



هيئة الصحة العامة
PUBLIC HEALTH AUTHORITY

SSI Surveillance Data Validation Tool

PART I : SSI Surveillance Process (Surgical Site Infections)

#	Items	A: Staff Knowledge	Score	Comments
WHAT? (ICPs responsible for SSI Surveillance must be well trained about SSI Surveillance Protocols)	CDC - NHSN SSI Criteria (Numerator) Superficial incisional SSI	<p>Q: Ask ICP about Superficial incisional SSI & differentiate between superficial primary & superficial secondary SSI?</p> <p>1: Date of event occurs within 30 days following the NHSN operative procedure (where day 1 = the procedure date) AND involves only skin and subcutaneous tissue of the incision.</p> <p>AND patient has at least one of the following:</p> <ul style="list-style-type: none">a. Purulent drainage from the superficial incision. ORb. organism(s) identified from an aseptically-obtained specimen from the superficial incision or subcutaneous tissue ORc. a superficial incision that is deliberately opened or re-accessed by surgeon, physician* or physician designee and culture or non-culture based testing of the superficial incision or subcutaneous tissue is not performed AND patient has at least one of the following signs or symptoms: localized pain or tenderness; localized swelling; erythema; or heatd. Diagnosis of a superficial incisional SSI by a physician* or physician designee		
		<p>There are two specific types of superficial incisional SSIs:</p> <p>1. 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)</p> <p>2. 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)</p>		
WHAT? (ICPs responsible for SSI Surveillance must be well trained about SSI Surveillance Protocols)	Deep incisional SSI	<p>Q: Ask ICP about Deep incisional SSI & differentiate between deep primary & deep secondary SSI?</p> <p>1: Date of event occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date)</p> <p>AND involves deep soft tissues of the incision (for example, fascial and muscle layers). AND patient has at least one of the following:</p> <ul style="list-style-type: none">a. purulent drainage from the deep incisionb. a deep incision that is deliberately opened*, re-accessed, or aspirated by a surgeon, physician** or physician designee or spontaneously dehisces 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 AND patient has at least one of the following signs or symptoms: fever (>38 °C); localized pain or tendernessc. an abscess or other evidence of infection involving the deep incision detected on gross anatomical exam, histopathologic exam, or imaging test.		

		<p>There are two specific types of superficial incisional SSIs:</p> <p>1. Deep Incisional Primary (SIP) - a deep 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)</p> <p>2. Deep Incisional Secondary (SIS) - 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)</p>		
	Organ / Space SSI	<p>Q: Ask ICP about Organ/Space SSI?</p> <p>1: Date of event occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date)</p> <p>AND involves deep soft tissues of the incision (for example, fascial and muscle layers).</p> <p>AND patient has at least one of the following:</p> <ul style="list-style-type: none"> 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 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 c. an abscess or other evidence of infection involving the organ/space detected on: <ul style="list-style-type: none"> • gross anatomical exam or • histopathologic exam or • imaging test evidence definitive or equivocal for infection. <p>AND meets at least one criterion for a specific organ/space infection site.</p> <p>Available at: https://www.cdc.gov/nhsn/pdfs/pscmanual/17pscnosinfdef_current.pdf</p>		
WHERE?	SSI Surveillance Data Collection including Post Discharge SSI Surveillance (30/90 days)	<p>Q: Ask about process of data collection including Post Discharge SSI Surveillance duration & Process?</p> <p>1: Patient medical records for procedure information, wound class, ASA score etc / patient charts for Signs & Symptoms etc</p> <p>The timeframe following an NHSN operative procedure for monitoring and identifying an SSI event. The surveillance period is determined by the NHSN operative procedure category (for example, COLO has a 30-day SSI surveillance period and KPRO has a 90-day SSI surveillance period).</p>		
		<p>Concurrent & post discharge surveillance methods:</p> <p>Review of medical records or surgery clinic patient records:</p> <ul style="list-style-type: none"> o Admission, readmission, ED, and OR logs o Patient reported signs and symptoms of SSI at surgery clinic, wound clinic o Lab, imaging, other diagnostic test reports o Clinician/healthcare professional notes o Visit to surgical ward / ICUs o Patient survey by phone call 		
WHAT?	Denominator Data Collection	<p>Q: How and from where denominator data can be collected??</p> <p>Denominator data are collected for each individual NHSN operative procedure category selected for monitoring (SSI Surveillance) & chosen to be reported via SEHA platform.</p> <p>Data Source: OR lists, Surgical wards etc</p>		
WHERE?	SSI Surveillance Location & Methods	<p>Ask where SSI surveillance should be conducted ??</p> <p>Surveillance of surgical patients will occur in any inpatient facility and/or hospital outpatient procedure department (HOPD) where the selected NHSN operative procedure(s) are performed.</p> <p>SSI monitoring requires active, patient-based, prospective surveillance. Concurrent and post discharge surveillance methods should be used to detect SSIs following inpatient and outpatient operative procedures as mentioned above.</p>		

