



Recommended Standards of Practice for Breaking Down the Sterile Field

Introduction

The following Recommended Standards of Practice were researched and authored by the AST Education and Professional Standards Committee and have been approved by the AST Board of Directors. They are effective October 20, 2008.

AST developed the *Recommended Standards of Practice* to support health care facilities in the reinforcement of best practices related to breaking down the sterile field in the perioperative setting. The purpose of the Recommended Standards is to provide an outline that Certified Surgical Technologists (CSTs) and Certified First Assistants (CFAs) in the perioperative setting can use to develop and implement policies and procedures for breaking down the sterile field. The Recommended Standards is presented with the understanding that it is the responsibility of the health care facility to develop, approve and establish policies and procedures for breaking down the sterile field according to established health care facility protocols.

Rationale

The following are Recommended Standards of Practice related to breaking down the sterile field in the perioperative setting. Surgical team members must rigorously adhere to the principles of aseptic technique and implement those principles for every surgical procedure in order to reduce the risk of the patient acquiring a surgical site infection (SSI). During all phases of surgical case management, the surgical team members must exhibit a high level of surgical conscience that demands following best practices when breaking down the sterile field. All surgery department personnel should be involved in the process of developing and implementing health care facility policies and procedures for breaking down the sterile field.

Standard of Practice I

Until the patient has been transported out of the operating room, the CST should remain sterile as well as maintain the sterility of the Mayo stand.

1. The CST should ensure that all sharps, instruments, and non-disposable items are removed from the drapes prior to the dressing being applied.
2. The CST is responsible for moving the sterile back table, Mayo stand and basin set away from the O.R. table.
 - A. If feasible, the CST should remain sterile while other members of the surgical team apply the dressings and remove the drapes. At the minimum, the CST should maintain the sterility of the Mayo stand, including keeping a minimum number of sterile instruments on the stand to include knife handle with attached knife blade, two to four hemostats, scissors, retractors and needle holder, until the patient has been transported out of

- the O.R.¹ (Refer to the *AST Position Statement Back Table and Mayo Stand Remaining Sterile Until Patient is Transported from Operating Room*).
- B. When the patient is waking from general anesthesia, complications can occur, such as respiratory distress. The surgical team must be ready to treat the complication in the O.R., such as performing an emergency tracheotomy.
3. When the CST is to be involved in the end-of-procedure care of the patient, he/she should still position the sterile back table, Mayo stand and basin set away from the O.R. table, but still preserve their sterility.
 - A. The skin around the surgical wound is cleaned and dried with sterile saline-soaked sponges. Care must be taken not to disrupt the wound or dislodge drains.
 - B. If the CST is double gloved and will be involved in applying the dressing, the outer glove should be removed first.
 - C. When the dressing is in place, the CST or surgeon should gently hold the dressing in place with one hand, while the drape is removed. As the drape is being removed, it should be rolled up so that the exterior is contained within itself.¹ It will be necessary for the CST or surgeon to switch hands to hold the dressing in place as the fenestration of the drape is rolled over that area. The drape should not be thrown from any distance into the waste container in order to prevent the splattering of blood and body fluids on the floor, walls, and/or furniture, and possibly onto other surgical team members. The drape should be properly contained at the end of the surgical procedure by placing it in an impervious bag that is labeled with the biohazard symbol.
 - D. The CST, as well as the other members of the sterile team, remove gown and gloves (see *Standard of Practice II*). The team members should perform a hand wash.
 - E. If used, the dispersive electrode is removed, and the condition of the patient's skin is observed and documented in the patient chart.
 - F. Monitoring devices are removed. The EKG leads are removed, and the condition of the patient's skin is observed and documented in the patient's chart.
 - G. Patient is transferred from the O.R. table to the stretcher (refer to the *RSOP for Patient Transportation*).
 - H. O.R. table linens should be placed in the impervious bag designated for soiled linen.

Standard of Practice II

The CST and CFA should remove gowns and gloves using aseptic technique and follow Standard Precautions to prevent contact with blood and body fluids.

1. The gown should always be removed first.
 - A. The gloves should not be removed prior to removing the gown, in order to prevent touching blood and body fluids on the gown, thus causing cross-contamination.⁵

- B. As the gown is being removed, it should be rolled up so that the exterior is contained within itself.¹
 - C. The gown should not be thrown from any distance into the waste container in order to prevent the splattering of blood and body fluids on the floor, walls, and/or furniture, and possibly onto other surgical team members. The gown should be properly contained at the end of the surgical procedure by placing in an impervious bag that is labeled with the biohazard symbol.
2. The gloves should be removed carefully to prevent splashing of blood and body fluids.
 - A. When double-gloved, the gloves should be removed one layer at a time to allow the CST and CFA the ability to visualize if there were any tears or punctures to the outer glove (refer to the *RSOP for Gowning and Gloving*).
 - B. The gloves should be placed in an impervious bag that is labeled with the biohazard symbol. The gloves should not be thrown or “sling-shot” into the container; this can cause blood or body fluids to be splattered on the floor, walls and/or O.R. furniture, as well as cause exposure to the eyes of the other team members.⁴
 - C. The CST and CFA should perform a hand wash after removing the gloves.

