

Recommended Practices for Selection and Use of Surgical Gowns and Drapes

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, 2003.

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 types of 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 units, physician's 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 guidelines for evaluation, selection, and use of surgical gowns and drapes. These products should provide a safe, effective means of protecting patients and health care personnel during use. Patients are at risk of contamination from both endogenous and exogenous microorganisms. Health care workers are at risk of contamination from a variety of bloodborne pathogens that can be contracted via exposure to patients' blood and body fluids. The barrier quality required of surgical gowns and drapes varies according to the planned use of the product and its anticipated exposure to blood and body fluids.

Recommendation I

Surgical gowns and drapes should be evaluated according to the AORN "Recommended practices for product selection in perioperative practice settings."¹

1. Materials selected for construction of surgical gowns and drapes should be safe, meet identified needs, and promote patient and personnel safety.

2. Selection of gown and drape products for use in the practice setting should be based on criteria specific to the products' function and use. Surgical gowns and drapes are constructed of either single-use or reusable materials. Each of these has advantages and disadvantages. Further, in each of the two categories, design and performance characteristics vary. This variation stems from trade-offs in cost, comfort, and the amount of barrier protection provided. Both single-use and reusable gowns and drapes often are reinforced to improve their barrier quality. Reinforcements may consist of additional layers of the same material or layers of different material(s).²

Recommendation II

Materials used for surgical gowns and drapes should be resistant to penetration by blood and other body fluids as necessitated by their intended use.

1. Perioperative managers and purchasing agents should obtain from manufacturers data verifying that materials used in gowns and drapes are protective barriers against the transfer of microorganisms, particulates, and fluids to minimize strike-through and the potential for personnel contamination. Microorganisms can be transferred through barrier materials by wicking of fluids and/or pressure or leaning on a flooded area of the product. Mechanical action such as pressure can result in both liquid and dry penetration of microbes if the pressure exceeds the maximum level of resistance that the material provides.³
2. Surgical gowns should be selected for use according to the barrier quality of the item and the wearers' anticipated exposure to blood and body fluids in accordance with the Occupational Safety and Health Administration guidelines for use of personal protective equipment.⁴ Short procedures during which there is little or no anticipated exposure to blood or body fluids can be completed successfully using a surgical gown with minimal barrier protection. As the complexity and length of the planned procedure increases, there may be increased potential for exposure to bloodborne pathogens, and it would be prudent to select a gown with greater barrier capability.