

# Recommended Practices for Prevention of Transmissible Infections in the Perioperative Practice Setting

The following Recommended Practices for Prevention of Transmissible Infections 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 December 15, 2012. 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 various settings in which perioperative nurses practice, and as such, these recommended practices are intended as guidelines adaptable to various practice settings. These practice settings include traditional operating rooms (ORs), ambulatory surgery centers, physicians' offices, cardiac catheterization laboratories, endoscopy suites, radiology departments, and all other areas where surgery and other invasive procedures may be performed.

## Purpose

The rapidly changing health care environment presents health care personnel with continual challenges in the form of newly recognized pathogens and well-known microorganisms that have become more resistant to today's therapeutic modalities. Protecting patients and health care practitioners from potentially infectious agent transmission continues to be a primary focus of perioperative registered nurses (RNs). The prevention and control of multidrug-resistant organisms (MDROs) requires that all health care organizations implement, evaluate, and adjust efforts to decrease the risk of transmission.

There are three principal elements required for an infection to occur:

- a source or reservoir,
- a susceptible host with a portal of entry to receive the infectious agent, and
- a method of transmission.<sup>1</sup>

These recommended practices are intended to guide perioperative RNs in implementing standard precautions and transmission-based precautions (ie, contact, droplet, airborne) to prevent infection in the perioperative practice setting. Additional guidance is provided for bloodborne pathogens; personal protective equipment (PPE); health care-associated infections and multidrug-resistant organisms (MDROs); immunization; and activities of health care workers with infections, exudative lesions, and nonintact skin. Finally, the document includes guidance for

ongoing education and competency evaluation, documentation requirements, policies and procedures, and quality assurance and performance improvement processes.

Prevention of transmissible infections is a priority in the perioperative environment and includes considerations for environment of care, sharps safety and safe injection practices, hand hygiene, sterile technique, and sterilization. These topics are addressed in separate recommended practices and although they are mentioned briefly where applicable (eg, standard precautions), the broader discussions are outside the scope of this document.

## Evidence Review

A medical librarian conducted a systematic search of the databases MEDLINE®, CINAHL®, Scopus®, and the Cochrane Database of Systematic Reviews for meta-analyses, systematic reviews, randomized controlled trials, guidelines, and additions to the *Morbidity and Mortality Weekly Report*. The report was also regularly consulted for newly added, relevant entries. Search terms included *infectious disease transmission, infectious skin diseases, soft tissue infections, blood-borne pathogens, gram-negative bacteria, gram-positive bacteria, gram-negative bacterial infections, gram-positive bacterial infections, viral hepatitis, viral meningitis, viral skin diseases, HIV infections, disease outbreaks, infectious disease transmission, needlestick injuries, occupational accidents, occupational health, occupational diseases, droplet precautions, standard precautions, isolation precautions, airborne precautions, patient isolation, microbial drug resistance, methicillin-resistant Staphylococcus aureus, methicillin resistance, Staphylococcus aureus, vancomycin resistance, vaccination, immunization, disaster planning, emergency preparedness, bioterrorism, and chemical terrorism*.

The search was limited to articles published in English between 1989 and 2011. The librarian established continuing alerts on the transmissible infection topics. The authors and medical librarian identified relevant guidelines from government agencies and standards-setting bodies. In addition, the authors requested articles that highlight the causes, identification, and treatment of transmissible infection, including some that were beyond the scope of this search.

Articles identified by the search were provided to the project team for evaluation. The team consisted of the lead author, three members of the Recommended Practices Advisory Board, and a doctorally prepared evidence appraiser. The lead author divided the

