Double up.

Protecting you, so that you can protect your patients.

CardinalHealth™

The risk is real.

Things can be hectic in the Operating Room. Sharp tools being passed back and forth. Staff focusing on patient safety and outcomes. The opportunity for a sharps injury is ripe.

Prevent sharps injuries with double-gloving.

Injury frequency

sharps injuries occur every year.[1]

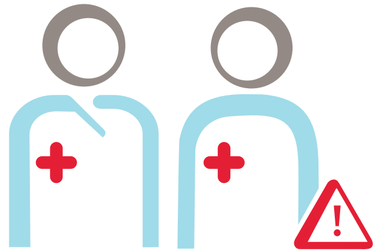
of glove breaches may go unnoticed.[2]

Self-inflicted injuries

15% of operations result in cuts or needlesticks.[4]

of these injuries are caused by suture needles.[3]

Colleague-inflicted injuries



24% of sharps injuries are accidentally inflicted by a colleague.[3]

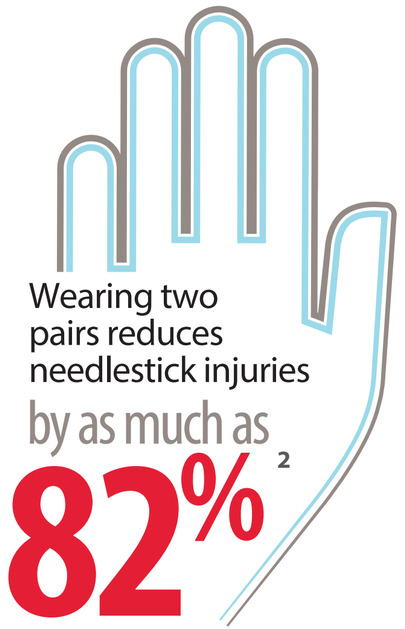
16% of injuries occur while passing sharp instruments hand-to-hand.[5]

Diminish the risk.

Double-gloving is a recommended best practice to greatly reduce the risks associated with sharps injuries by wearing two pairs of surgical gloves.[6]

This surgical best practice is recommended by:

- The Centers for Disease Control and Prevention (CDC)
- European Journal of Surgery
- Association of periOperative Registered Nurses (AORN)
- International College of Surgeons



Wearing two pairs reduces needlestick injuries by as much as **82%**[2]

Double-gloving reduces the volume of blood on a solid suture needle by as much as **95%** reducing your exposure to bloodborne pathogens[5]

Change is hard.

It looks and feels a little different at first. But, implementing the standard safety practice of double-gloving is worth it.

Tip: Give yourself, and the rest of your staff, time to adjust.

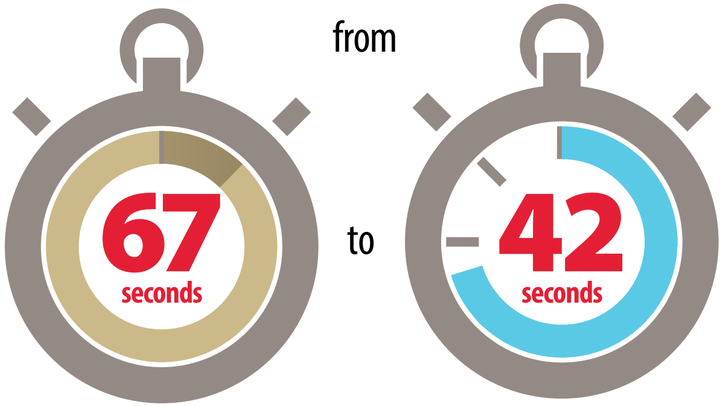
Surgeons who normally double-glove take only **two days** in most cases to fully adapt to the technique. They report fewer instances of decreased hand sensation compared to surgeons who don't normally double-glove.[5]

Studies have shown that double-gloving doesn't reduce performance or fit.[7]

Take better to best.

