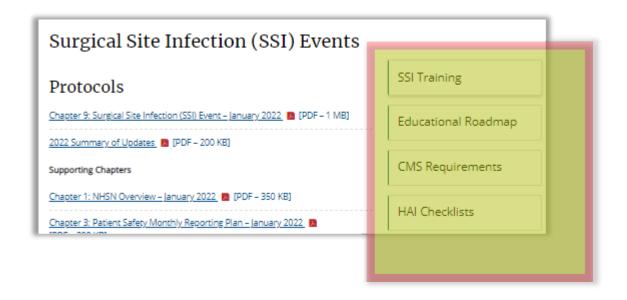
Use ICD-10-PCS/CM diagnosis or procedure codes included in this spreadsheet to determine if patient meets criteria for 'prior infection at index joint'.

Document detailing changes made to the 2021-2022 operative procedure codes

Summary of 2021-2022 Code Changes - January 2022 E [XLSX - 400 KB]

This document includes changes made to the procedure codes listed for 2021 SSI reporting, as well as, new procedure codes added for 2022 SSI reporting. Because both outdated (removed) and current procedure codes are included, use caution if this document is used to identify procedures for SSI events for reporting.

Training Resources



Reporting Requirements and Monthly Reporting Plan

What is required to report?

- NHSN does not mandate reporting.
- NHSN is a mechanism for collecting and analyzing surveillance data, based on what a facility has chosen to enter in their Monthly Reporting Plan.
- The decision to use NHSN depends on:
 - CMS Inpatient Quality Reporting Program
 - Your facility internal risk assessment
 - Required reporting by your state or other organizations

Monthly Reporting Plan (MRP)

- MRP informs NHSN which modules will be reported on during a given month
- If a module is included in the MRP, this is an agreement to follow the details of the module in its entirety

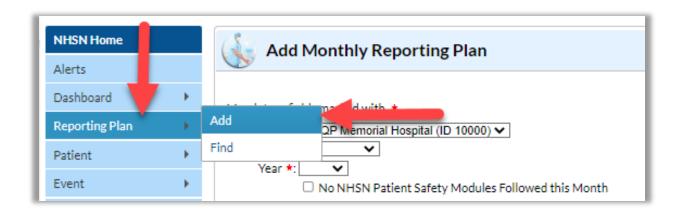
In-plan

- Module included in the MPR
- NHSN surveillance protocol(s) will be used, in its entirety.
- ✓ Data included in NHSN annual reports or other NHSN publications.
- ✓ Submitted to CMS in accordance with CMS's Quality Reporting Program

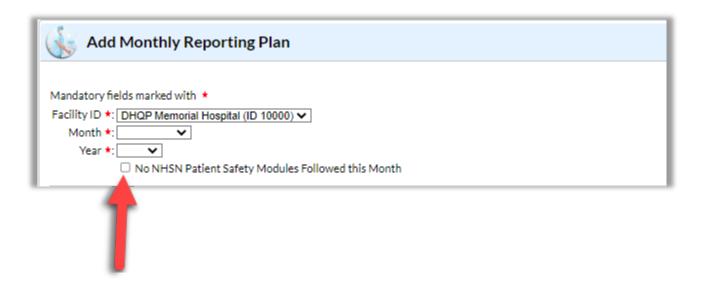
Off-plan

- ✓ Module **NOT** included in the MPR
- ✓ NHSN surveillance protocol(s) is **NOT** required to be used, in its entirety.
- ✓ Data **NOT** included in NHSN annual reports or other NHSN publications.

