Count Policy

Site	All CHB
Setting/Population	Operating Rooms & Procedure Areas/All patients undergoing invasive procedures
Clinician	All personnel involved in the procedure

Policy

- Sponge counts are performed for every operative or invasive procedure. Sharps, instruments and miscellaneous items are counted on procedures in which an item could be retained.
- The RF surgical sponge detection system is as an adjunct to the current counting procedure. For more information on this see Patient Care References: ***RF surgical sponge detection system***
- Use RF detectable sponges for all surgical procedures except those requiring MRT scanning.
- Team may waive counts in a surgical emergency.
- Full undivided attention of the team is required during all counts; avoid any distraction or interruption.
- Use the pocketed sponge holder on all cases that require 4x4, 4x8, 12x12 or 18x18 sponges. See the Patient Care Reference: ***Guidelines for Pocketed Sponge Holder Reference Tool*** for more information.
- Circulating nurse and/or Scrub person do not relieve each other during closing counts or during critical portions of the procedure.
- Any count initiated by a team is completed by that team without interruption.
- During complex procedures team members may call for additional help to facilitate the count process.
- Staff involved in the procedure:
  - Two individuals one of whom is an RN and the second being an RN/SST count audibly and concurrently viewing all counted items.
  - Orientees count with a preceptor until count competencies are met.
  - Students are not responsible for performing counts. See the Perioperative Policy and Procedure Manual: ***Visitor Policy*** for more information.
- Include any sponge, sharp, instrument, or other miscellaneous item placed in a body cavity or orifice during a surgical procedure in the count.
- Maintain a record of counted items added to the sterile field throughout the procedure.

- Any perioperative team member (e.g. Anesthesia care provider, float RN) who assists the surgical team by opening sterile items such as extra sutures or radiopaque sponges:
  - Counts the items with the scrub person, and
  - Promptly informs the RN circulator about what was added, for documentation.
- Document the full name of one circulating nurse and one scrub person who verify the counts in the patient's intraoperative record.
- Members of the surgical team account for all surgical items (e.g., sharps, instruments, wires, disposable items) in their entirety that may have broken or become separated within the confines of the surgical site.
- In the event an un-retrieved device fragment is left in the surgical wound (e.g., broken instrument tip), the surgeon informs the patient/family of the nature of the item and the risks associated with leaving it in the wound and documents this information in the op-note.
- Avoid altering countable miscellaneous items, when possible.

  Note: The surgeon communicates alteration of countable item to the team. Altered items are accounted for in their entirety during the final count. If item has been cut, the multiple pieces are compared with an identical, intact item.
- Additional counts may be done at the discretion of any member of the team.
- Final count results are verbalized to the whole team and documented by the circulator in the intraoperative record.

Team Roles

Physician performing procedure

- The physician maintains awareness of all soft goods, instruments, and sharps used in the surgical wound during the course of the procedure.
- The physician does not perform the count but facilitates the count process by:
  - Using (whenever possible) only radiopaque surgical items in the wound.
  - Avoiding altering countable items (e.g., cutting vessel loops, sponges). If the physician does alter an item, he/she communicates this to the team.
  - Communicating placement of surgical items in the wound to the perioperative team for notation (e.g., on whiteboard).
  - Understanding that completion of proper count procedure is the responsibility of the entire perioperative team

Anesthesia Care Provider

- The anesthesia care provider does not perform the count but facilitates the count process by:
  - Maintaining situational awareness to support the prevention of retained surgical items.
  - Using active communication with the team when items are placed in and out of the oral pharynx, the anesthesia care provider documents the time of throat pack placement and removal.

- RF sponges are used for all throat packs and RF scanning is required after throat pack is removed. For more information see the Patient Care Reference: ***RF Surgical Sponge Detection System***.
- Understanding that completion of proper count procedure is the responsibility of the entire perioperative team.

Timing and Sequence of Counts

- Perform sponge/sharp/miscellaneous item counts/instruments when applicable:
  - Before the procedure to establish a baseline
  - When additional counted items are added to the sterile field
  - Prior to closure of a cavity within a cavity
  - At the time wound closure begins
  - At skin closure or end of the procedure
- Initiate an RF detection scan for any procedure where the possibility exists for a retained sponge, including:
  - All open procedures when the incision size is greater than 8cm, including hip and spine procedures.
  - All procedures that enter a body cavity, regardless of incision size.
    - Exception: Endoscopic procedures that are not opened.
  - Any time a sponge(s) is/are placed in or through a body orifice.
  - Any procedure where the possibility exists for a retained RF sponge (e.g. breast reduction, deep shoulder, deep wounds, sponge(s) packed during a procedure)
  - Any time there is a count discrepancy.
  - Any time any team member requests a scan.

