

ENVIRONMENT OF CARE



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MEDICAL ABBREVIATIONS & ACRONYMS

dBA - Decibels A-Scale
ESU - Electrosurgical Unit
FDA - US Food and Drug Administration
IgE - Immunoglobulin E
IFU - Instructions for Use
MAUDE - Manufacturer and User Facility Device Experience
MMA - Methyl Methacrylate

NFPA - National Fire Protection Association
NIOSH - National Institute for Occupational Safety and Health
OR - Operating Room
ppm - Parts per Million
RN - Registered Nurse
SDS - Safety Data Sheet

GUIDELINE FOR A SAFE ENVIRONMENT OF CARE

The Guideline for a Safe Environment of Care has been approved by the AORN Guidelines Advisory Board. It was presented as a proposed guideline for comments by members and others. The guideline is effective October 1, 2018. The recommendations in the guideline are intended to be achievable and represent 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 guideline can be implemented. AORN recognizes the many diverse settings in which perioperative nurses practice; therefore, this guideline is adaptable to all areas where operative or other invasive procedures may be performed.

Purpose

This document provides guidance for maintaining a safe environment of care for patients and perioperative personnel. The recommendations include information on

- **clinical** and **alert alarms**,
- **noise** and **distractions**,
- occupational injuries (eg, slips, trips, and falls),
- fire safety,
- electrical equipment,
- blanket and fluid warming cabinets,
- medical gas cylinders,
- waste anesthesia gases,
- **latex allergy**,
- hazardous chemicals, and
- hazardous waste.

The following topics are outside the scope of this document:

- chemotherapeutic agents (See the AORN Guideline for Medication Safety¹);
- heating, ventilation, and air conditioning (See the AORN Guideline for Design and Maintenance of the Surgical Suite²);
- lifting equipment and moving patients (See the AORN Guideline for Safe Patient Handling and Movement³);
- patient injuries related to incorrect tubing connections (See the AORN Guideline for Medication Safety¹);
- personnel injuries related to exposure to bloodborne pathogens (See the AORN Guideline for Transmission-Based Precautions⁴);
- product evaluation (See the AORN Guideline for Medical Device and Product Evaluation⁵);
- radiation (See the AORN Guideline for Radiation Safety⁶); and

- surgical smoke (See the AORN Guideline for Surgical Smoke Safety⁷).

Evidence Review

A medical librarian conducted a systematic literature search of the databases Ovid MEDLINE®, EBSCO CINAHL®, Scopus®, and the Cochrane Database of Systematic Reviews. The search was limited to literature published in English from 2012 through March 2018. At the time of the initial search, weekly alerts were created on the topics included in the search. Results from these alerts were provided to the lead author until April 2018. The lead author also requested additional articles that did not fit the original search criteria or were discovered during the appraisal process.

Search terms included *abortion spontaneous, activation indicators, airway fires, alarm fatigue, alert alarms, blanket warmer, bone cements, burns, clinical alarms, combustion, control of noise and distractions, dermatitis (allergic contact), electrical equipment, electrical equipment and supplies, ethylene oxide, fire, fire blanket, fire extinguisher, fire extinguishing equipment, fire prevention, fire safety, fire triangle, firefighting equipment and supplies, formalin, glutaraldehyde, hazardous substances, hazardous waste, hazardous waste disposal, latex, latex hypersensitivity, methyl methacrylate, methylmethacrylate, miscarriage, noise, occupational diseases, protective clothing, scalding, smoke alarms, solution warmer, surgical fires, teratogens, thermal injuries, warming techniques, waste products, and Zimmer bone cement*.

Included were research and non-research literature in English, complete publications, and publication dates within the time restriction when available. Excluded were non-peer-reviewed publications and older evidence within the time restriction when more recent evidence was available. Editorials, news items, and other brief items were excluded. Low-quality evidence was excluded when higher-quality evidence was available, and literature outside the time restriction was excluded when literature within the time restriction was available (**Figure 1**).

Articles identified in the search were provided to the project team for evaluation. The team consisted of the lead author and one evidence appraiser. The lead author divided the search results into topics, and both members of the team reviewed and critically appraised each article using the AORN Research or Non-Research Evidence Appraisal Tools as appropriate. The literature was independently evaluated and appraised according to the strength and quality of the evidence. Each article was then assigned an appraisal score. The appraisal score is noted in brackets after each reference, as applicable.