Double-gloving is great. But, double-gloving with a colored underglove that contrasts the color of the outer glove is even better.

Wearing a colored underglove can reduce awareness time of a sharps injury[8]



Can you tell which of these gloves has a breach?

They both do.

Using a colored underglove can:

Increase awareness of **perforations from 21% to 86%**[9]

How much is improving safety for healthcare providers worth?

Two pairs of gloves are more expensive than one. There is no denying that.

The reality is though, double-gloving helps avoid a wide range of potential costs associated with exposure to blood or bodily fluid, so it can actually save an institution money in the long-run.

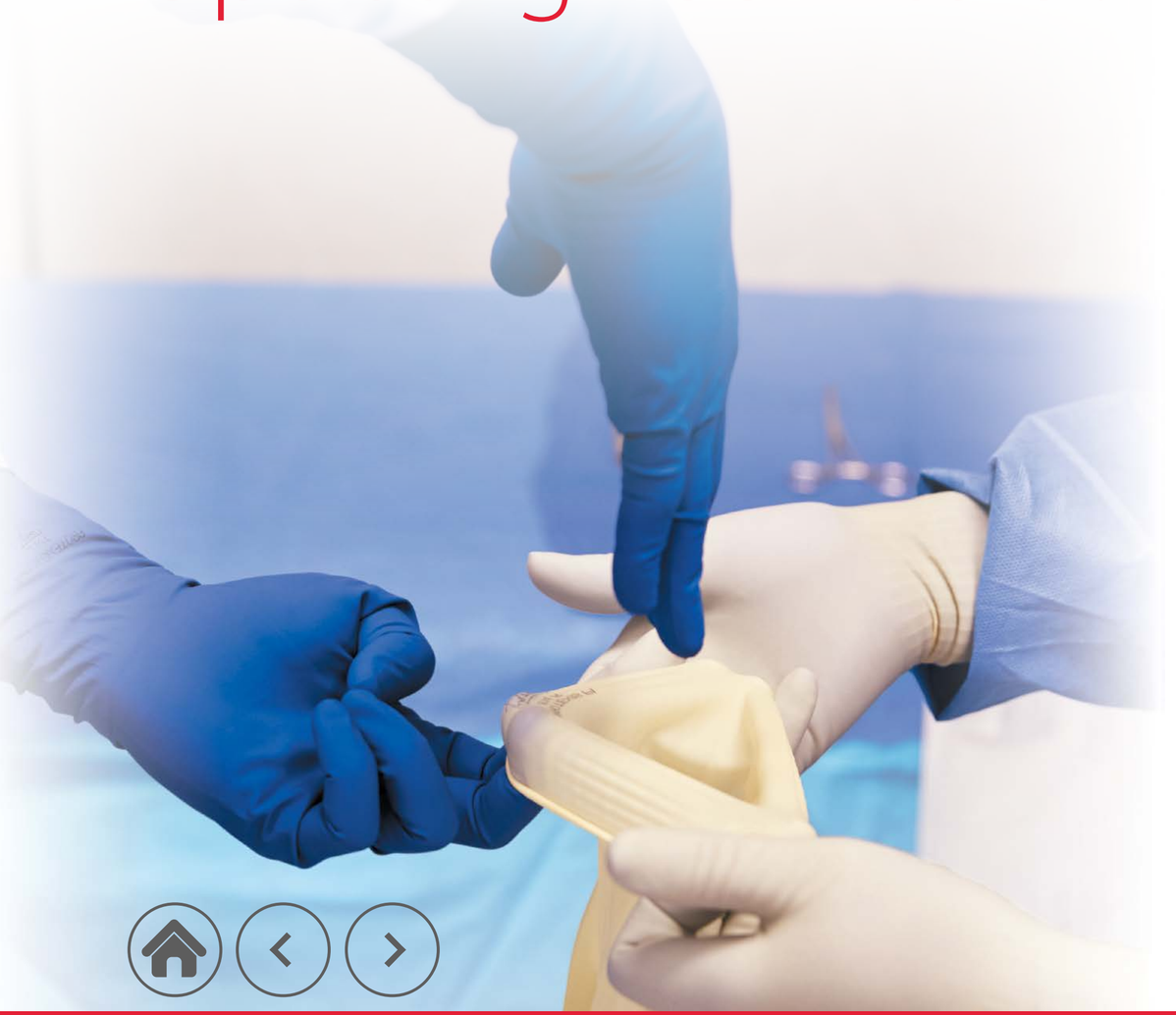
- **Immediate testing and post-exposure prophylaxis**
- **Potential life-threatening infection transmission**
- **Potential clinician disability**
- **Staff or facility downtime and disruptions**
- **Potential hospital litigation**