  Note: Consider using an RF scan in emergency situations, if patient condition allows.
- Complete the RF detection scan after the final sponge count, but before the field is contaminated and drapes are removed.
- A change over count occurs at the time of permanent relief for either the scrub person or the circulating nurse. All incoming and outgoing scrub persons and circulating nurses:
  - Visualize counted items together.
  - Use closed loop communication to verify counted items and their location.

  Note: Although direct visualization of all items may not always be possible or feasible, documentation reflects practice.
- Perform closing sponge/sharp/miscellaneous item/instrument counts in the same sequence:
  - Begin the count at the surgical site and immediate surrounding area.
  - Proceed to the mayo stand and back table.
  - End with counted items that have been discarded from the field.

  Note: The pocketed sponge holder is used on all cases that require 4x4, 4x8, 12x12 or 18x18 sponges. See the Patient Care Reference: ***Guidelines for Pocketed Sponge Holder Reference Tool*** for more information.

Note: The use of RF detection scans are described ***above***.

- Perform instrument counts for:
  - All patients having abdominal, retroperitoneal, or thoracic cavity surgery. The initial instrument count is done regardless of expected initial incision size. If the final incision is less than 8cm x 8cm, a closing count is not required. (See ***exceptions***)
  - All laparoscopic, thorascopic and robotic procedures to establish a baseline. If the patient is not opened during the procedure, a closing count is not required.
  - All procedures done in the MRT suite.

Wound Closure "Time Out"

- Surgeon or nurse announces "wound closure time out" with team using active communication to acknowledge that closing has begun.
- The surgeon removes counted items and instrumentation from the surgical wound and field at the initiation of the closing count process when feasible.
- The attending surgeon/designee performs a methodical wound exploration before closure of the surgical site.
- The team gives full undivided attention during closing count; interruptions and distractions are avoided.
- Nursing team performs closing count.
- Team acknowledges final count status.

Count Discrepancy/Incorrect Counts Procedure

- If a count discrepancy occurs follow these steps:
  1. Notify the surgeon and the surgical team of count discrepancy.
  2. Suspend closure of the wound if the patient's condition permits
  3. Surgeon re-explores the operative site for the missing item.
  4. The team performs an extensive search of the surgical field, surrounding area, trash and linen for the missing item.
  5. Re-count all previously counted items.
  6. When item is not accounted for, intraoperative plain radiograph is performed to rule out a retained item before final closure of the wound if the patient's condition permits.
     - Clearly describe the missing surgical item on the radiology requisition.
     - Obtain a plain radiograph that includes a complete view of the surgical site to confirm the item is not in the patient.
     - If the patient condition is too unstable for a plain radiograph in the OR, complete the plain radiograph post-operatively, document and communicate plan in clinical hand-off.

Note: Plain radiograph is not required for incorrect needle count when the needle is **known** to be 10 mm or less.

7. Call attending radiologist/designee to read the film.
8. The attending surgeon/designee in the operating room and a radiologist/designee simultaneously review the film.
9. The attending surgeon/designee in the operating room and the attending radiologist/designee confirm and document that the radiograph view is adequate and determine if further films are needed.
10. Telephone confirmation and agreement of findings of the film occurs. If there is a discrepancy a subsequent film is taken.
11. The surgeon and/or radiologist may access Synapse (under MRN# 9764321) to view samples of commonly counted items.
12. A surgeon cannot refuse to take a plain radiograph unless the item is listed as a known exception. If the surgeon refuses a plain radiograph, the circulating nurse initiates communication up the chain of command.
13. Whenever patient condition permits, remain in the OR until the item is found or it is determined with certainty not to be in the patient.
14. Document unresolved counts as incorrect in the perioperative record incorrect count segment in surginet.
15. An attending radiologist performs the final read and documents it in a film report that is placed in the patient's medical record.

Note: In the case of an unresolved incorrect sharp or instrument count in the MRT, the OR team determine if the missing item is ferromagnetic. There is a risk that the missing item could become a projectile during subsequent cases or during routine MR safety checks. Missing item is communicated to MR Technologist staff.

Waiving Count for Emergencies Only

- When the team waives a count in a surgical emergency - document the omission and rationale on the intraoperative record.
- In the event of an emergency or if a radiologist is not readily available, the attending surgeon can review the film and make an independent decision on whether to proceed with closing or waiting for the radiologist availability.
- If the patient's condition is unstable, the plain radiograph is taken as soon as possible.

Purpose

To ensure the prevention of retained surgical items (RSIs) in patients undergoing surgical and other invasive procedures. Implementation of accurate count procedures and active, closed-loop communication between surgical team members help promote optimal perioperative patient outcome.

