

Association of periOperative Registered Nurses (AORN): Double Gloving Recommendations¹

Nearly
40.4%
of all needlestick and
sharps injuries occur in the
operating room²

Double gloving reduces
blood volume on a solid
suture needle by as much as
95%³

A reduction in glove
perforations by
71%
has been shown when
wearing two pairs of
gloves compared to
wearing only one⁴

6.2 Sharps Safety: Personal Protective Equipment¹

Scrubbed team members should wear two pairs of sterile surgical gloves (ie, double glove), and use a perforation indicator system. *[Recommendation]*

Sterile Technique: Glove Change¹

2.5 "Inspect all gloves for integrity after donning, before contact with the sterile field, throughout use, and when an outer glove perforation is discovered and outer gloves are changed. *[Recommendation]*

2.5.1 Change surgical gloves worn during invasive procedures:

After each patient procedure; every 90 to 150 minutes; When visible defect or perforation is noted or when a suspected or actual perforation from a needle, suture, bone or other object occurs; Immediately after direct contact with methyl methacrylate; After touching optic eye pieces on the operative microscope/fluoroscopy machine/or a surgical helmet system hood or visor; and when suspected or actual contamination occurs. *[Recommendation]*

2.5.2 Surgical gloves worn during invasive procedures may be changed after draping is complete; after handling heavy, coarse, or sharp instrumentation; after manipulation of rough edges of bone; and before handling of implants. *[Conditional Recommendation]*

2.5.3 When a perforation occurs in the outer pair of double gloves, change the outer gloves and inspect the inner gloves. *[Recommendation]*

2.5.4 When a glove change is indicated, use clinical judgement to determine whether the individual glove should be changed or if the gown and gloves should be removed, surgical hand antisepsis performed, and a sterile gown and gloves donned. Base the decision on a risk assessment of the following: part of the glove that was contaminated, degree of contamination, risk of exposing patient or other personnel to blood, body fluids, or other potentially infectious materials, and the length of time remaining in the procedure. *[Recommendation]*

2.5.5 Change gloves in a location away from the sterile field. *[Recommendation]*

2.5.6 To change a sterile glove during a procedure, perform gloving with assistance in the following order: unscrubbed team member should remove the glove to be changed, without altering the position of the gown cuff, a scrubbed team member should hold open the glove to be donned, and the person donning the glove should insert hand into the glove with the gown cuff only touching the inside of the glove. *[Recommendation]*"

"Wearing a colored under glove increases identification of perforations by up to 86%."⁵

The names and trademarks of the standard-setting organizations mentioned in this presentation belong to their respective owners. Ansell Limited and its affiliates do not claim any proprietary right to the marks whatsoever; they are used solely for informational purposes only and do not represent endorsement by the respective owners of the marks of any material presented herein.

References

1. Association of PeriOperative Registered Nurses. (AORN). Guideline for double gloving. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2023.
2. International Safety Center. U.S. EPINet Sharps Injury and Blood and Body Fluid Exposure Surveillance Research Group. Sharps Injury Data Report for 2022. Report available at <https://internationalsafetycenter.org/exposure-reports/>. Updated 2022. Accessed September 25, 2023.
3. Berguer R. Key strategies for eliminating sharps injuries during surgery. AORN J. 2011;94(1):91-96.
4. Mischke C, Verbeek JH, Saarto A, Lavoie MC, Pahwa M, Ijaz S. Gloves, extra gloves or special types of gloves for preventing percutaneous exposure injuries in healthcare personnel. Cochrane Database Syst Rev. 2014;(3):CD009573. Published 2014 Mar 7.
5. Laine T, Aarnio P. How often does glove perforation occur in surgery? Comparison between single gloves and a double-gloving system. Am J Surg. 2001;181(6):564-566.