



<p>Team Name: Staff Development, Infection Prevention & Control</p> <p>Team Lead: Director - Staff Development, Infection Prevention & Control</p> <p>Approved by: Regional Lead - Acute Care & Chief Nursing Officer</p>	<p>Reference Number: CLI.8011.PL.019</p> <p>Program Area: Infection Prevention & Control</p> <p>Policy Section: Infection Prevention & Control</p>
<p>Issue Date: January 16, 2023</p> <p>Review Date:</p> <p>Revision Date:</p>	<p>Subject: Surgical Site Infection (SSI) Surveillance</p>

POLICY SUBJECT:

Surgical Site Infection (SSI) Surveillance

PURPOSE:

Surveillance for surgical site Class 1 (clean) and Class 2 (clean-contaminated) infections are conducted on the following targeted surgeries, (Open Colorectal, Cesarean Sections, Total Hip Arthroplasty, and Total Knee Arthroplasty) to determine trends, evaluate the efficacy of preventative programs and help identify quality improvement measures.

BOARD POLICY REFERENCE:

- Executive Limitation (EL-2) Treatment of Clients
- Executive Limitation (EL-3) Treatment of Staff
- Executive Limitation (EL-7) Asset Protection & Risk Management

POLICY:

Southern Health-Santé Sud (SH-SS) is committed to reducing the risk of SSIs. Elements of an SSI surveillance program include the use of standardized surveillance methodology and definitions, evaluation of rates according to risk factors associated with SSI development, and feedback of data to relevant stakeholders.

DEFINITIONS:

Health Care Worker (HCW): An employee (including contracted individuals, students and volunteers) of SH-SS who provides direct care or indirect, non-contact care as a result of their duties/tasks of their position. HCW spans the continuum of services/care that a client may receive from an SH-SS facility or program.

Open Colorectal Surgery: For the purposes of SH-SS SSI surveillance only, Open Colorectal surgery includes the following: laparoscopic assisted Open Colorectal, laparoscopic Open Colorectal with secondary incision for specimen removal and Open Colorectal.

Surgical Site Infection (SSI): Occurs as a complex interaction between the microbial contamination of the surgical site, the host response, and the local environment at the site of contamination. An SSI is generally considered present when purulent drainage is identified at the surgical site.

- **Superficial Incisional Surgical Site Infection:**
Infection occurs within 30 days after the operative procedure (where day 1= the procedure date) and involves only skin and subcutaneous tissue of the incision.
- **Deep Incisional Surgical Site Infection:**
Infection that occurs within 30 days after the operative procedure or within 90 days if an implant is left in place (where day 1= the procedure date) and involves deep soft tissues of the incision (e.g., fascial and muscle layers).
- **Organ/Space Surgical Site Infection:**
Infection occurs within 30 days after the operative procedure or within 90 days if an implant is left in place (where day 1= the procedure date) and involves any part of the body, excluding the skin incision, fascia, or muscle layers, that is opened or manipulated during the operative procedure.
 - See *Surgical Site Infection Report Form* (CLI.8011.PL.019.FORM.01) page 2 for more detailed surgical site infection criteria

Surgical Site Infection (SSI) Bundle: A set of evidence-based practices that when implemented, improve patient outcomes, i.e., appropriate use of prophylactic antibiotics, appropriate hair removal, maintenance of perioperative glucose control, perioperative normothermia.

Surgical Site Infection Rate: A rate of surgical site infection specific to an operative procedure.

- **Calculation:** $\frac{\text{number of surgical site infections}}{\text{number of procedures}} \times 100 = \text{SSI rate (as a percentage)}$.

Surgical Wound Classification: A system of categorizing surgical procedures into risk groups on the likelihood of contamination of the surgical site at the time of the operative procedure. Each operative wound is assessed and categorized into four surgical wound classes and is assigned upon completion of the surgery, in consultation with the surgeon. (Note: surveillance will not be performed on wound class III /IV surgeries).

- Refer to *Surgical Wound Classification Table* (CLI.8011.PL.019.SD.01)

Surveillance: The continuous and systematic process of collecting, analyzing, interpreting and disseminating descriptive information to monitor the health status of a community or population to ensure timely interventions to reduce morbidity and mortality. Southern Health-Santé Sud IP&C program collects targeted surveillance data.

- **Targeted Surveillance:** Surveillance that is implemented only in specific areas or is targeted at specific infections or procedures that are more common/relevant to an area or that are required by governing bodies (i.e., MHSAL and Accreditation Canada).

Targeted Surgical Site Infection (SSI) surveillance includes the following:

- Open Colorectal surgery
- Cesarean Section surgery
- Total Hip Arthroplasty
- Total Knee Arthroplasty

IMPORTANT POINTS TO CONSIDER:

- The goal of SH-SS is to provide more accurate SSI surveillance for the targeted surgical sites across the SDO through the following measures:
 - Increased education of surgical patients undergoing targeted surgical procedures
 - Increased reporting of SSIs from the following settings: Acute Care (AC), Outpatient Departments (OPD)/Emergency Departments (ED), Personal care homes (PCHs), Community programs [Public Health (PH), Primary Health Care (PHC), Home Care (HC)] and postoperative follow-up appointment, if applicable
 - Telephone surveillance with colorectal surgical patients
- Regional Coordinators, Infection Prevention & Control (IP&C) may initiate further SSI prevention bundle data compliance locally as required when SSI rates are high.

PROCEDURE/RESPONSIBILITIES:

1) Nurses

a) Surgical Centre:

- i) Pre-op appointment:
 - Review and provide the patient with *Patient Fact Sheet – Preventing Surgical Site Infections* ([CLI.8011.PL.019.SD.02](#))
- ii) Date of surgery:
 - Complete the pre-op, intra-op and post-op sections of *the Surgical Site Infection Data Collection Form* ([CLI.8011.PL.019.FORM.02](#)) for applicable targeted surgeries (Open Colorectal, Cesarean Section, Total Hip Arthroplasty, Total Knee Arthroplasty):
 - Send completed form to site Infection Control Practitioner (ICP)
- iii) Discharge:
 - If signs of infection are present at time of discharge, complete *Surgical Site Infection Report Form* for applicable targeted surgery (Open Colorectal, Cesarean Section, Total Hip Arthroplasty, Total Knee Arthroplasty):
 - Send completed form to site ICP
 - On patient discharge for the following targeted surgeries (Open Colorectal, Cesarean Section, Total Hip Arthroplasty, Total Knee Arthroplasty):
 - Review and provide the patient with *Patient Fact Sheet – Preventing Surgical Site Infections* and the *Surgical Site Infection Report Form*
 - Emphasize the need to observe for signs of infection and to bring the *Surgical Site Infection Report Form* to any post-operative follow-up appointments, if applicable.

b) Facility Setting: (Includes Acute Care, Outpatient Department/Emergency Department, Personal Care Homes)

- When an SSI is identified in any of the following targeted surgeries (Open Colorectal, Cesarean Section, Total Hip Arthroplasty, Total Knee Arthroplasty):
 - Complete the *Surgical Site Infection Report Form*
 - If patient presents to the surgical centre where surgery was performed, send completed form to site ICP
 - If patient presents to a site where surgery was not performed, fax form to the Infection Prevention and Control Department at (204) 326-2969 and Regional Coordinators, IP&C will forward to site ICP
 - File a copy of the report in the patient's health record
- c) Community Setting: (Includes Public Health, Primary Health Care, Home Care)**
 - When an SSI is identified in any of the following targeted surgeries (Open Colorectal, Cesarean Section, Total Hip Arthroplasty, Total Knee Arthroplasty):
 - Complete the *Surgical Site Infection Report Form*
 - Fax form to the Infection Prevention and Control Department at (204) 326-2969 and Regional Coordinators, IP&C will forward to site ICP
 - File a copy of the report in the patient's health record

2) Surgeon

a) **Postoperative follow-up appointment, if applicable:**

- Upon review of patient condition in past 6 weeks and/or assessing current symptoms of an SSI, complete the *Surgical Site Infection Report Form* if SSI is suspected
 - Fax form to the Infection Prevention and Control Program at (204) 326-2969 per the instructions listed on the form and Regional Coordinators, IP&C will forward to site ICP

