



Surgical Skin Prep Decision Guide*

Fight SSIs from every angle.

Patient Assessment

Does the patient have any allergies or sensitivities?



CHG allergy or sensitivity



Use Iodophor-based product

Iodine sensitivity



Use CHG-based product

No known allergy or sensitivity



Use either Iodophor or CHG-based product

Is the patient less than 2 months old?



The preferred choice is a product that is specified by the manufacturer for patients under two months of age. When products contain a warning or caution regarding use in infants less than 2 months of age, the perioperative team should collaboratively evaluate risks and benefits of using the products and alternatives such as soaps or saline. The goal is to select a safe and effective surgical skin prep to help reduce bacteria that can cause surgical site infection.



Use either Iodophor or CHG-based product

Surgical Site Assessment

Intact Skin?



Use either Iodophor or CHG-based product



For Meninges or lumbar puncture, use Iodophor-based product



If open wound or trauma, no alcohol-based products may be used. See manufacturer's instructions for use.

Eyes



- Do not use alcohol-based products
- Do not use CHG as it can cause corneal damage
- Use Ophthalmic Iodine-based product as specified by manufacturer's instructions for eye site procedures

Ears



- Do not use alcohol-based products if contraindicated per manufacturer's instruction for use
- Do not use CHG as it can cause deafness if in contact with the inner ear
- Use aqueous-based Iodophor product

Mucous Membrane



- Do not use alcohol-based products
- CHG should be used with caution. Some CHG products prohibit use in genital area. See manufacturer's instructions for use.
- Use aqueous-based Iodophor product

Surgical Factors

Large amount of fluids?
(saline and blood)



Use a water insoluble prep



Not a factor for prep selection

Use of Incise drape?
(orthopedic, cardiovascular,
neurosurgery)



Water insoluble preps improve drape adhesion. Drape lift has been associated with a six-fold increase in surgical site infection.¹



Not a factor for prep selection

Large prep area?
(bariatric, cardiovascular surgery)



Coverage Area – Efficacy may also be linked to coverage area. Some preps cover more area per applicator than others. Check manufacturer's coverage information. Using a prep beyond coverage specifications may affect efficacy. This may require more than one applicator to complete the patient prep.

Safety Factors

Prep area with high microbial count?
(groin, toes, fingernails, skin folds)



Application for Use – Check manufacturer's instructions for use. Efficacy testing is based on correct application. Some preps have different instructions for use dependent upon dry or moist site.

Prepping Technique – An applicator must be discarded after using in a contaminated (higher microbial) area regardless of any remaining solution. This may require the use of more than one applicator to complete the patient prep.

Will the patient's airway be associated
in the surgery?



Consider the flammability risk due to increased oxygen levels (e.g., laser use, cautery) and take necessary precautions.

Is a flammable prep used?



Additional precautions should be taken to minimize the risk of surgical fire. Follow manufacturer's instructions for use and AORN Guidelines for Perioperative Practice.



Follow manufacturer's instructions for use and AORN Guidelines for Perioperative Practice.

*This guide contains recommendations based on AORN 2018 Guidelines for Perioperative Practice; it is not meant to be all-inclusive of considerations.

¹Alexander, J.W., Aemi, SI, and Plettner, J.P. 1985. Development of safe and effective One-Minute Skin Preparation. *Arch Surg.* 120:1357-1361.