

## Recommended Practices for Maintaining a Sterile Field

The following recommended practices were developed by the AORN Recommended Practices Committee and have been approved by the AORN Board of Directors. They were presented as proposed recommended practices for comments by members and others. They are effective January 1, 2006.

These recommended practices are intended as achievable recommendations representing what is believed to be an optimal level of practice. Policies and procedures will reflect variations in practice settings and/or clinical situations that determine the degree to which the recommended practices can be implemented.

AORN recognizes the numerous settings in which perioperative nurses practice. These recommended practices are intended as guidelines adaptable to various practice settings. These practice settings include traditional operating rooms, ambulatory surgery centers, physicians' offices, cardiac catheterization suites, endoscopy suites, radiology departments, and all other areas where operative and other invasive procedures may be performed.

### Purpose

These recommended practices provide guidance for establishing and maintaining a sterile field. The creation and maintenance of a sterile field can directly influence patient outcomes. Adherence to aseptic practices by all individuals involved in surgical interventions aids in fulfilling the professional responsibility to protect patients from injury. Aseptic practices are implemented preoperatively, intraoperatively, and postoperatively to minimize wound contamination and reduce patient risks for surgical site infections.

### Recommendation I

**Scrubbed persons should function within a sterile field.**

1. Before donning sterile gowns and gloves, surgical hand antisepsis should be performed according to AORN's "Recommended practices for surgical hand antisepsis/hand scrubs"<sup>1</sup> and the manufacturer's written instructions for the antiseptic. Surgical hand antisepsis decreases the microbial counts on the skin and will reduce the transfer of microorganisms.
2. Personnel within the sterile field should be attired according to both AORN's "Recom-

mended practices for surgical attire"<sup>2</sup> and "Recommended practices for standard and transmission-based precautions."<sup>3</sup> Personnel should wear scrub attire, caps, masks, eye protection, and sterile gowns and gloves to prevent microbial transference to the sterile field, surgical site, and patient during the surgical procedure and to reduce risk of occupational exposure to bloodborne pathogens and other potentially infectious materials.<sup>4-7</sup>

3. Scrubbed personnel should don sterile gowns and gloves from a sterile area away from the main instrument table to prevent contamination of the sterile field.<sup>8-12</sup>
4. Materials for gowns should be selected according to AORN's "Recommended practices for selection and use of surgical gowns and drapes"<sup>13</sup> and according to the required level of barrier protection as outlined in the Association for the Advancement of Medical Instrumentation (AAMI) guideline "Liquid barrier performance and classification of protective apparel and drapes intended for use in health care facilities."<sup>14</sup> Surgical gowns should be of sufficient size to adequately cover the scrubbed person. Surgical gowns should establish a barrier that minimizes the passage of microorganisms between nonsterile and sterile areas.<sup>12,15</sup>
5. The front of a sterile gown is considered sterile from the chest to the level of the sterile field. The sterile area of the gown front extends to the level of the sterile field because most scrubbed personnel work adjacent to a sterile bed and/or table. Gown sleeves are considered sterile from two inches above the elbow to the cuff, circumferentially.

The neckline, shoulders, underarms, sleeve cuffs, and gown back are areas of friction and, therefore, are not considered effective microbial barriers. The gown back is considered nonsterile because it cannot be constantly monitored.

Gowns of an adequate size to close completely in the back and a sleeve length adequate to prevent cuff exposure outside the glove should be selected.

6. Sleeve cuffs should be considered contaminated when the scrubbed person's hands pass beyond the cuff.<sup>9,10,12</sup>