### Key Takeaways

**Takeaway**

- Fingernail tips should be no longer than 2 mm (0.08 inch). Maintaining short nails reduces the risk of harboring potential pathogens under fingernails, puncturing gloves, or injuring patients during patient handling. **Recommendation 1.a.**

- Artificial fingernails or extenders should not be worn in the perioperative setting. Artificial nails have been associated with hand contamination and epidemiologically implicated in outbreaks caused by gram-negative bacteria and yeasts. **Recommendation 1.b.**

- A multidisciplinary team at the health care organization should determine whether fingernail polish, including ultraviolet (UV)-cured (gel) nail polish, may be worn in the perioperative setting.
  - Although evidence is lacking to determine any harms from wearing nail polish, the potential harms could include nail polish hindering the effectiveness of hand hygiene, transmission of pathogens harbored in chipped or old nail polish to a patient, or chipped polish becoming deposited in the sterile field or wound.
  - Whether UV-cured nail polish carries the same risk that artificial nails do of harboring pathogens or transmitting infection to patients is unknown. The harms of wearing UV-cured nail polish may include damage to the natural fingernail and harboring of pathogens in the gaps created as the nail and cuticle grow. **Recommendation 1.c.**

- Moisturizing skin care products that are approved by the health care organization should be used. Using lotions approved by the health care organization is important because some types of lotion have been associated with altered integrity of latex rubber gloves, reduced persistent effects of hand antiseptics, and bacterial contamination of the lotion.

- Hands should be dried completely before gloves are donned. There is an increased risk for skin irritation from wearing gloves on wet hands.

- Water for hand washing should be controlled between the temperatures of 70° F and 80° F (21.1° C and 26.7° C). Repeated exposure to hot water can irritate the skin and may lead to dermatitis or bacterial colonization.

- Alcohol-based hand rubs should be used rather than soap and water when hands are not visibly soiled. Alcohol-based hand rubs are well tolerated and associated with less irritant contact dermatitis than soap and water. **Recommendation 1.d.**

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Perioperative team members should maintain healthy fingernail condition.

Perioperative team members should maintain healthy skin condition by taking measures to prevent hand dermatitis.
**Takeaway**

Perioperative team members should not wear jewelry (eg, rings, watches, bracelets) on the hands or wrists.

- Wearing jewelry on the hands or wrists may impede the removal of microorganisms from the hands during hand hygiene.
- Transmission of microorganisms to the patient that are harbored on jewelry worn by perioperative team members may result in the patient developing a health care-associated infection.

**Recommendation II**

Perioperative team members should perform hand hygiene.

- Personnel should perform hand hygiene
  - before and after patient contact
  - before performing a clean or sterile task
  - after risk for blood or body fluid exposure
  - after contact with patient surroundings
  - when hands are visibly soiled
  - before and after eating
  - after using the restroom

**Recommendation III.a.**

- The use of gloves does not replace the need for hand hygiene. **Recommendation III.a.5**

- Performing a single act of hand hygiene may fulfill multiple indications (eg, opening multiple sterile items sequentially). Multiple indications for hand hygiene may arise simultaneously that create a single opportunity to perform hand hygiene. **Recommendation III.a.6.**

- In the event that performing hand hygiene would put the patient’s safety at risk, the perioperative team member should weigh the risks and benefits of delaying hand hygiene. **Recommendation III.b.**

- When hands are not visibly soiled or dirty, hand hygiene should be performed using an alcohol-based hand rub. The amount of alcohol-based hand rub recommended by the manufacturer should be applied to cover all surfaces of the hands, and hands should be rubbed together until dry. **Recommendation III.d.**
Takeaway

Perioperative team members should perform surgical hand antisepsis before donning sterile gowns and gloves for operative and other invasive procedures.

Patients and visitors should have access to hand washing stations and products and be involved in hand hygiene initiatives.

Hand washing stations and products should be accessible to patients and visitors in unrestricted areas (eg, waiting room, preoperative area, postoperative area) unless contraindicated for a specific patient population (eg, pediatric, psychiatric) or individual patient. Providing opportunities to perform hand hygiene engages the patient and visitors in the mission of the perioperative team to prevent the patient from developing a health care-associated infection and may reduce the contamination of the patient's environment. Recommendation II.d.-II.e.

Patients and visitors should be encouraged to remind perioperative team members to perform hand hygiene before care.

Patients should be included in end-user evaluations of hand hygiene products. The patient's aesthetic preferences (ie, fragrance, color, texture, ease of use) should be considered in the selection of hand hygiene products. Patients may be especially sensitive to the fragrance of hand hygiene products. Recommendation III

• Surgical hand antisepsis is the primary line of defense to protect the patient from pathogens on the hands of perioperative team members, whereas sterile surgical gloves are the secondary line of defense. Due to the risk for glove failure, the performance of surgical hand antisepsis is critical for the prevention of surgical site infection.
  - Surgical hand antisepsis using a surgical hand scrub or rub should be performed according to the manufacturer's instructions for use. Failure to adhere to the manufacturer's instructions for use may result in harm or ineffectiveness of the surgical hand antiseptic. Recommendation IV.a.

• The surgical hand scrub should not be performed using a brush. Recommendation IV.b.2