



TITLE:  
HAND HYGIENE

PURPOSE

Hand Hygiene

Hand washing is the single most important procedure for preventing nosocomial infections. Body secretions, surfaces, and hands of all health care workers (HCWs) can carry potentially infectious microorganisms. These include both resident (colonizing) and transient (contaminating) flora.

Employees, physicians and other staff have a responsibility for maintaining hand hygiene by adhering to established and specific infection prevention practices. All HCWs must comply with Category 1A, 1B, 1C. Category II is suggested. (See Indications section below.)

DEFINITION

Hand Washing – Washing hands with soap and water.

Hand Hygiene – Applies to either hand washing, antiseptic hand wash, antiseptic hand or surgical hand antisepsis.

Hand Antisepsis – Refers to either antiseptic hand wash or antiseptic hand rub.

Antimicrobial Soap – Soap containing and antiseptic agent.

Alcohol Based Hand Rub or Waterless Hand Cleaner – Alcohol containing preparation designed for the application to the hands for reducing the number of viable microorganisms on the hands.

Visibly Soiled Hands – Hands showing visible dirt or visible contamination with blood or body fluids.

Artificial Nail Enhancements or Prosthetic Nails – Anything applied to natural nails other than nail polish is considered an enhancement. This includes but is not limited to acrylic, artificial nails, tips, appliques, gels and any additional items applied to the nail surface.

Other Potentially Infectious Material (OPIM) – Includes body fluids that may transmit disease (includes: synovial fluid, amniotic fluid, saliva in dental procedures, pericardial fluid, cerebrospinal fluid, pleural fluid).

Health Care Worker (HCW) – Employees, physicians, EMS, and volunteers.

PROCEDURE

Hand Washing and Hand Antisepsis

1. Hand washing facilities (i.e. sinks, faucets, approved hospital soap, paper towels) will be readily accessible by all HCWs in their work place.
2. Hand washing facilities shall be conveniently located throughout the hospital and be in or adjacent to rooms where invasive or diagnostic procedures are performed.
3. Approved waterless hand cleaner (i.e. alcohol based hand cleaner) will be available in all patient care areas as an adjunct to hand washing and may be used when hands are not soiled with dirt or heavily contaminated with blood or other organic material.

Indications

1. HCWs will wash hands thoroughly with soap and water when hands are visibly dirty or contaminated with proteinaceous material or are visibly soiled with blood or other body fluids, (wash hands with antimicrobial soap and water). Category 1A.

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2. HCWs will perform hand antisepsis, if hands are not visibly soiled use an alcohol based hand rub for routinely sanitizing hands in all other clinical situations. Category 1A.
  - a. Sanitizing before having direct contact with a patient. Category 1B.
  - b. Sanitizing after removing gloves. Category 1B.
  - c. Sanitizing hands after contact with a patient's intact skin (i.e. when taking a pulse or blood pressure, and lifting a patient). Category 1B.
  - d. Sanitizing after contact with a source of microorganisms (body fluids and substances, mucus membranes, non-intact skin, and wound dressings) if hands are not visibly soiled. Category 1B.
  - e. Sanitizing hands before donning sterile gloves, when inserting a central intravascular catheter. Category 1B.
  - f. Sanitizing hands before eating, after using the restroom, wash hands with an antimicrobial soap and water. Category 1B.
  - g. Sanitizing hands before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure. Category 1B.
  - h. Sanitizing hands if moving from a contaminated body site to a clean body site during patient care. Category II.
3. Decontaminate hands after contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient. Category III in locations where sinks are not practical, or in the event of interruption of water supply, alcohol based hand cleaner will be made available. Antiseptic towelettes are not as effective as alcohol based hand rubs or washing hands with antimicrobial soap and water, so they will not be used as a substitute for using alcohol based hand rub or antimicrobial soap.
4. Employees shall advise supervisors or directors immediately where contamination could reasonably be expected to occur and hands cannot be cleaned in accordance with these standards, so that corrective action can be taken.

#### Hand Hygiene Techniques

##### Soap and Water

1. Wet hands first with warm water; apply approximately 3 to 5 ml of soap to hands and rub hands together vigorously for at least 20 seconds, covering all surfaces of the hands and fingers.
2. Rinse hands with water and dry thoroughly with a disposable paper towel.
3. Use paper towel to turn off faucet. All manually controlled faucets are considered contaminated.
4. Avoid using hot water, because repeated exposure to hot water may increase the risk of dermatitis.
5. Hospital approved lotion may be used to minimize the occurrence of irritant contact dermatitis associated with hand antisepsis or hand washing. Category 1B.