Definitions

Active Communication	Verbal acknowledgement by 2 team members or more.
Circulating Nurse	A registered nurse role
Scrub Person	A registered nurse or surgical scrub technician role
Initial count	Indicates count done prior to incision.
Closing Count	Indicates all closing counts and may include any cavity within a cavity when applicable. There may be multiple closing counts.
Final Count	Indicates all counts are complete, all counted items are accounted for and visualized by the scrub and circulator.
Correct	All items are visualized and accounted for.
Incorrect	Counted items are not accounted for (see process for ***incorrect count***).
N/A	Count not required.
Deferred	Nursing judgment during change over count based on clinical situation. For example: Relief occurs in the middle of a procedure and multiple instruments and other countable items are in use on the field, the team agrees it would be difficult to do an accurate count and disruptive to the surgical team.

Resources

- For a list of miscellaneous countable items, please see the ***Miscellaneous Countable Items*** reference tool.

Procedure

Implementation

Sponge/Miscellaneous Countable Items

1. The pocketed sponge holder is used on all cases that require 4x4, 4x8, 12x12 or 18x18 sponges. See the Patient Care Reference: ***Guidelines for Pocketed Sponge Holder Reference Tool*** for more information.
2. Sponges/miscellaneous items are counted audibly and viewed concurrently as they are separated. See Patient Care Reference: ***Miscellaneous Countable Items Reference Tool*** for more information on what is counted.
   - All sponges/miscellaneous items are counted for every case.
   - Tails of sponges are clearly visible when counting and are not cut from sponges.
   - Keep sponges in their original configuration - do not cut.
   - Break all tapes on each sponge pack; separate and count each sponge individually.
3. If the package contains an incorrect number of sponges, bag, label and isolate the entire pack from the rest of the sponges in the room.

4. All counted sponges/miscellaneous items remain within the OR room/sterile field during the procedure. Linen or waste containers from the OR room remain in place until all counts are completed and resolved.
5. Maintain an ongoing tally of sponges and counted items throughout the procedure.
   - Visualize and count-off used items audibly and concurrently.
6. Withhold non-radiopaque gauze dressing materials from the field until the wound is closed and the final count is complete. Use only non-radiopaque detectable sponges as dressings.
7. Sponge(s) placed in the pharynx are radiopaque. They can be placed by either the surgeon or anesthesiologist.
   - The throat pack is tagged with suture.
   - The suture tag for the throat pack is outside of the mouth and is visible at all times during the surgery, except in rare instances in which it substantially interferes with the surgical procedure.
   - Additional throat packs added during the procedure are not required to be tagged, provided at least one tag is visible.
   - Using active communication the team verifies the placement of the throat pack.
   - The anesthesiologist documents the placement and removal of the throat pack in and out.
   - Using active communication, the team verifies when the throat pack is removed.
8. Circulating nurse maintains documentation throughout the case of any counted item placed in an orifice during the procedure.

Note: The surgeon placing or removing a counted item in an orifice uses active communication to notify the team. Such items may include but are not limited to: corneal shield, vaginal or rectal packs, and Hagar dilator. The team verifies these items. The circulating nurse documents when the item is placed and when the item is removed.

9. Account for and properly dispose of all sponges and miscellaneous items according to ***OSHA Bloodborne Pathogens Standards*** during end-of case cleanup.

Intentionally Retained Packing: Counted Sponges/Items/Grids and Strips

In the event that counted sponges or additional items are intentionally used as packing and the patient leaves the OR with this packing in place, do the following:

1. Document the number and type of intentionally retained sponges or additional items on the intra-operative record and relay this information in verbal reports to subsequent caregivers.
2. Document the number and type of intentionally retained sponges or additional items removed in the patient's current intraoperative record.
3. Isolate the packing materials; do not include in counts for the subsequent procedure.

4. Upon final closure a radiograph or RF wand may be done to rule out any unintentionally retained sponges/items or surgical packing.
5. Grids and strips placement and removal:
   - Placement:
     - Circulating Nurse documents the implant of grids and strips in the "implant" and the "grids and strips" segments of Surginet.
     - Count all components including: contacts (gray dots), plastic pieces, and tails (white wires tunneled through the skin).
   - Removal:
     - Circulating nurse reviews the OR implant record from the time grids/strips were placed to verify the number of components to be removed.
     - Prior to wound closure, intraoperative team verifies all components intended for removal are accounted for.
     - Circulating nurse documents the number of grids and strips removed during surgery in the "grids and strips" segment of Surginet.

Sharp Counts

1. Sharp safety is maintained.
2. Initial needle count is verified by the scrub person and circulator.
3. Members of the surgical team account for sharps in their entirety.
4. All counted sharps remain within the OR and/or sterile field during the procedure.
5. Account for and properly dispose of all sharps and miscellaneous items. For more information, see Patient Care Manual: ***Bloodborne Pathogens Standards***.

