

## Evidence Review

The Guideline for Preoperative Patient Skin Antisepsis was approved by the AORN Guidelines Advisory Board and became effective as of May 13, 2021.

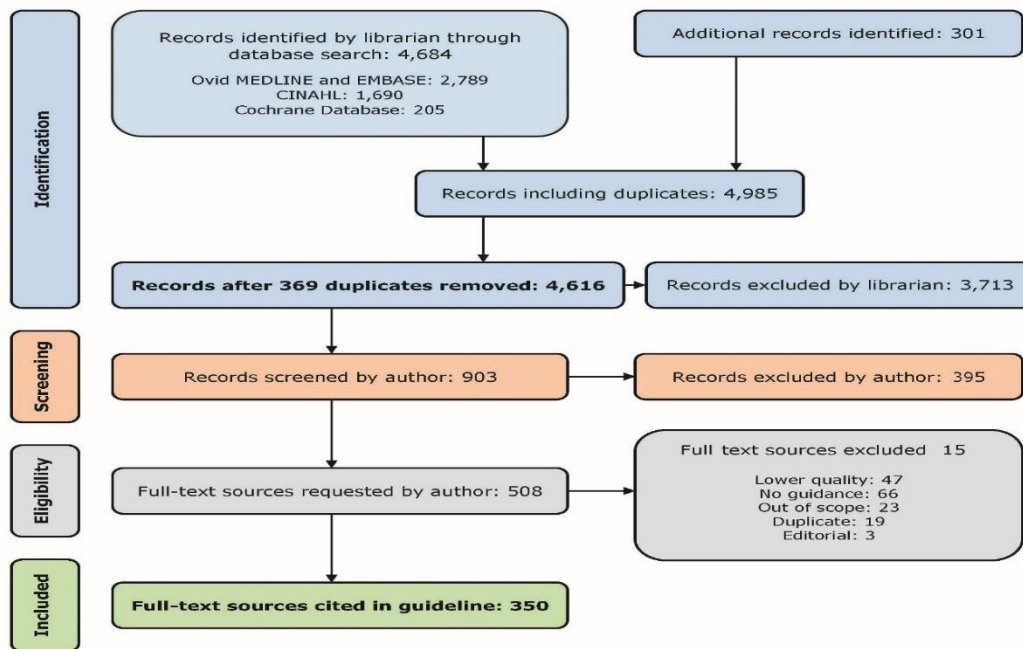
A medical librarian with a perioperative background conducted a systematic search of the databases Ovid MEDLINE, Ovid Embase, EBSCO CINAHL, and the Cochrane Database of Systematic Reviews. The search was limited to literature published in English from **January 2014 through January 2020**. At the time 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 **June 2020**. 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 *administration (cutaneous), administration (topical), alcohol, anti-infective agents (local), antiseptic cloth, antiseptic shower, antiseptic solution, antisepsis, artificial nails, baby shampoo, bathing, benzalkonium chloride, Betadine, Betasept, body jewelry, body piercing, burns (chemical), care bundle, castile, cesarean section, chemical burns, ChlorPrep, chlorhexidine\*, chlorhexidine alcohol, chlorhexidine wipe, chloroxylenol, clipp\*, ClipVac, cost-benefit analysis, cross infection, depilat\*, delivery of health care (integrated), dermatitis, disinfectant, Duraprep, ExCel AP, fingernails, fires, flammab\*, Hyamine, hair removal, health care delivery (integrated), Hibiclens, impaired wound healing, infection prevention, iodine compounds, iodophors, jewelry, local anti-infective agents, male genitalia, mucous membrane, nail polish, nails, nasal cavity, nasal decolonization, nonshaved, Nozin, open wound, parachloroxylenol, patient care bundles, PCMX, penis, perioperative nursing, pHisoHex, post-natal infection, povidone-iodine, practice guidelines, practice guidelines as topic, preoperative antisepsis, preoperative bathing, preoperative care, preoperative shower, preoperative wash, program evaluation, prosthetic joint infection, PVP-I prep, quality improvement, razor, scrotum, shaving, shellfish, skin antisept\*, skin paint, skin prep, skin scrub, skin sensitivity, sterile prep solution, sterile preparation, surgery (operative), surgical fires, surgical patients, surgical procedures, surgical procedures (operative), surgical site infection, surgical skin preparation, surgical wound infection, tape, Techni-Care, total joint replacement, treatment outcome, triclosan, vacuum hair, vagina, vaginal cleansing, vaginal irritation, vaginal vault, vaginitis, wound infection, ZuraGard, and 2-propanol.*

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 in the event of 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, Altman 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 May 1976, *AORN Journal*, as “Standards for preoperative skin preparation of patients.” Format revision March 1978, July 1982.
- Revised February 1983, November 1988, November 1992, June 1996. Published November 1996, *AORN Journal*; reformatted July 2000.
- Revised November 2001; published January 2002, *AORN Journal*.
- Revised 2007; published as “Recommended practices for preoperative patient skin antisepsis” in *Perioperative Standards and Recommended Practices*, 2008 edition.
- Minor editing revisions made to omit PND codes; reformatted September 2012 for publication in *Perioperative Standards and Recommended Practices*, 2013 edition.
- Revised July 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.
- Evidence ratings revised in *Guidelines for Perioperative Practice*, 2018 edition, to conform to the current AORN Evidence Rating Model.
- Evidence ratings revised and minor editorial changes made to conform to the current AORN Evidence Rating model, September 2019, for online publication in *Guidelines for Perioperative Practice*.
- Revised May 2021 for online publication in *Guidelines for Perioperative Practice*.

Scheduled for review in 2026.