

CLOSED DONNING TECHNIQUE FOR STERILE SURGICAL GLOVES

WHY DOUBLE GLOVE

Double gloving is the recommended best practice when gloving for surgery as it provides an additional level of protection against blood-borne pathogen exposure and greatly reduces the risk of glove penetrations.¹

Donning Steps



1 **Using cuffed hands** open the glove packet and position the gloves so that the cuffs are nearest to you and the fingers are pointing away. Using your right hand pull the left glove cuff down from the package by the fold of the cuff.

2 **With your right hand** still inside gown pick up left glove and place it thumb to thumb pointing towards your elbow. With your left hand from the back of the glove grasp the cuff of the glove and gown together with your right thumb, then grab the front of the cuff and pinch.

3 **Keeping your left fingers straight**, pull down the sleeve and glove until your hand fills the glove. Now with your right cuffed hand pull the left glove cuff over your gown sleeve.

4 **Repeat the procedure to don the other glove.** That is: use your gloved left hand to lay the right glove on your right wrist. Pull down the sleeve and glove together. Ensure you use all four fingers to pull on the glove cuff. Do not pull on the palm of the glove.



5 **Now with both hands covered** you can attend to finer adjustment of both gloves without risk of contamination. Gently pull the glove sleeves down to remove gown folds.

To prevent glove/gown separation ensure the following:

- gown cuff present down to the base of your palm
- adequate grip area for the glove to grip the gown; and
- that you have no glove cuff folds at the end of the glove.

6 **Multiple studies investigating tactility and sensation** have concluded that there is no negative impact on tactility associated with use of double gloves.

A second pair of gloves is donned in the same manner as previous procedures.

7 **Routine glove changing, preferably every two hours**, is recommended for all surgeries. Especially for procedures involving intensive work on bones or high-risk cases.

Removing both pairs of gloves when a perforation occurs is another best practice to consider since a perforation in the outer glove is an indication that the inner glove may be compromised as well.⁵

Wearing a colored inner glove increases the identification of perforation by as much as 86%⁴



Double gloving reduces glove perforations by 71% compared to single gloving³

The main causes of blood exposure by operating personnel are surgical glove punctures and tears in the operating room².

References

1. Opinion of the scientific committee on medical products and medical devices on 'The protection offered by natural rubber latex devices (medical gloves and condoms) against transmissible diseases'. European Commission, Health & Consumer Protection Directorate-General, October 2003)
2. Clyde Smoot E. Practical Precautions for avoiding sharp injuries and blood exposure. *Plast Reconstr Surg.* 1998; vol. 101(2): 528-534
3. Mischke C, Verbeek JH, Saarto A, Lavoie MC, Pahwa M, Ijaz S. Gloves, extra gloves special types of gloves for preventing percutaneous exposure injuries in healthcare personnel (Review) *The Cochrane Collaboration*
4. Laine T, Aarnio P. How often does glove perforation occur in surgery? Comparison between single gloves and a double-gloving system. *American journal of surgery* 2001;181:564-6
5. Thomas-Copeland J. Do surgical personnel really need to double glove? *AORN J.* 2009;89(2): 322-328.