Exceptions to Instrument Counts

- Orthopedic Procedure: Anterior spinal procedures with implants. At the time of closure a plain radiograph is taken and read by the surgeon to determine if any unintended items have been retained.
- Cardiac procedures: Sternotomy and thoracotomy/video assisted thorascopic surgery (VATS) in patients less than 10 kg.

Performing the Instrument Count

1. The circulating nurse and scrub person reconcile total number of instruments with the standardized count sheets included in the instrument set.
2. The circulating nurse and scrub person count instruments as follows:
   - Instruments in the set
   - Multi-part instruments: Count all disassembled instrument parts
   - All disposable instruments
   - Any instruments added after procedure has begun

3. All counted instruments remain in the OR until all counts are completed and resolved.
4. Record any counted instrument placed by the surgeon in an orifice during the procedure on the count sheet.
   - Using active communication the team verifies the placement of the instrument.
   - The circulating nurse documents the placement of the instrument.
   - Using active communication, the team verifies when the instrument is removed.
   - An instrument count is not complete until all instruments placed in an orifice are removed from the patient and visualized by the team.
   - The circulating nurse verbalizes the final count to the team using active communication, and completes documentation.
5. Instruments with multiple parts are counted in their entirety during the final count.
6. The team accounts for instruments in their entirety that may have broken or become separated within the confines of the surgical site.

Evaluation

All sponges, sharps, miscellaneous items, and instruments are accounted for and the results documented on surgical procedure.

Documentation

Complete ***patient care documentation*** as described in the Patient Care Manual. In addition document specific Counts Policy information as follows:

Surginet, Intraoperative Record, Count Segments

Document sponge, sharps, and instrument counts. Documentation of counts includes, but is not limited to:

- Operative sites identification
- Full names of personnel performing the counts
- Count results indicating correct or incorrect
- Sponges, Sharps, miscellaneous items, or instruments remaining with the patient intentionally
- Actions taken if count discrepancies occur
- Outcome of count discrepancy
- Rationale if counts are not performed or completed per policy
- RF Scan number if applicable

Surginet, Interoperative Record, Implant Segment

Grids and Strips are documented in the "implant" and "grids and strips" segment of Surginet. All components are counted and recorded including: contacts (gray dots), plastic pieces, and tails (white wires tunneled through the skin).

Surginet, Intraoperative Record, Incorrect Count Segment	Document unresolved counts as incorrect by completing all of the fields in the incorrect count segment in Surginet.

Related Content

RF Surgical Sponge Detection System Reference Tool

Guidelines for Pocketed Sponge Holder Reference Tool

For a list of miscellaneous countable items, please see the ***Miscellaneous Countable Items*** reference tool.

The surgeon and/or radiologist may access Synapse (under MRN# 9764321) to view samples of commonly counted items.

References

American College of Surgeons (October, 2005), "***Statement on the prevention of retained foreign bodies after surgery***."

AORN Recommended Practices for the Prevention of Retained Surgical Instruments (formerly "Recommended practices for sponge, sharp, and instrument counts") (2010). AORN Standards and Recommended Practices for Perioperative Nursing Care, Denver, CO: AORN Inc.

Gawande, A.A., et al. (2003). Risk factors for retained instruments and sponges after surgery, New England Journal of Medicine, 348, 229-235.

Joint Commission on Accreditation of Health Care Organizations (2006). Focus on Five, Preventing Retained Foreign Objects, Improving Safety After Surgery. Joint Commission Perspectives on Patient Safety, 6(3).

Pennsylvania Patient Safety Advisory (June 2009). Beyond the Count: Preventing Retention of Foreign Objects. Vol.6, No.2 39-45

Ponrartana, S., Coakley, F., Yeh,B., et al. (2008). Accuracy of Plain Abdominal Radiographs in the Detection of Retained Surgical Needles in the Peritoneal Cavity. Annals of Surgery, 237(1), 8-12.

Document Attributes

Title	Count Policy		
Author	Elizabeth Norton, BSN, RN, CNOR Anne Micheli RN, MS, NEA-BC	**Date of Origin**	06/08
Reviewed/ Revised by	Elizabeth Norton, BSN, RN, CNOR Anne Micheli RN, MS, NEA-BC	**Dates Reviewed/ Revised**	06/08, 08/08, 10/08, 11/08, 01/09, 09/09, 07/10, 01/11, 11/11, 01.12

Copyright	©Children's Hospital Boston, 2012	**Last Modified**	01/31/12
Approved	**Signature on file** James Kasser, MD Chief, Department of Orthopaedics Surgeon-in-Chief **Signature on file** Eileen M. Sporing, MSN, RN, NEA-BC, FAAN Senior Vice President for Patient Care Operations, Chief Nursing Officer **Signature on file** Robert Shamberger, MD Chair, Medical Staff Executive Committee		