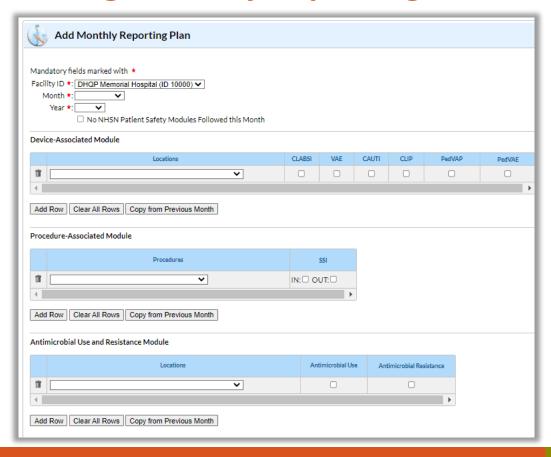
Adding Monthly Reporting Plan



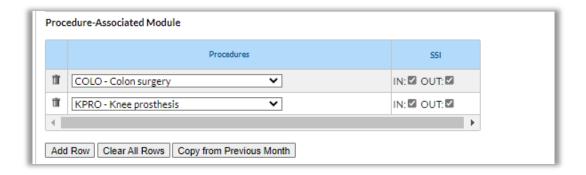
Adding Monthly Reporting Plan



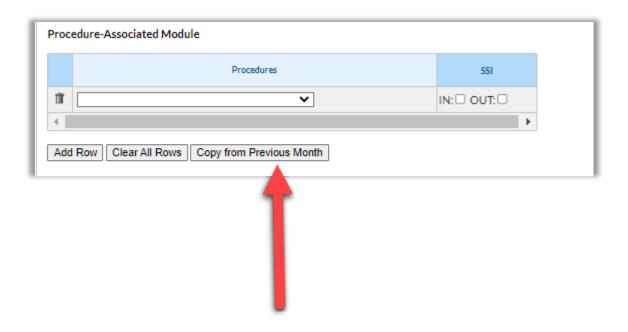
Adding Monthly Reporting Plan



Adding Monthly Reporting Plan for Procedure-Associated Module: Example

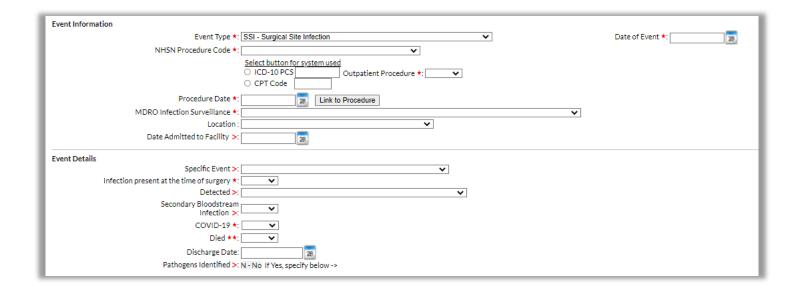


Adding Monthly Reporting Plan for Procedure Associated Module: Copy from Previous Month

