



Recommended Standards of Practice for Shoe Covers in the Perioperative Environment

Introduction

The following Recommended Standards of Practice were researched and written by the AST Education and Professional Standards Committee and have been approved by the AST Board of Directors. They are effective April 13, 2007.

AST developed the following Recommended Standards of Practice to support health care facilities in the reinforcement of best practices related to wearing shoe covers in the perioperative setting. The purpose of the Recommended Standards is to provide an outline that health care workers (HCWs) in the perioperative setting can use to develop and implement policies and procedures for shoes covers. 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 wearing shoe covers according to established health care facility protocols.

Rationale

The following are Recommended Standards of practice related to wearing shoe covers in the perioperative setting, in addition to addressing proper footwear. The use of shoe covers has never been proven to decrease the risk or incidences of surgical site infection, or to decrease the bacterial counts of the operating room floors.⁵ Shoe covers do protect the footwear and feet from exposure to blood and body fluids.

Footwear protects the feet from injury by sharps or heavy equipment and instruments that may accidentally fall on the feet. Footwear also provides a barrier to exposure to blood and body fluids.

Standard of Practice I

HCWs should protect themselves from contact with blood and body fluids by wearing disposable shoe covers.

1. Fluid-resistant disposable shoe covers should be worn in the semi-restricted and restricted areas of the surgical suite as protection from blood and body fluids.¹
2. Disposable shoe covers should be worn if it is anticipated that contact with blood and body fluids, splashes and spills may occur.¹
3. Knee-high impervious boot style covers should be worn if it is anticipated that there could be a large amount of irrigation fluid use and/or large amount of blood and/or body fluid loss.⁴

Standard of Practice II

HCWs should avoid tracking blood and body fluids, debris and other gross contaminants throughout the surgical suite.

1. Shoe covers must not be worn outside the surgical suite.
2. Clean shoe covers should be donned when returning to the semi-restricted and restricted areas of the surgical suite.
3. Shoe covers must be changed daily.
4. Shoe covers that are soiled and contaminated, torn, or moist/wet, must be changed as soon as possible. When removing the contaminated shoe covers, surgical personnel should wear nonsterile gloves to protect the hands from the gross contaminants.
5. When discarding shoe covers, they should be discarded in a designated container.
6. Shoe covers should be removed before entering the dressing room area and must be removed when leaving the surgical suite.
7. Shoe covers should be kept in close proximity to the semi-restricted area.

Standard of Practice III

HCWs should be aware of the hazards associated with workplace foot and toe injuries, and should protect himself/herself from injury by wearing the correct footwear.

1. Sandals, shoes made of soft materials, and open toe and open heel shoes should not be worn in the surgical suite. It is recommended that the footwear have low heels.
2. Rubber boots and leather shoes are two recommendations for footwear that offer good protection.
3. The footwear should be comfortable, supportive, breathable and protective.
4. HCWs who wear footwear that is designated for use only in the surgical suite must make sure the footwear meets health care facility standards.
5. HCWs are responsible for keeping the footwear clean and in good repair. Gross contaminants should be cleaned from the footwear as soon as possible and not be allowed to build up on the surface.
6. If footwear is specifically designated for use in the surgical suite and worn without shoe covers, the footwear must not be worn outside the surgical suite.

Standard of Practice IV

Policies and procedures for surgical attire, including shoe covers, should be developed, written and reviewed on a periodical basis.

1. HCWs should be familiar with the policies and procedures for the proper wearing of surgical attire.
2. The policies and procedures should follow the recommended guidelines and standards published by the CDC and OSHA regarding surgical attire including shoe covers and foot wear.¹

Competency Statements

Competency Statements	Measurable Criteria
-----------------------	---------------------

<p>1. Certified Surgical Technologists (CSTs) and Certified First Assistants (CFAs) are knowledgeable of the importance of reducing bacterial spreading in the surgical suite and contamination of the sterile field.</p> <p>2. CSTs and CFAs are knowledgeable of the need to protect themselves from injury, as well as microbial and environmental hazards.</p> <p>3. CSTS and CFAs are knowledgeable of the importance of wearing the proper PPE and surgical attire as an integral part of their daily hospital routine.</p> <p>4. CSTs and CFAs utilize the appropriate footwear and footwear coverings, and follow the recommended CDC and OSHA guidelines and standards, and health care facility polices and procedures for PPE.</p>	<p>1. Educational standards as established by the <i>Core Curriculum for Surgical Technology</i> and <i>Core Curriculum for Surgical Assisting</i>.^{2,3}</p> <p>2. The subject areas of surgical attire and PPE are included in the didactic studies as a surgical technology student.</p> <p>3. Surgical technology students demonstrate knowledge of and follow the recommended practices for PPE in the lab/mock OR setting and during clinical rotation.</p> <p>4. As practitioners, CSTs and CFAs understand and apply the concepts of aseptic technique, wearing the appropriate surgical attire, and following CDC and OSHA guidelines and standards.</p> <p>5. CSTs and CFAs complete continuing education to remain current in their knowledge of PPE requirements.</p>
---	---

References

1. Centers for Disease Control and Prevention Guideline for prevention of surgical site infection. *Infection Control and Hospital Epidemiology*. 1999; 20: 250-278.
2. *Core Curriculum for Surgical Assisting*. 2nd ed. Littleton, CO: Association of Surgical Technologists; 2006.
3. *Core Curriculum for Surgical Technology*. 5th ed. Littleton, CO: Association of Surgical Technologists; 2002.
4. Frey K, Ross T. eds. *Surgical Technology for the Surgical Technologist: A Positive Care Approach*. 3rd ed. Clifton Park, NY; Delmar Cengage; 2008.
5. Humphreys H, Marshall RJ, Ricketts VE, Russell A J, Reeves DS. Theatre over-shoes do not reduce operating theatre floor bacterial counts. *Journal of Hospital Infection*. 1991; 17:117-123.

6. US Department of Labor, Occupational Safety and Health Administration. Bloodborne pathogens standard 1910-1030. http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051. Accessed March 21, 2007.
7. Weightman NC, Banfield KR. Protective overshoes are unnecessary in a day surgery unit. *Journal of Hospital Infection*.1994; 28: 1-3.