



Subject:	Prevention of Unintended Retained Foreign Objects (URFO) Counts Policy	Effective Date:	October 2014
Primary Responsibility:	Manager of Surgical Services, CNO	Review/Revision Dates:	March 2016
Policy Location:	7420.003b		

Purpose:

To provide guidance to perioperative personnel for preventing unintended retained foreign objects (URFO) during operative or other invasive procedures. The expected outcome is that the patient is free from unintended retained foreign objects.

Policy Statement:

It is the policy statement of HMC is to provide patient safety and promote optimal peri-operative outcomes. Proper counting procedure will ensure patient's will be safe by prevention of URFOs.

Definitions:

Instruments: Surgical tools or devices designed to perform a specific function, such as cutting, dissecting, grasping, holding, retracting, or suturing.

Miscellaneous items: In relation to items on the sterile field that require counting, this may include vessel clip bars, vessel loops, umbilical and hernia tapes, vascular inserts, electrosurgery scratch pads, trocar sealing caps, and any other small items that have the potential for being retained in a surgical wound.

Sharps: Items with edges or points capable of cutting or puncturing other items. In the context of surgery, items include, but are not limited to, suture needles, scalpel blades, hypodermic needles, electrosurgical needles and blades, instruments with sharp edges or points, and safety pins.

Sponges: Soft goods (eg, gauze pads, cottonoids, peanuts, dissectors, tonsil/laparotomy sponges) used to absorb fluids, protect tissues, or apply pressure or traction.

Waived count: Surgical procedures in which accurate accounting for sponges, instruments, and miscellaneous items is determined to be unachievable or in situations in which the time required to perform the count may present an unacceptable delay in patient care (eg, trauma procedures, anterior-posterior spinal procedures).

Procedure:

I. PERIOPERATIVE TEAM MEMBERS RESPONSIBILITIES:

- A. Unnecessary activity and distractions should be curtailed during the counting process to allow the scrub person and RN circulator to focus on the counting process.

- B. The RN circulator will facilitate the count process by initiating the count, performing count procedures in conjunction with the perioperative team, documenting count reconciliation activities, and reporting any count discrepancy.
- C. The scrub person will maintain an organized sterile field with minimal variation between scrub persons and maintain awareness of the location of soft goods, miscellaneous items and instruments on the sterile field all throughout the course of the procedure.
- D. If **any** member of the surgical team requests to count sponges, needles or instrumentation the request must be honored.
- E. The surgeon does not perform the count but should facilitate the count process by:
 1. Using only radiopaque surgical items in the wound.
 2. Communicating placement of surgical items in the wound to the perioperative team for notation on the whiteboard/count sheet.
 3. Communicating existence of surgical specimens deliberately within a body cavity for later retrieval at the end of the operation. This information shall be conveyed to the perioperative team for notation on the whiteboard/count worksheet.
 4. Communicating the division of surgical items into fragments to the perioperative team for notation on the whiteboard/count worksheet.
 5. Performing a methodical wound exploration at the time of closure when counts are initiated.
 6. Accounting for and communicating about surgical items in the surgical field.

II. COUNT PROCEDURE STATEMENT:

- A. Sponges, sharps, instruments and miscellaneous items dispensed for use during the course of a surgical procedure are to be systematically and accurately accounted for and documented on the dry erase board or count sheet.
- B. Only Laparotomy sponges, Raytecs and towels that are **radiopaque** will be used.
- C. All other sponges will be **radiopaque** (e.g., neuro sponges, tonsil sponges, etc).
- D. All surgical procedures where the width and depth of the incision or body cavity has the potential to retain a surgical sponge should be scanned prior to closure of the wound.
- E. Counts must be performed under the direct supervision of a Registered Nurse.
- F. The surgeon may waive final resolution of the count only in the event of a life threatening emergency. Waiver of the final resolution of the count must be documented completely in the patient's chart by the operating surgeon and in the intraoperative nursing documentation by the RN circulating nurse.