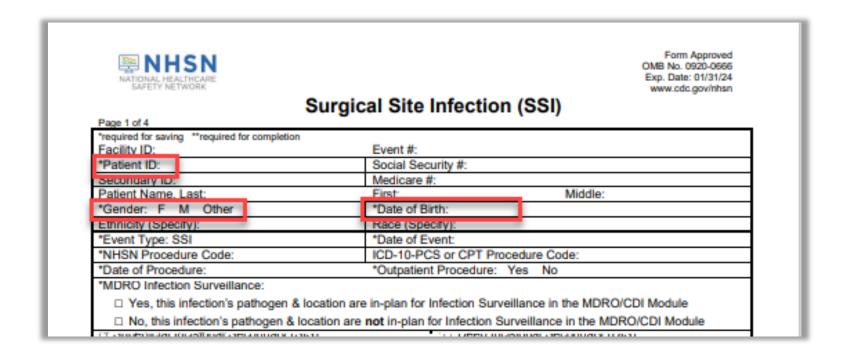


Completing the SSI Event (Numerator) Form

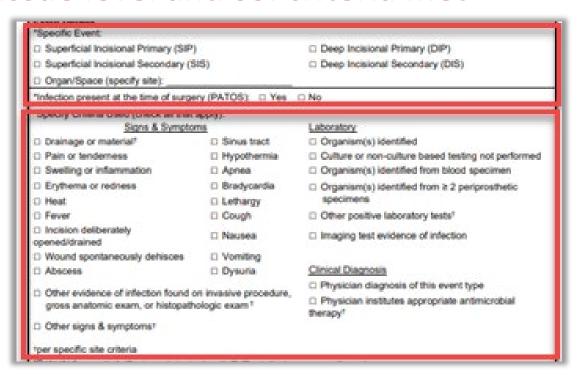
Event information



SSI Event Form: Patient Level Data



SSI Event Form: Tissue level and SSI criteria met

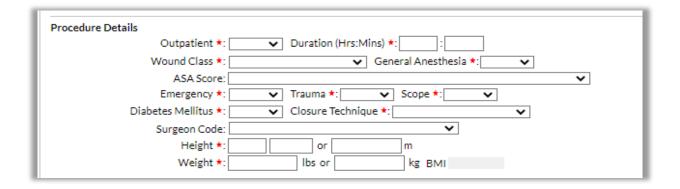


SSI Event Form: Additional Details

tner specific site criteria	
*Detected: A (During admission) P (I RF (Readmission to facility wh RO (Readmission to facility of	
"Secondary Bloodstream Infection: Yes No	"Died: Yes No SSI Contributed to Death: Yes No
Discharge Date:	*Pathogens Identified: Yes *If Yes, specify on pages 2-3.
COVID-19: Yes No If Yes: «Confirmed «Suspected	
marriaging the data resolut, and completing and remember the collection of who	not otherwise to disclosed or released without the consent of the delinitival, or the institution in accommon with it. and (Interest). Formulae per insportes, including the time for exceeding instructions, exerciting existing date econom, pathwing and matter. An appendy may not constant or represent, and a person in not required to respond to a collection of enteringently the business activate or any other aspects of the collection of information, including paggrature for N. Hearts, GA 20223, ATTIS, PRA (0000-0000).

Completing the Procedure (Denominator) Form

Procedure Information



Procedure Form: Required and Conditional Requirements



Form Approved OMB No. 0920-0666 Exp. Date: 01/31/24 www.cdc.gov/nhsn

Denominator for Procedure

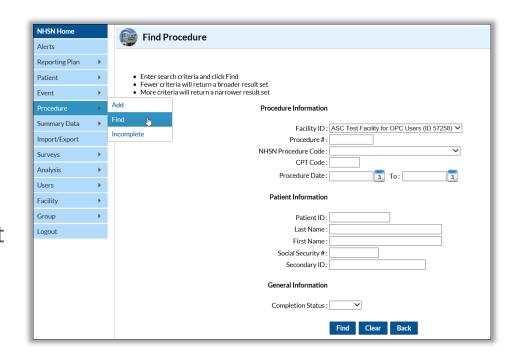
Page 1 of 2 Facility ID	Procedure #:
*Patient ID:	Social Security #:
Secondary ID:	Medicare #:
Patient Name, Last:	First: Middle:
*Gender: F M Other	*Date of Birth:
Ethnicity (Specify):	Race (Specify):
Event Type: PROC	*NHSN Procedure Code:
*Date of Procedure:	ICD-10-PCS or CPT Procedure Code:
Procedure 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	
*Height: feet inches	*Closure Technique: Primary Other than primary
(choose one)meters "Weight:lbs/kg (circle one)	Surgeon Code:
*Weight:lbs/kg (circle one)	ouigeon oode.
CSEC: *Duration of Labor:hours	
Circle one: FUSN	
*Spinal Level (check one)	
☐ Atlas-axis	
☐ Atlas-axis/Cervical	*Approach/Technique (check one)
□ Cervical	☐ Anterior
□ Cervical/Dorsal/Dorsolumbar	□ Posterior
□ Dorsal/Dorsolumbar	☐ Anterior and Posterior
☐ Lumbar/Lumbosacral	
Circle one: HPRO KPRO	
ICD-10-PCS Supplemental Procedure Code	e for HPRO/KPRO:
*Check one: Total Hemi Re	
If Total: Total Primary Total R	Revision
If Hemi: ☐ Partial Primary ☐ Partial	Revision
If Resurfacing (HPRO only): Total P	Primary ☐ Partial Primary

