

## CDC Hand Hygiene Recommendations:

1. Indications for handwashing and hand antisepsis
  - A. When hands are visibly dirty or contaminated with proteinaceous material or are visibly soiled with blood or other body fluids, wash hands with either a non-antimicrobial soap and water or an antimicrobial soap and water.
  - B. If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands in all other clinical situations described in items Alternatively, wash hands with an antimicrobial soap and water in all clinical situations described in items Decontaminate hands before having direct contact with patients
  - C. Decontaminate hands before donning sterile gloves when inserting a central intravascular catheter
  - D. Decontaminate hands before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure  
Decontaminate hands after contact with a patient's intact skin (e.g., when taking a pulse or blood pressure, and lifting a patient)
  - E. Decontaminate hands after contact with body fluids or excretions, mucous membranes, nonintact skin, and wound dressings if hands are not visibly soiled.
  - F. Decontaminate hands if moving from a contaminated-body site to a clean-body site during patient care
  - G. Decontaminate hands after contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient.
  - H. Decontaminate hands after removing gloves.
  - I. Before eating and after using a restroom, wash hands with a non-antimicrobial soap and water or with an antimicrobial soap and water.
  - J. Antimicrobial-impregnated wipes (i.e., towelettes) may be considered as an alternative to washing hands with non-antimicrobial soap and water. Because they are not as effective as alcohol-based hand rubs or washing hands with an antimicrobial soap and water for reducing bacterial counts on the hands of HCWs, they are not a substitute for using an alcohol-based hand rub or antimicrobial soap.
  - K. Wash hands with non-antimicrobial soap and water or with antimicrobial soap and water if exposure to *Bacillus anthracis* is suspected or proven. The physical action of washing and rinsing hands under such circumstances is recommended because alcohols, chlorhexidine, iodophors, and other antiseptic agents have poor activity against spores.
  - L. No recommendation can be made regarding the routine use of nonalcohol-based hand rubs for hand hygiene in health-care settings. Unresolved issue.
2. Hand-hygiene technique
  - A. When decontaminating hands with an alcohol-based hand rub, apply product to palm of one-hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry. Follow the manufacturers' recommendations regarding the volume of product to use.
  - B. When washing hands with soap and water, wet hands first with water, apply an amount of product recommended by the manufacturer to hands, and rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers. Rinse hands with water and dry thoroughly with a disposable towel. Use towel to turn off the faucet. Avoid using hot water, because repeated exposure to hot water may increase the risk of dermatitis.
  - C. Liquid, bar, leaflet or powdered forms of plain soap are acceptable when washing hands with a non-antimicrobial soap and water. When bar soap is used, soap racks that facilitate drainage and small bars of soap should be used.
  - D. Multiple-use cloth towels of the hanging or roll type are not recommended for use in health-care settings.

### 3. Surgical hand antisepsis

- A. Remove rings, watches, and bracelets before beginning the surgical hand scrub.
- B. Remove debris from underneath fingernails using a nail cleaner under running water.
- C. 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.
- D. When performing surgical hand antisepsis using an antimicrobial soap, scrub hands and forearms for the length of time recommended by the manufacturer, usually 2--6 minutes. Long scrub times (e.g., 10 minutes) is not necessary.
- E. When using an alcohol-based surgical hand-scrub product with persistent activity, follow the manufacturer's instructions. Before applying the alcohol solution, prewash hands and forearms with a non-antimicrobial soap and dry hands and forearms completely. After application of the alcohol-based product as recommended, allow hands and forearms to dry thoroughly before donning sterile gloves.

### 4. Selection of hand-hygiene agents

- A. Provide personnel with efficacious hand-hygiene products that have low irritancy potential, particularly when these products are used multiple times per shift. This recommendation applies to products used for hand antisepsis before and after patient care in clinical areas and to products used for surgical hand antisepsis by surgical personnel.
- B. To maximize acceptance of hand-hygiene products by HCWs, solicit input from these employees regarding the feel, fragrance, and skin tolerance of any products under consideration. The cost of hand-hygiene products should not be the primary factor influencing product selection.
- C. When selecting non-antimicrobial soaps, antimicrobial soaps, or alcohol-based hand rubs, solicit information from manufacturers regarding any known interactions between products used to clean hands, skin care products, and the types of gloves used in the institution.
- D. Before making purchasing decisions, evaluate the dispenser systems of various product manufacturers or distributors to ensure that dispensers function adequately and deliver an appropriate volume of product.
- E. Do not add soap to a partially empty soap dispenser. This practice of "topping off" dispensers can lead to bacterial contamination of soap.

### 5. Skin care

- A. Provide HCWs with hand lotions or creams to minimize the occurrence of irritant contact dermatitis associated with hand antisepsis or handwashing.
- B. Solicit information from manufacturers regarding any effects that hand lotions, creams, or alcohol-based hand antiseptics may have on the persistent effects of antimicrobial soaps being used in the institution.

### 6. Other Aspects of Hand Hygiene

- A. Do not wear artificial fingernails or extenders when having direct contact with patients at high risk (e.g., those in intensive-care units or operating rooms).
- B. Keep natural nails tips less than 1/4-inch long.
- C. Wear gloves when contact with blood or other potentially infectious materials, mucous membranes, and nonintact skin could occur.
- D. 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 uses with different patients.
- E. Change gloves during patient care if moving from a contaminated body site to a clean body site.
- F. No recommendation can be made regarding wearing rings in health-care settings. Unresolved issue.

## 7. Health-care worker educational and motivational programs

- A. As part of an overall program to improve hand-hygiene practices of HCWs, educate personnel regarding the types of patient-care activities that can result in hand contamination and the advantages and disadvantages of various methods used to clean their hands.
- B. Monitor HCWs' adherence with recommended hand-hygiene practices and provide personnel with information regarding their performance.
- C. Encourage patients and their families to remind HCWs to decontaminate their hands.

## 8. Administrative measures

- A. Make improved hand-hygiene adherence an institutional priority and provide appropriate administrative support and financial resources.
- B. Implement a multidisciplinary program designed to improve adherence of health personnel to recommended hand-hygiene practices.
- C. As part of a multidisciplinary program to improve hand-hygiene adherence, provide HCWs with a readily accessible alcohol-based hand-rub product.
- D. To improve hand-hygiene adherence among personnel who work in areas in which high workloads and high intensity of patient care are anticipated, make an alcohol-based hand rub available at the entrance to the patient's room or at the bedside, in other convenient locations, and in individual pocket-sized containers to be carried by HCWs.
- E. Store supplies of alcohol-based hand rubs in cabinets or areas approved for flammable materials.

## **Performance Indicators**

1. The following performance indicators are recommended for measuring improvements in HCWs' hand-hygiene adherence:

- A. Periodically monitor and record adherence as the number of hand-hygiene episodes performed by personnel/number of hand-hygiene opportunities, by ward or by service. Provide feedback to personnel regarding their performance.
- B. Monitor the volume of alcohol-based hand rub (or detergent used for handwashing or hand antisepsis) used per 1,000 patient-days.
- C. Monitor adherence to policies dealing with wearing of artificial nails.
- D. When outbreaks of infection occur, assess the adequacy of health-care worker hand hygiene.