III. SPONGE COUNT PROCEDURE:

- A. Sponges have a radiopaque thread and are defined as, but not limited to:
 1. 4 x 8 sponges (*Raytec*) – 10 to a pack
 2. Lap sponges – 5 to a pack
 3. Cottonoids (“Neuro patties”) - 10 to a pack
 4. “Peanuts” – 5 to a pack
 5. Tonsil Sponges – 5 to a pack
 6. Miscellaneous tapes (e.g. Umbilical tape, Vessel loops) – 2 to a pack
 7. Radio-opaque towels with string / loop tag - 4 to a pack
- B. Sponge counts must be completed on all procedures. Sponges are counted in the Operating Room Suite both audibly and visually by the circulator and scrub person at the following times:

1. **Prior to the beginning of the procedure** to establish a baseline and identify manufacturing packaging errors (**initial count**);
 2. When **additional sponges** are added to the sterile field (must be recorded immediately);
 3. **Prior to closure of an organ cavity within a body cavity** (e.g. uterus);
 4. **Before** wound closure begins (**closure count**);
 5. At **skin closure** at the end of the procedure or at the end of the procedure when counted items are no longer in use (**final count**);
 6. **Prior** to closure of the **vaginal cuff** for a vaginal hysterectomy;
 7. At the **time of permanent relief of either the scrub person or the RN circulator**, (although direct visualization of all items may not be possible);
 8. Whenever the **surgeon is replaced** or **another surgeon begins** to operate simultaneously.
- C. The circulator records the counts on the whiteboard/count sheet.
- D. Any package containing an *incorrect* number of sponges,
1. should be removed from the field, bagged and labeled,
 2. isolated from the rest of the radiopaque sponges in the O.R., and
 3. excluded from the count.
 4. The labeled package must be removed from the room before the patient's entry and given to the Clinical Coordinator/designee for follow-up.
- E. Sponges should be left in their original configuration and should not be cut or altered in any way.
- F. Sponges must be separated and the packaging band removed when counting.
- G. Sponge counts must be done in the same sequence each time. The counting sequence should be in a logical progression (e.g., from large to small or from proximal to distal from the wound).
- H. All counted radiopaque sponges should remain within the O.R. or procedure room during the procedure.
- I. Used sponges are discarded in kick buckets with leak proof plastic bags and subsequently placed in transparent, plastic, pocketed sponge bags for display and easy visualization.
- J. Used Cottonoids, Peanuts and Tonsils sponges are kept on the back table.
- K. Sponges must not leave the O.R. with specimens.
- L. Linen and waste containers must not be removed from the room until all counts are completed and resolved.
- M. Counted sponges must not be used as post-operative packing.
- N. When sponges are intentionally used as therapeutic packing, the number and type of any sponge(s) retained and the reason for variation from policy must be documented in the medical record before the patient leaves the O.R.
1. In these cases a *Hercules* report must be completed and communicated as part of the transfer of patient care information.
 2. When the patient is returned to the O.R. for a subsequent procedure to remove therapeutic packing the removed sponges must be isolated and not included in the counts for the removal procedure and the number and type of sponges must be documented in the medical record.
- O. Only towels with Radiopaque may be used **in the wound**. These radiopaque towels must be included in the count.

- P. Non-radiopaque gauze dressing materials should be withheld from the field until the wound is closed or the case is completed.
- Q. A member of the scrubbed surgical team will scan the operative field for retained sponges prior to skin closure.
- R. The circulator verbally informs the surgeon of the result of each count taken.
- S. In the event that the scanning system is not functioning reliably a radiograph of the body cavity operated upon must be obtained.

IV. SHARPS and OTHER MISCELLANEOUS ITEMS COUNT:

- A. Sharps and other miscellaneous items include, but are not limited to suture needles, hypodermics, scalpel blades, angiocatheters, reels, safety pins, vessel clips, vessel loops, vascular inserts, cautery scratch pads, trocars, sealing caps, endoscopic staple reload cartridges, antifog sponges, electro-surgical needle points or blades, laparotomy sponge rings, Raney clips, umbilical and hernia tapes, hypodermics.
- B. During video-endoscopic cases all specimens severed from anatomic attachments are to be retrieved and accounted for, whether they were left within a specimen bag or loose in the body cavity.
- C. Suture needles must be counted according to the number marked on the outer package and verified by the surgical technologist/surgical scrub and circulating nurse when the outer package is opened.
- D. Sharps, needles, and other miscellaneous items are counted audibly, visibly, and concurrently by the circulator and scrub person at the following times:
 - 1. **Prior to the beginning of the procedure** to establish a baseline and identify manufacturing packaging errors;
 - 2. When **additional sharps/miscellaneous items are added** to the sterile field; must be recorded immediately
 - 3. **Prior to closure of an organ cavity within a body cavity** (e.g. uterus)
 - 4. **Before** wound closure begins (closure count)
 - 5. At **skin closure** at the end of the procedure or at the end of the procedure when counted items are no longer in use (final count)
 - 6. **Prior** to closure of the **vaginal cuff** for a vaginal hysterectomy
 - 7. At the time of **permanent relief of either the scrub person or the RN circulator**, although direct visualization of all items may not be possible.
 - 8. Whenever the **surgeon is replaced or another surgeon begins to operate simultaneously**.
- E. Empty suture packages **must not** be used to rectify a discrepancy in a closing needle count, as the actual number of needles may not be the same as the number of empty packages.
- F. Sharps should be handed to and from the surgeon on an exchange basis using a **“neutral zone” or “hands-free”** technique.
- G. Used sharps on the sterile field should be kept in a disposable puncture-resistant container.
- H. Sharps must be counted in the same sequence each time and conducted in the same sequence: from sterile field to table to off the field.
- I. The scrub person should assess the condition of sharps or other items and verify that they are intact when returned from the operative site. If a broken or separated item is