Data Entry

Data Entry Screens

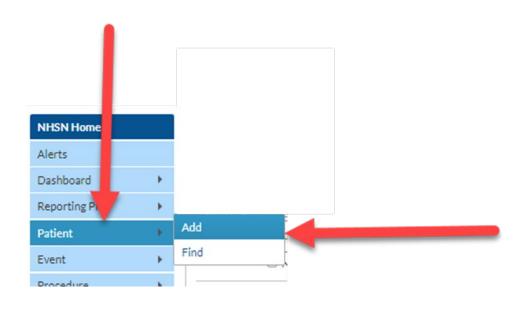
3 Options: Add, Find, Incomplete

- Click 'Add' to enter data
- 'Find' is used to look for previously entered data forms.
- 'Incomplete' lists the forms that have been started, but all the required fields have not been completed.



The 'Find' and 'Incomplete' options are very useful for <u>investigating data quality issues</u>.

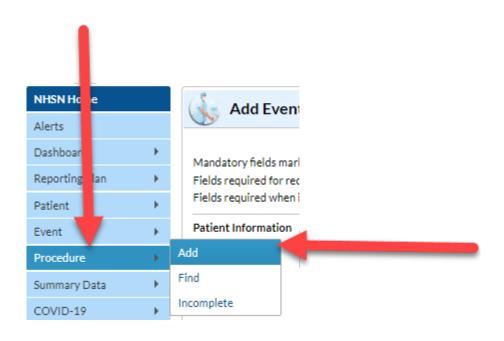
Data Entry Sources: Patient



Data Entry Sources: Event



Data Entry Sources: Procedure



Data Entry Sources: Survey



NHSN User Data Entry

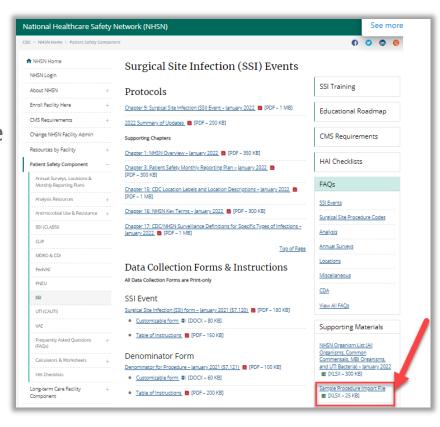


Desired Reports – Rate, Standardized Infection Ratio (SIR), Custom, etc.

CSV Upload

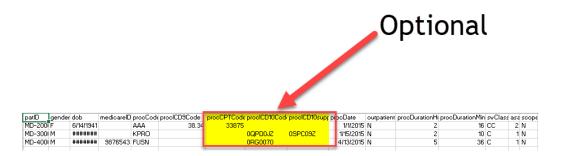
Upload of Procedure Data

- NHSN recommends CSV file
- Supporting Materials on SSI landing page



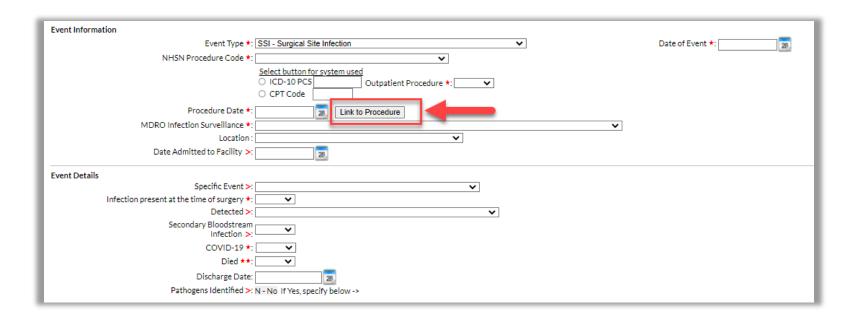
CSV Upload Reminders

- Header row MUST match variable name
- Fields can be imported in any order
- No duplicates
- Exclude blank spaces
- Those fields marked in yellow are optional