##### Alcohol Based Hand Cleaner

1. Hands must be free of any visible soiling or debris before use of hand cleaner.
2. Apply approximately 5 ml of hand cleaner to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry (approximately 15 to 20 seconds). Category 1B.

##### Surgical Hand Antisepsis

1. Remove rings, watches, and bracelets before beginning the surgical hand scrub. Category II.
2. Surgical hand antisepsis using either an antimicrobial soap or an alcohol based hand rub with persistent activity is recommended before donning sterile gloves when performing surgical procedures. Category 1B.

##### Surgical Hand Scrub Alcohol Based Hand Cleaner (Avagard D 61% Ethyl Alcohol)

1. Wash hands and forearms with soap and running water immediately before beginning the surgical hand antisepsis procedure.

#### Traditional Antimicrobial Scrub Agent (15% Povidone-Iodine or 4% Chlorhexidene Gluconate)

1. Dispense the antimicrobial scrub agent into hands.
2. Using a sponge spread the agent over the wet hands and forearms.
3. Each finger, hand and arm having four sides, wash all four sides effectively. Repeat for opposite fingers, hands and arm. Use a timed method or a counted stroke method to equal 3 minutes.
4. Rinse, holding hands higher than elbows and away from surgical attire.

#### Alcohol Based Surgical Hand Scrub

1. Before applying the alcohol solution, pre-wash hands and forearms with a non-antimicrobial soap and dry hands and forearms completely. Category 1B.
2. Apply Avagard (chlorhexidene gluconate 1% and ethyl alcohol 61%) to clean dry hands. For first use of the day clean under nails with a nail stick.
3. Dispense one pump (2 ml) into the palm of one hand.
4. Dip the fingertips of the opposite hand into the liquid and work it under the nails.
5. Spread the remaining liquid over the hand and up to just above the elbow.
6. Using another 2 ml of liquid repeat with the other hand.
7. Dispense another 2 ml of liquid into either hand and reapply to all aspects of both hands up to the wrists.
8. Allow hands and forearms to dry thoroughly before donning sterile gloves.

#### Other Aspects of Hand Hygiene

Do not add soap to a partially empty soap dispenser. This practice of "topping off" dispensers can lead to bacterial contamination of soap. Category 1A.

Provide health care workers (HCWs) with hand lotions or creams to minimize the occurrence of irritant contact dermatitis associated with hand antisepsis or hand washing. Category 1A.

#### Gloves

**The use of gloves does not replace the need to perform adequate hand hygiene.**

1. Gloves will be worn when anticipated contact with blood, body fluids, or other potentially infectious material, mucus membranes, non-intact skin, or contaminated environmental surfaces is likely to occur. Category 1C.
2. Remove gloves after caring for a patient. Do not wear the same pair of gloves for the care of more than one patient and do not wash gloves between patients. Category 1B.

#### Fingernail Enhancement

Artificial nails and artificial nail enhancements or prosthetic nails can increase the risk of colonization and transmission of pathogens. To prevent or limit the spread of disease causing agents, artificial nails and artificial nail enhancements are prohibited by providers of direct patient care and HCWs having indirect patient contact in the following areas: Sterile Processing Department (SPD). Category 1A.

#### Nail Care

1. Fingernails are to be kept clean, smooth, well manicured and of reasonable length (1/4 inch beyond the finger tip). Category II.
2. Nail polish may be used if it is changed every four days or sooner if chipped.
3. Individual departments may institute additional measures to comply with established standards of care in specialty areas.
4. Department directors, managers and supervisors are responsible for monitoring and enforcing compliance.

Health Care Worker Educational and Motivational Programs

1. Monitor health care workers (HCWs) adherence with recommended hand hygiene practices and provide personnel written information regarding their performance. Category 1A.
2. Periodically monitoring and recording or adherence of the number of episodes of hand hygiene performed by personnel/number of hand hygiene opportunities by ward or by service will be collected and provided back to the staff regarding their performance.
3. Encourage patients and their families to remind health care workers (HCWs) to sanitize their hands. Category II.

Administrative Measures

1. Make improved hand hygiene adherence an institutional priority and provide appropriate administrative support and financial resources. Category 1B.
2. Implement a multidisciplinary program designed to improve adherence of health personnel to recommended hand hygiene practices. Category 1B.
3. Implement a multidisciplinary program designed to improve adherence, provide health care workers (HCWs) with readily accessible alcohol based hand rub product. Category 1A.
4. Alcohol based hand rub is available at entrance to the patient's room and inside patient's room, and several other convenient locations.

ATTACHMENTS N/A

REFERENCES APIC Guideline for Hand Washing and Hand Antisepsis in Health Care Settings, Association for Professionals in Infection Control and Hospital Epidemiology, 1995.

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