returned from the operative site, the scrub person should immediately notify the perioperative team.

- J. The circulator verbally informs the surgeon of the result of each count taken.

V. INSTRUMENT COUNTS:

- A. Instruments are counted on all procedures in which the likelihood exists that an instrument could be retained, e.g., all abdominal cases and all open chest cases. An instrument count is not required where the width and depth of the incision is too small, or does not enter into a major cavity, and during any procedure where fluoroscopy or intra-procedure x-ray is scheduled to be performed that can verify the absence of retained items.
- B. Counts of instruments should be performed:
 - 1. **Before** the procedure to establish a baseline (**initial count**);
 - 2. When **new instruments are added to the field**;
 - 3. **Before closure of a cavity and/or incision** that might contain an instrument;
 - 4. At **wound closure** or at the end of the procedure when counted items are no longer in use (**final count**)
 - 5. At the time of **permanent relief of either the scrub person or the RN circulator**, although of the ability to directly see all items may not be possible.
- C. Instruments should be counted audibly and viewed concurrently by two individuals, one of whom should be the RN circulator
- D. Individual pieces of assembled instruments (suction tips, wing nuts, blades, sheaths) should be accounted for separately and documented on the white board/count worksheet.
- E. All counted instruments should remain within the O.R. during the procedure until all counts are completed and resolved.
- F. Instruments broken or disassembled during the procedure must be accounted for in their entirety. Any broken instrument will be tagged and sent to the Sterile Processing Department.
- G. The counting sequence should be in a logical progression (e.g., from large to small item size, proximal to distal from the wound).
- H. All instruments must be accounted for and removed from the room during end-of-procedure cleanup for inventory control and to prevent potential count discrepancies during subsequent procedures.

VI. Device Fragments:

- A. Sharps, needles, instruments, percutaneous catheters, wires and equipment that are **broken or damaged** during a procedure must be accounted for in their entirety.
- B. The surgical technologist/scrub person must inspect instruments and devices passed to the surgeon and returned from the field to ensure they are complete and intact.
- C. If a missing part is discovered every effort should be made to retrieve any device fragments or parts if possible.
- D. Radiographic imaging must be obtained to document the whereabouts of the items.
- E. In the event a device fragment cannot be retrieved and it is a clinical decision by the surgeon that it should be left in the wound, the Clinical Coordinator/Nurse Manager or designee is to be informed; the circulating RN and Surgeon shall document the reason for the decision not to attempt retrieval, the fragment location, amount and type of retained item. A *Hercules* report must be completed and Risk Management notified.

- F. All items pertaining to the incident must be saved and given to the Clinical Coordinator/Nurse Manager for evidence.
- G. The surgeon is required to inform the patient of the nature of the item and risks and benefits associated with leaving it in the wound as opposed to retrieving the fragment.