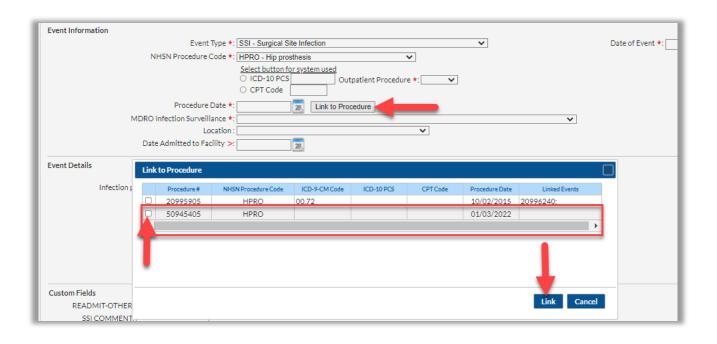


Linking a Procedure to Event

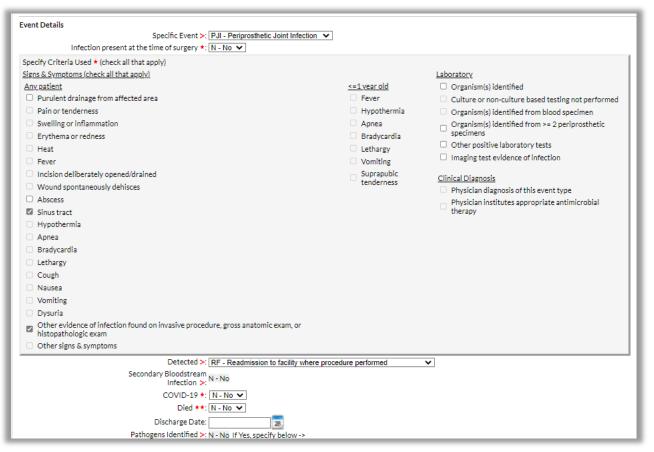
Linking a Procedure to an Event



Linking a Procedure to an Event



Enter the Event Details



Generating Datasets

First Resolve any Alerts

NOTE: Unresolved alerts will prevent data from showing up in SIR reports

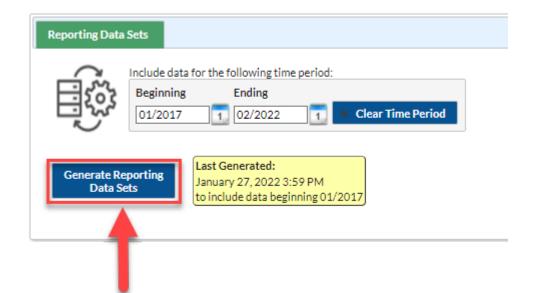


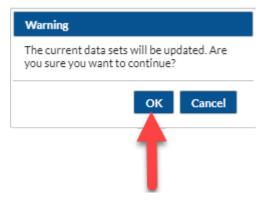
Generating Datasets

- After data entry is complete and all alerts are resolved
- Generate datasets so that all data crosses over for use in Analysis reports

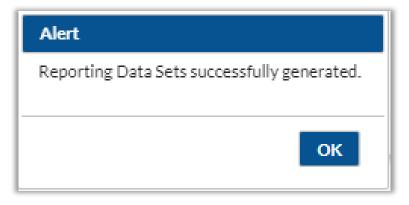


Generating Datasets





Generating Datasets: Complete



For any questions or concerns, contact the NHSN Helpdesk 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: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.