3) Infection Control Practitioner (ICP):

- Upon receipt of the *Surgical Site Infection Report Form*, review information submitted to determine if an approved SSI definition has been met.
 - Case detection can involve review of any of the following:
 - microbiology lab reports
 - review of SSI Report Forms from AC, Outpatient department/Emergency Department, PCH, Community programs (PH, PHC, HC) and postoperative follow-up appointment, if applicable
 - review of Operating room (OR) procedure lists/ED visit lists for infections following procedures
 - review of Infection Control Report sent by clinical systems
 - review of patient charts
- Identify all colorectal surgical patients that meet the open colorectal surgery definition based on the Infection Control Report sent by clinical systems
 - Contact these colorectal surgical patients no sooner than Day 30 postoperative and complete the *Postoperative SSI Surveillance Telephone Script (CLI.8011.PL.019.FORM.03)*
- Notification of SSI

- If surgery performed outside the region, call ICP at surgical site to notify of SSI
- If surgery performed at another regional surgical centre, contact site ICP to notify of SSI
- Upon identification of an SSI, fax the *Memorandum for Surgeons* (CLI.8011.PL.019.FORM.04) to the surgeon that performed the surgical procedure
 - Include a copy of the *Surgical Site Infection Report Form* if applicable
 - Include a copy of the *Postoperative SSI Surveillance Telephone Script* if applicable
- Upon receipt of the *Surgical Site Infection Data Collection Form*, enter data for all targeted surgeries on the Infection Control Indicator Report.
 - Timely preoperative prophylactic antibiotic administration and perioperative normothermia will be calculated as per the [Healthcare Associated Infection Surveillance Definitions](#) document.
- Complete site-specific Infection Control Indicator Report on a monthly basis
 - Timeline for monthly data submission: 45 days
 - Report due on 15th of each month (e.g., April data due on June 15)
 - Forward Infection Control Indicator Report to Staff Development email: staffdevelopment@southernhealth.ca
 - When quarterly SSI Reports are received from Staff Development/Regional Coordinator, IP&C, distribute within the facility and post for staff.

4) Regional Coordinator, Infection Prevention and Control:

- As *Surgical Site Infection Report Forms* are received, forward to appropriate site ICP
- Determine which surgeries will be targeted and establish priorities for the SSI surveillance program annually with the Regional IP&C Team.
- Determine whether SSI prevention bundle compliance is required locally for surveillance (i.e., if SSI rates are high) by reviewing SSI Reports with the SH-SS Regional IP&C Team.
- Provide feedback and ongoing training and support on SSI surveillance to surgical facilities and site ICPs within Southern Health-Santé Sud as required.
- Provide a system (e.g., spreadsheet, database) to facilitate the collection and analysis of SSI surveillance data.
- Create and distribute surgical site-specific quarterly SSI reports to ICPs at all surgical facilities in Southern Health-Santé Sud where targeted surgical procedures are performed.
- Prepare and distribute the Regional IP&C Annual Report to the Southern Health-Santé Sud Regional Leadership Team, Executive Management Team and Regional Board of Directors.

5) Department of Surgery, Department of Obstetrics/Gynecology, OR staff and Regional Infection Prevention & Control Team:

- Review reports to identify trends or significant increases in SSI rates.

- Evaluate the implementation and compliance of SSI data collection components to determine quality improvement measures.

SUPPORTING DOCUMENTS:

[CLI.8011.PL.019.FORM.01](#) Surgical Site Infection Report Form
[CLI.8011.PL.019.FORM.02](#) Surgical Site Infection Data Collection Form
[CLI.8011.PL.019.FORM.03](#) Post Surgical Telephone Surveillance Script
[CLI.8011.PL.019.FORM.04](#) Memorandum for Surgeons
[CLI.8011.PL.019.SD.01](#) Surgical Wound Classification Table
[CLI.8011.PL.019.SD.02](#) Patient Fact Sheet – Preventing Surgical Site Infections
[CLI.8011.PL.019.SD.02.F](#) Patient Fact Sheet – Preventing Surgical Site Infections - French

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