VII. Incorrect Counts (Count Discrepancies):

In the event of an *incorrect* count, the following actions must be taken:

- A. The RN circulator must inform the surgeon and surgical team what specific type of item is missing and receive verbal acknowledgment from the surgeon and surgical team as soon as a discrepancy in a surgical count is identified.
- B. The **surgeon** should **suspend closure** of the wound if the patient's condition permits and perform a methodical wound examination by actively looking for the missing item.
- C. The RN circulator should visually inspect the area surrounding the surgical field, including the floor, kick buckets, and linen and trash receptacles and the scrub person should assist with the visual inspection of the area surrounding the sterile field in an effort to locate the missing surgical item.
 - 1. If the missing item is a sponge and is not located, the surgeon or surgical assistant will visually inspect wound. The RN circulator will visually inspect the remainder of the patient and all linen and waste containers to locate the missing sponge.
 - 2. If the missing item is a needle the RN circulator should visually inspect the area surrounding the sterile field, including the floor and surrounding areas using a magnet.
 - i. If the missing item is a needle, a sample of the exact size of the needle when possible should be sent to the Radiology Department for comparison films. Anterior and posterior (AP) and oblique images will be done.
 - ii. Intraoperative imaging should not be performed if the missing needle is known to be 13mm or smaller in size unless the surgeon specifically requests it. If the count remains incorrect, the surgeon and RN circulator must document the needle count as incorrect, the size of the needle and reason(s) why x-ray is not indicated in the medical record.
- D. If the missing item is not recovered, intraoperative imaging (not mini-c arm) should be performed to rule out a retained item before final closure of the wound if the patient's condition permits. If the patient's condition is unstable, a radiograph should be taken as soon as possible in the next phase of care.

The intraoperative radiograph should be reviewed by a radiologist and the results communicated directly to the surgeon by the radiologist before the patient leaves the operating room.
- E. If the count remains incorrect and the imaging results are negative, the circulating RN and surgeon must document the count as incorrect and include the radiological imaging results. The Clinical Coordinator, Nurse Manager or designee must be notified and a *Hercules* report must be completed.
- F. The surgeon should remain in the OR until the item is found or it is determined with certainty that it is not in the patient.

VIII. Omitted Counts and Intraoperative Imaging:

- A. Counts may only be omitted when a **life threatening emergency** exists and the use of resources and time needed for counting is deemed more risky to the patient than the potential adverse consequences of a retained foreign body. If a count is omitted the surgical team should determine if an intraoperative imaging is appropriate.
- B. If a **life threatening emergency** exists and the use of resources and time needed for intraoperative imaging is deemed more risky to the patient than the potential for a retained foreign body, the Attending Surgeon may decline. In this case an x-ray should be performed at the most appropriate next level of care (i.e. PACU or ICU) and the results called to the Surgical Services Manager or designee. The reason for omission of count or intraoperative imaging must be documented in the Intra-operative Record and a *Hercules* report must be completed.
- C. **Stat radiographs must be obtained and read prior to completion of the procedure if any of the following circumstances apply:**
 - 1. Incorrect counts
 - 2. Two (2) or more surgical disciplines are performing open surgery in the same body cavity
 - 3. Three (3) or more changes of nursing personnel occur in open surgery involving the thoracic or the abdominal cavity
 - 4. Four (4) or more units of blood transfused
 - 5. Fifty (50) or more sponges are opened for use in open surgery involving the thoracic or the abdominal cavity
- D. If there is a question of a retained foreign object or incorrect sponge count at the end of the procedure:
 - 1. Stat radiographs must be obtained.
 - 2. A permanent copy of the radiographs must be preserved.
 - 3. The surgeon must personally communicate with the radiologist/radiology resident describing circumstances and concern.
 - 4. The surgeon must wait with the patient in the Operating Room until the radiologist/radiology resident provides the report.
- E. In spine and endovascular surgery, whether these two disciplines are working together in the same case or independently in separate cases, and there are no other triggers for Stat radiographic images outlined above **then** the surgeon may scan the operative site fluoroscopically and may determine that there are no foreign objects unintentionally retained.
 - 1. A permanent image of the operative area confirming the absence of a foreign object (URFO) must be maintained.
 - 2. The surgeon will attest to the conclusion determined and document the negative finding in the medical record and operative report.
- F. **If the case characteristics are such that any member on the surgical team believes that the possibility of an unintended retained foreign object (URFO) exist radiographs will be ordered or the situation escalated.**

References:

Petersen C, ed. Retained foreign object.. In: *Perioperative Nursing Data Set*. 3rd ed. Denver, CO: AORN, Inc; 2011:146-149.

Guideline for prevention of retained surgical items. In: *Guidelines for Perioperative Practice*. Denver, CO: AORN, Inc.

Approved by:

Review / Revision

Legal:	Date: _____	_____	_____
SG Practice Council:	Date: _____	_____	_____
Medical Executive:	Date: _____	_____	_____
Other Approvals:			
_____	Date: _____	_____	_____