Your staff is dedicated to patient safety, and Cardinal Health is dedicated to your staff's safety by providing them the perfect fit in surgical gloves.

Cardinal Health Protexis™ Blue-Colored Undergloves
are specially designed to improve the practice of double-gloving. Since their worldwide launch in 2013, leading healthcare institutions have purchased nearly 60 million pairs of blue undergloves from Cardinal Health, with the rate of adoption continuing to increase.

On average
15%
thinner than
standard
surgical gloves

Together, let's make the Operating Room safer.



At Cardinal Health, we know you would do anything to help those in need. It's who you are. Just as it's your instinct to give care, it's ours to ensure your staff's safety every step of the way. Let's work together to make sure that their best tools—their hands—stay protected by wearing two, different colored surgical gloves.

No surgical interruptions.

No lost time.

No costly testing.

A quicker chance for breach detection.
A simple fix of changing the top-layer glove.

It's time to make double-gloving the standard.

For additional information, contact your Cardinal Health representative today.

1. http://www.cdc.gov/niosh/ stopsticks/sharpsinjuries.html

2. Thomas S, Agarwal M, Mehta G. Intraoperative glove perforation—single versus double gloving in protection against skin contamination. Postgraduate Medical Journal. 2001;77(909):458–460.

3. Tokars JM, Bell DM, Culver DH, et al. Percutaneous injuries during surgical procedures. Journal of the American Medical Association. 1992;267:2899-2904.

4. Gerberding JL, Littell C, Tarkington A, et al. Risk of exposure of surgical personnel to patients' blood during surgery at San Francisco General Hospital. New England Journal of Medicine.1990;322:1788-1793. Quebbeman EL, Telford GL, Hubbard S. et al. Risk of blood contamination and injury to operating room personnel. Annals of Surgery 1991; 214:614-620.

5. Berguer R, Heller PJ. Preventing sharps injuries in the operating room. Journal of the American College of Surgeons. 2004;199(3):462-467.

6. Yang, L, Mullan B. Reducing Needle Stick Injuries in Healthcare Occupations: An Integrative Review of the Literature. ISRN Nurs. 2011; 2011: 315432. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3169876/

7. Quebbeman EJ, Telford GL, Wadsworth K, Hubbard S, Goodman H, Gottlieb MS. Double-gloving: Protecting surgeons from blood contamination in the operating room. Archives of Surgery. 1992; 127(2): 213-217.

8. Florman S, Burgdof M, Finigan K, Slakey D, Hewitt R, Nichols RL. Efficacy of double gloving with an intrinsic indicator system. Surg Infect (Larchmt). 2005;6(4):385-395.

9. Tanner, J., Parkinson, H., Double gloving to reduce surgical cross-infection, Cochrane Database Syst Rev. 2009

10. One study showed that the use of a double gloving system featuring a colored under-glove provides an accuracy of detection of 97%. Wigmore SJ, Rainey JB. Br J Surg. Use of colored undergloves to detect glove puncture. 1994; 81: 1480. Another study showed the detection of perforation during surgery was 86.5% with a double-gloving system. 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: 564-566.

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