

Evidence Review

The Guideline for Specimen Management was approved by the AORN Guidelines Advisory Board and became effective as of December 21, 2020.

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 2012 through November 2019**. 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 **March 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.

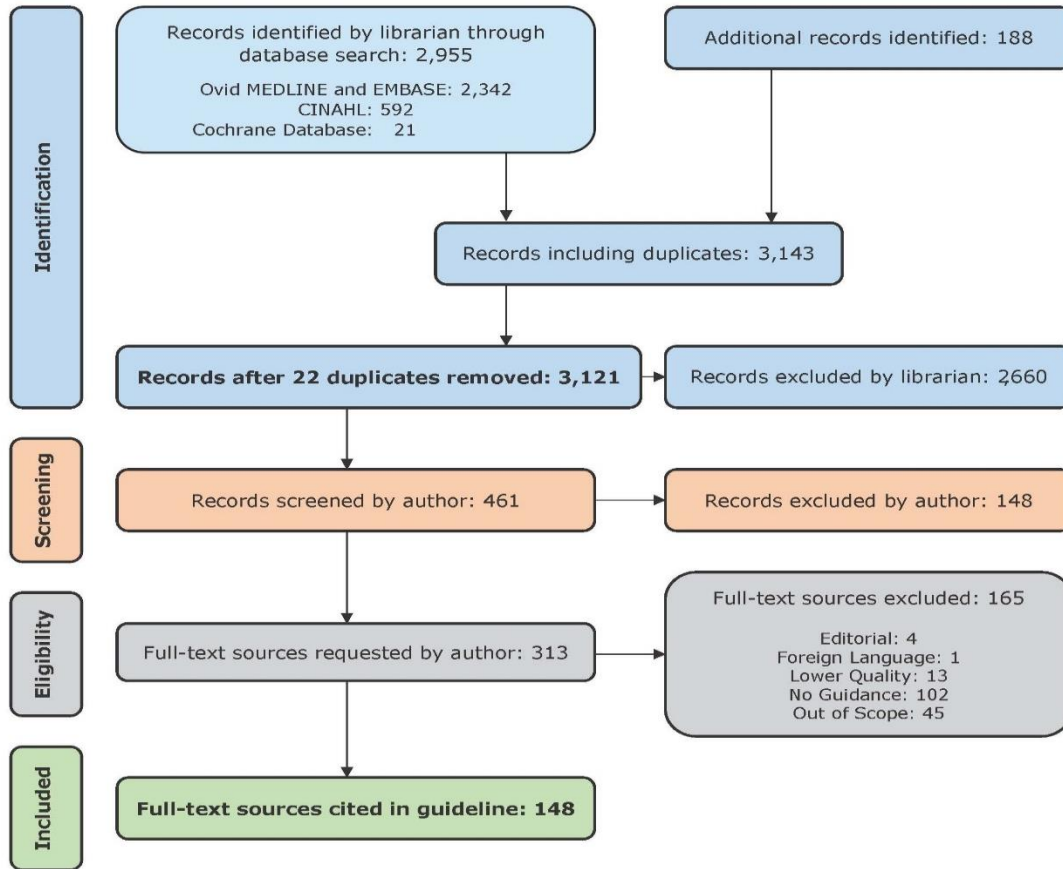
Search terms included *accidents (occupational), amputation (traumatic), biopsy, bone nails, bone plates, bone screws, bone wires, breast neoplasms, burial practices, calculi, chain of custody, cholelithiasis, clinical information, clothing, cultural diversity, dermatologic surgical procedures, device removal, diagnostic errors, documentation, ethanol, explant, fixati*, fixation time and amount, fixatives, forensic ballistics, forensic nursing, forensic pathology, formaldehyde, formalin, fresh specimen, fresh tissue, frozen specimen, frozen tissue, funeral rites, gallstones, gross evaluation, gross examination, health care errors, honey, intraoperative care, intraoperative period, label*, lymph nodes, medical errors, mishandling, misidentification, mislabel*, normal saline, nurse's role, nursing records, occupational diseases, occupational exposure, occupational health, occupational safety, operating room nursing, operating rooms, orthopedic implants, paraffin, paraffin embedding, pathology (surgical), patient identification systems, patient information, patient safety, perioperative care, perioperative nursing practice guidelines as topic, preoperative care, products of conception, prostheses and implants, quality assurance (health care), quality of health care, radiation effects, radiation injuries, radiation monitoring, radiation protection, radiologic health, RPMI 1640, safety, safety precautions, saline solution, specimen contaminat*, specimen defect, specimen handling, specimen storage, specimen type, surgery (operative), surgical pathology process, surgical procedures (operative), surgical site identification, surgical specimen, suture tags, tissue markers, tissue preservation, vacuum, wire localization, wounds (gunshot), and wounds (stab).*

Included were research and non-research literature in English, complete publications, and publications with dates within the time restriction when available. Historical studies were also included. 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 indicated AORN Research or Non-Research Evidence Appraisal Tools. 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 systematic review and 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

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- Minor editing revisions made to omit PND codes; reformatted September 2012 for publication in *Perioperative Standards and Recommended Practices*, 2013 edition.
- Revised May 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.
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