Standard of Practice III

The CST should wear personal protective equipment (PPE) when breaking down sterile field to protect against exposure to blood borne pathogens (OSHA).

1. The CST should continue to wear head cover, mask and eye protection. After removing the sterile gown and gloves, he/she should don nonsterile gloves and nonsterile protection/medical gown.

Standard of Practice IV

To contribute to the efficiency of room turnover, the CST should implement the principles of economy of motion in establishing a routine for breaking down the sterile field.

1. The CST should establish a logical, sequential and efficient routine for breaking down the sterile field that can be followed for all types of surgical procedures. Utilizing a routine for breaking down the Mayo stand and back table contributes to economizing time.
2. Principles of economy of motion include:
 - A. Motions should be simple, productive, minimal and non-repetitive.
 - B. Move about as little as possible.
 - C. Establish a logical, sequential and efficient pattern for Mayo stand and back table break down.
 - D. Move as smoothly and quickly as possible without compromising safety.
3. The following is a recommended routine for the breakdown of the sterile field.
 - A. Disposable sharps should be handled and discarded according to health care facility policy.

- (1) Sharps should be placed in the sharps container that is on the back table. The container should be placed in a puncture-proof sharps container that is labeled with the biohazard symbol. This will ensure the safety of health care workers, who are tasked with the disposal of sharps.
- B. Instruments from the Mayo stand should be wiped off with a sponge soaked in sterile water and placed in a basin of water.
 - (1) Saline solution should not be used, since the salt in the solution can cause pitting on the stainless steel finish of instruments.
 - (2) Ratcheted instruments should be left open.
 - (3) Instruments with multiple parts should be disassembled.
 - (4) Instruments with lumen should be flushed using the asepto or bulb syringe and water.
 - (5) The basin with instruments should be placed in the case cart for transfer to decontamination.
- C. Instruments on the back table that were not used during the procedure should be placed in the instrument tray (refer to the *RSOP for the Care and Handling of Instruments*).
 - (1) Ratcheted instruments should be opened and placed on the stringer.
 - (2) Instruments with multiple parts should be disassembled.
 - (3) Heavy instruments should be placed on the bottom of the tray; delicate instruments placed on top.
 - (4) The tray with instruments should be placed in the case cart for transfer to decontamination.
- D. All disposable items should be placed in the impervious bag labeled with the biohazard symbol.
- E. Suction canisters and tubing are properly discarded according to health care facility policy and procedures and local regulations.
- F. The O.R. furniture is re-positioned in preparation for the next procedure.
- G. The case cart is transferred to decontamination.
- H. PPE is removed and discarded in the impervious bag identified by the biohazard symbol.
- I. The biohazard and linen bags are removed from the O.R. and placed in the health care facility designated area for removal by environmental personnel.
- J. The CST should perform a hand wash.
- K. The preoperative case management routine is repeated in preparation for the next procedure.

Competency Statements

Competency Statements	Measurable Criteria
1. The CST and CFA have the knowledge and skills for implementing the principles of aseptic technique.	1. Educational standards as established by the <i>Core Curriculum for Surgical Assisting</i> and <i>Core Curriculum for Surgical</i>

<p>2. The CST and CFA are qualified to perform post-procedure patient care, utilizing their knowledge of the principles of aseptic technique and PPE.</p> <p>3. The CST and CFA have the knowledge and skills to implement the principles of economy of motion in order to contribute to the efficiency of performing post-procedure care of the patient in a safe manner.</p>	<p><i>Technology.</i>^{2,3}</p> <p>2. The subjects of principles of aseptic technique and implementation of the principles, use of PPE and Standard Precautions, post-procedure care of the patient, breaking down the sterile field, surgical conscience, and principles of economy of motion are included in the didactic studies as a student.</p> <p>3. Students demonstrate knowledge of the above listed didactic subjects in the lab/mock O.R. setting and during clinical rotation.</p> <p>4. As practitioners, CSTs and CFAs implement Standard Precautions and use of PPE in breaking down the sterile field as well as implement the principles of economy of motion.</p> <p>5. CSTs and CFAs complete continuing education to remain current in their knowledge of Standard Precautions, blood borne pathogens, use of PPE, and care of the patient.</p>
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References

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5. Gruendemann BJ, Mangum SS. *Infection Prevention in Surgical Settings*. Philadelphia, PA: WB Saunders Company; 2001.

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