

Evidence Review

The Guideline for Surgical Attire was approved by the AORN Guidelines Advisory Board and became effective as of July 1, 2019.

A medical librarian with a perioperative background conducted a systematic search of the databases Ovid MEDLINE®, Ovid Embase®, EBSCO CINAHL®, and the Cochrane Database of Systematic Reviews. The search was limited to literature published in English from **January 2014 through February 2018**. At the time of the initial search, weekly alerts were created on the topics included in that search. Results from these alerts were provided to the lead author until **August 2018**. The lead author requested additional articles that either did not fit the original search criteria or were discovered during the evidence appraisal process. The lead author and the medical librarian also identified relevant guidelines from government agencies, professional organizations, and standards-setting bodies.

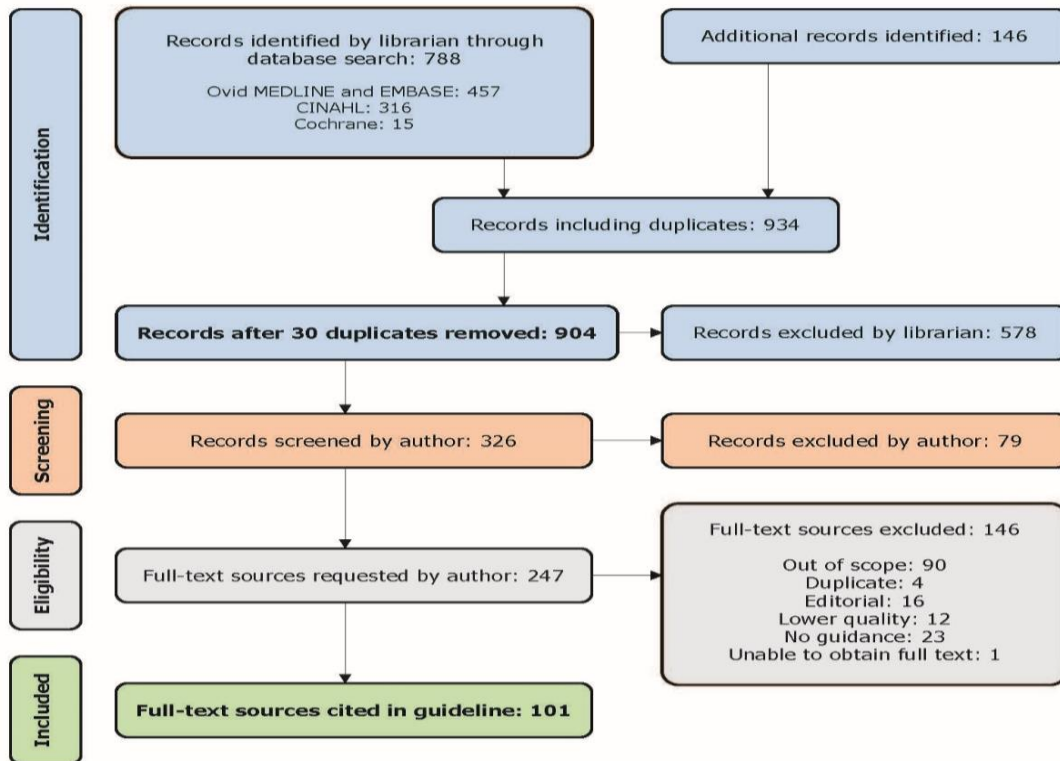
Search terms included *armpit, axilla, backpack, bacterial load, badge, beard, bedding and linens, bouffant, briefcase, bunny suit, cell phone, cellular phone, clean room, clothing, colonization, computers, computers (handheld/hand-held/portable), computers and computerization, coveralls, cross infection, dandruff, dermatitis (exfoliative/seborrheic), desquamate, desquamation, disease transmission, disposable hats, dust, ear, environment (controlled), epithelial cells, epithelium, equipment contamination, eyelashes, facial hair, fanny pack, fleece, fomites, fungi, groin, hair, head covering, hoods, infection control, infectious disease transmission, iPad, iPhone, jewelry, jumpsuit, lanyard, laundering, laundering scrubs, laundering service (hospital), mobile communication device, mobile phone, mold, nosocomial, pollen, protective clothing, purse, scalp, scrubs, seborrhea, seborrheic dermatitis, shed, shedding, skin, skullcaps, smartphone, squames, stethoscopes, surgical attire, surgical cap, surgical wound infection, tablet computer, textiles, tie, uniforms, and washing machine.*

Included were research and non-research literature in English, complete publications, and publications with 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 and the evidence appraiser reviewed and critically appraised each article using the AORN Research or Non-Research Evidence Appraisal Tools as appropriate. A second appraiser was consulted if there was a disagreement between the lead author and the primary evidence appraiser. 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.

Each recommendation rating is based on a synthesis of the collective evidence, a benefit-harm assessment, and consideration of resource use. The strength of the recommendation was determined using the AORN Evidence Rating Model and the quality and consistency of the evidence supporting a recommendation. The recommendation strength rating is noted in brackets after each recommendation.

Figure 1: PRISMA 2009 Flow Diagram



Adapted from: Moher D, Liberati A, Tetzlaff J, Atman DG; The PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS Med. 2009;6(6):e1000097.

Publication History

- Originally published March 1975, *AORN Journal*, as AORN “Standards for proper OR wearing apparel.”
- Format revision March 1978, July 1982.
- Revised March 1984, March 1990. Published as proposed recommended practices, August 1994.
- Revised November 1998; published December 1998. Reformatted July 2000.
- Revised November 2004; published in *Standards, Recommended Practices, and Guidelines*, 2005 edition. Reprinted February 2005, *AORN Journal*.
- Revised October 2010 for online publication in *Perioperative Standards and Recommended Practices*.
- Reformatted September 2012 for publication in *Perioperative Standards and Recommended Practices*, 2013 edition.
- Revised September 2014 for online publication in *Perioperative Standards and Recommended Practices*.
- Minor editing revisions made in November 2014 for publication in *Guidelines for Perioperative Practice*, 2015 edition.
- Revised 2019 for online publication in *Guidelines for Perioperative Practice*.
- Minor revisions in May 2021, addition to Section 5 Head Coverings (5.3.2, 5.3.3), for online publication in *Guidelines for Perioperative Practice*.

Under review for revision and publication in 2024.