Hand Hygiene

Purpose
To provide UHS employees research-based hand hygiene techniques and practices that will reduce the risk of nosocomial infection when followed, and to standardize hand hygiene practices throughout the organization. University Health Shreveport bases hand hygiene guidelines upon CDC recommendations outlined in “CDC Guideline for Hand Hygiene in Healthcare settings; 2002.”

GUIDELINES FOR SELECTION OF SOAPS AND INTERVALS FOR HAND WASHING*

<table>
<thead>
<tr>
<th>1. Plain soap &amp; water OR 2. Antimicrobial soap &amp; water (Always use soap &amp; water or antimicrobial soap and water if hands are visibly soiled.)</th>
<th>1. Antimicrobial soap &amp; water OR 2. Alcohol based hand sanitizer (Use sanitizer when hands are not visibly soiled.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hands visibly soiled with blood or body fluids. 2. If exposure to <em>C. difficile</em> or <em>B. anthracis</em> is suspected or proven, washing with soap &amp; water is recommended. 3. Before eating. 4. After restroom.</td>
<td>1. Before and after direct contact with patients, their furniture or medical equipment. 2. Before sterile gloving for invasive procedures not requiring surgery (i.e., inserting IV, foley cath). 3. After contact with a patient’s skin (intact or not), excretions, secretions, mucous membranes, or wound dressings. 4. Moving from a contaminated body site to a clean body site during patient care. 5. After removing gloves.</td>
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*Check department specific policies for additional interval requirements, i.e., dietary for food handlers.

**Antiseptic hand soaps and gels have poor activity against spores; therefore, the mechanical washing and rinsing of hands should be performed thoroughly.

Additional requirements

<table>
<thead>
<tr>
<th>Dietary workers</th>
<th>Artificial nails, nail polish, and jewelry on the hands or arms is prohibited when working with exposed food. A plain wedding band is acceptable. Nails must not be visible when viewed from the palm side. ¹</th>
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<tbody>
<tr>
<td>Artificial nails, nail extenders</td>
<td>Prohibited during direct patient care for high-risk patients. Includes: ALL Intensive Care Units, Bone Marrow Unit, OR, L&amp;D, and when caring for patients in neutropenic isolation.</td>
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<tr>
<td>Nail length</td>
<td>Less than ¼ inch for employees with direct patient contact. ²</td>
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<tr>
<td>Nail polish and nail hygiene</td>
<td>Nail polish is prohibited in all operating rooms, NICU, and labor and delivery. If nail polish is worn, it must not be chipped or cracked. Nails must be kept neat and clean.</td>
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<tr>
<td>Jewelry</td>
<td>None permitted in NICU and newborn nursery. One ring or one wedding set per hand in other patient care areas.</td>
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<tr>
<td>Lotions</td>
<td>Lotions permitted that do not interfere with CHG. No petroleum-based lotions are permitted with latex gloves.</td>
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</table>

¹ Louisiana Sanitary Code, April 2008.

² Guideline for hand hygiene in health-care settings. CDC 2002.
Procedure

1. **Routine hand washing with soap, antimicrobial soap, and water**
   Wet hands with warm water; apply about 5 ml of soap or antimicrobial soap and rub hands together vigorously for at least 15 seconds, working the soap into a lather. Use friction to cover all surfaces of the hands and fingers, paying attention to fingernails and web spaces. Rinse with warm water, and dry with a disposable towel. Use a clean dry towel to turn off the water faucet.

2. **Entry scrub for NICU**
   Use CHG or iodophor impregnated brush. Open sponge package, using care to avoid contamination. Clean nails with nail pick. Discard wet sponge. Wash each hand and arm for 1.5 minutes, working the detergent into a lather. Rinse with warm water from finger-tips to the elbow, using care to avoid touching the sink or faucet. Dry thoroughly with a clean disposable towel. Sensors will turn water on and off. Subsequent entries require only routine hand wash.

3. **Alcohol based hand sanitizer**
   Apply a sufficient quantity to cover all surfaces of the hands. Follow manufacturer’s recommendations. Rub hands together, working the sanitizer into the skin on all surfaces of the hands and fingers, paying attention to fingernails and web spaces. Allow to air dry. Use hand sanitizer when hands are not visibly soiled.

4. **Surgical scrub (required for surgical procedures)**
   Counted brush stroke or timed method may be used. See Operating Room Guidelines for detailed instructions on the technique for counted brush stroke method.
   - Remove all jewelry. No one with open cuts, burns, or skin rash on the hands or arms is allowed to scrub into a surgical case. Open sponge package and place open package with sponge inside on the sink ledge, using care to avoid contamination. Prewash hands with antimicrobial soap to remove gross soil. Clean nails and subungal areas using the disposable nail cleaner. Rinse hands and forearms, allowing the water to run from fingertips to elbows. After prewash, remove the sponge from the package and proceed to scrub hands and arms for six minutes if using Chlorhexidine 4%, or five minutes if using Iodophor scrub solution. Wash from fingertips to 2 inches above elbows, allowing solution to drip from the flexed elbows. Avoid contact at all times with the sink or other surfaces. Dry with a sterile towel, using care to avoid contamination of the scrubbed area and sterile fields.

   Waterless alcohol based surgical scrub is available and should be used according to manufacturers recommendations.

**Procedure for using Avagard Hand Scrub:**
   - Remove all jewelry. Perform a prewash as described above prior to the first scrub of the day. For all subsequent scrubs, if hands are visibly soiled, prewash to remove organic soil. Be certain that hands and nails are thoroughly clean and dry. Dispense one pump (2ml) of Avagard into the palm of one hand. Dip the fingertips of the opposite hand into the lotion and work it under the nails. Spread remaining lotion over the hand and up to just above the elbow. Using another 2 ml. of Avagard, repeat with the other hand. Dispense another 2ml. of Avagard into either hand and reapply to all aspects of both hands up to the wrist. Lightly and continuously rub hands together and allow Avagard to air dry before donning gloves. DO NOT dry hands with a towel prior to donning sterile gloves.

References: