

Recommended Practices for Environmental Cleaning

The following Recommended Practices for Environmental Cleaning have been approved by the AORN Recommended Practices Advisory Board. They were presented as proposed recommendations for comments by members and others. They are effective November 15, 2013. These recommended practices are intended to be 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 many diverse settings in which perioperative nurses practice, and as such, these recommended practices are guidelines adaptable to all areas where operative and other invasive procedures may be performed.

Purpose

Historically, perioperative registered nurses (RNs) have played a critical role in providing a clean environment for patients undergoing operative or other invasive procedures. In recent years, researchers have developed an increasing awareness of the role of the environment in the development of health care-associated infections and transmission of multidrug-resistant organisms (MDROs).¹⁻⁴

The literature describes a high risk of pathogen transmission in the perioperative setting due to multiple contacts among patients, perioperative team members, and environmental surfaces.¹ Thus, thorough cleaning and disinfection of perioperative areas is essential to preventing the spread of potentially pathogenic microorganisms.¹ Because surfaces that health care providers touch frequently may present a high risk for pathogen transmission to patients,² routine cleaning of high-touch objects is an effective approach to limiting transmission of pathogens⁵ when implemented as part of a comprehensive environmental cleaning and disinfection program.

Researchers have shown that cleaning practices in the operating room (OR) have not been adequately thorough or consistent with the policies of the health care organization.^{1,6,7} Jefferson et al observed a mean cleaning rate of 25% for objects monitored in the OR setting in six acute care hospitals.⁷ These findings demonstrate that some ORs may not be as clean as previously thought,¹ although the literature has not defined the concept of cleanliness. All perioperative team members have a responsibility to provide a clean environment for patients. Perioperative and environmental services leaders can cultivate an environment where perioperative and environmental services personnel work collaboratively to accomplish adequately thorough cleanliness in a culture of safety and mutual support.

These recommended practices provide guidance for environmental cleaning and disinfection in the perioperative practice setting and are based on the highest quality evidence available. The quality of the research investigating environmental cleaning has not yet achieved a level of rigor to thoroughly define and evaluate best practices for environmental cleaning in health care, including the perioperative setting.³ According to Carling, published studies have not separated cleaning thoroughness from the cleaning chemicals being evaluated, and there is a need for outcome studies to determine the impact of environmental cleaning on the transmission of disease.³ Donskey found that although much of the evidence for environmental disinfection as a control strategy for reducing health care-associated infections is sub-optimal, the practice of environmental cleaning is supported by several high-quality investigations.⁸ Conscientious application of these recommended practices should result in a clean environment for perioperative patients and minimize the exposure risk of health care personnel and patients to potentially infectious microorganisms. Any patient could be infected with bloodborne or other pathogens, so all surgical procedures should be considered potentially infectious. This document provides specific guidance for cleaning procedures; selection of appropriate cleaning chemicals, materials, tools, and equipment; ongoing education and competency verification; policies and procedures; and quality assurance and performance improvement processes.

Although these recommendations include references to cleaning a wide variety of surfaces, the focus of this document is specific to the environmental cleaning of perioperative areas. These recommendations may be applicable to sterile processing areas. Laundering of textiles is outside the scope of these recommendations. Environmental cleaning includes considerations for a safe environment of care, prevention of transmissible infections, and hand hygiene. These topics are addressed in separate recommended practices documents, and although they are mentioned briefly where applicable (eg, standard precautions), broader discussions are outside the scope of this document.⁹⁻¹¹

Evidence Review

A medical librarian conducted systematic searches of the databases MEDLINE, CINAHL, and the Cochrane Database of Systematic Reviews for meta-analyses, systematic reviews, randomized controlled and non-randomized trials and studies, opinion documents, case reports, letters, reviews, and guidelines. Scopus was also consulted, although not searched systematically.