WHAT?	SSI Risk Factors	<p>What is Wound class:??</p> <p>An assessment of the degree of contamination of a surgical wound at the time of the surgical procedure. Wound class is assigned by a person involved in the surgical procedure (for example, surgeon). The four wound classifications available within the NHSN application are: Clean (C), Clean-Contaminated (CC), Contaminated (CO), Dirty/Infected (D).</p> <p>What is ASA Score?</p> <p>ASA physical status: Assessment by the anesthesiologist of the patient's preoperative physical condition using the American Society of Anesthesiologists' (ASA) Physical Status Classification System 12.</p> <p>Patients are assigned an ASA score of 1-6 at time of surgery.</p> <p>Patients with an ASA score of 1-5 are eligible for NHSN SSI surveillance.</p> <p>Patients that are assigned an ASA score of 6 (a declared brain-dead patient whose organs are being removed for donor purposes) are not eligible for NHSN SSI surveillance.</p>		
-------	------------------	--	--	--

B: Positive Culture Linelist & Internal Validation

WHAT?	Line list Review	Is there any effective notification system between the IPC department, laboratory, and all departments in the hospital for any critical values (i.e MDROs, positive cultures & high-alert microorganisms).		
		Is there any updated surgical procedures linelist that includes Patient information, procedure information, signs & symptoms etc date of specimen collection, type of organism, type of SSI etc		
		Internal validation done to review data for candidate SSIs according to chosen surgical procedures,		
		Internal validation done to review denominator data - Number of surgical procedures included in reporting via SEHA Platform		

C: SSI Events Identification & Reporting

WHAT?	Data Analysis & Event reporting	Number of SSI Event/s correctly identified as per CDC-NHSN Criteria		
		Number of SSI Event/s matching CDC criteria that were missed by ICP and were detected during visit.		
		Number of correctly identified SSI Events reported Via seha platform in a timely manner.		
		Number of Event/s as per manual sheet are 100% matching with Seha Platform & Power BI dashboard		

D: SSI Surveillance Data Entry Via Seha Platform

WHAT?	Electronic Platforms	All patients who underwent chosen surgical procedure are registered in Seha Platform. (Patients under SSI Surveillance)		
		Procedure information is entered accurately for all patients having a specific surgical procedure and required surgical bundle form is filled. (Check at least 20% of patients for chosen procedure/s via Seha Platform on day of visit to ensure completeness and accuracy)		
		Number of surgical patients as per manual Procedure linelist MUST be 100% matching with Patients under SSI Surveillance in electronic platform (NOTE=End of surveillance for surgical patients is done automatically by system after 30/90 days post discharge surveillance period.		

E: HAI Outbreak Detection & Reporting (ESKAPE-C)

WHAT?	Outbreak Detection Reporting	Outbreak was detected correctly as per latest GDIPC updates (version 7.2 Jan 2025)		
		Outbreak was reported in a timely manner via electronic Platform		
		An outbreak was missed which was detected during visit as per linelist (Device associated (Central Line) or non device associated)		



Optimal Cesarean Care Strategy (OCC)

WHAT?	OCC Tools (Knowledge & Practices)	Assess staff knowledge about National Optimal Cesarean Care Strategy (OCC)		
		Ask about the OCC prevention tools & their implementation. <i>(Cesarean Section ONLY)</i>		
		Compare the actual compliance data Vs data submitted each month - observe any discrepancy.		

PART II : On Site Visit (Surgical Ward to validate preoperative & Postoperative care)

WHAT?	Validation Rounds	Conduct rounds in surgical wards & ensure surgical care bundles & prevention tools are applied. <i>(Pre operative, intraoperative & post operative)</i>		
		Assess staff knowledge about Surgical care bundle elements & OCC prevention tools.		

PART III (Education & Training Session)

WHAT?	SSI Surveillance Education & Training	External Validator conducted short concluding training & education session ????		
		SSI Surveillance Protocols based on CDC-NHSN Criteria Surgical Care Bundle <i>(Pre operative, intraoperative & post operative domains)</i> OCC Prevention Tools overview		
WHO?		Targeted Audience: Infection Control Team Nursing representatives from Surgical Wards. OR, ER, Surgical OPD/Clinic representatives etc		