



ACFAS Advisory

Hand Hygiene for Home Care Givers

Overall Recommendation:

Home caregivers should sanitize hands using soap and water after using the bathroom, prior to food preparation or eating, and when their hands are visibly soiled prior to or after providing patient care. If their hands are not visibly soiled, home caregivers should sanitize hands using alcohol-based gels or alternatively soap and water prior to and after patient care, after removing gloves when gloves are worn. Hand sanitization using soap and water requires vigorous rubbing for at least 15 seconds, rinsing, and drying hands using clean paper towels. Hand sanitizing using alcohol-based gels requires use of sufficient gel to meet the manufacturer's recommendations and to cover the hands and fingers entirely. In either case, caregivers should keep their fingernails trimmed to minimize harboring microorganisms under the nails. To minimize skin irritation, caregivers may use a hand lotion twice daily that does not compromise the integrity of the gloves.

Standards: Home caregivers should sanitize hands using soap and water after using the bathroom, prior to food preparation or eating, and when their hands are visibly soiled prior to providing patient care. If their hands are not visibly soiled, home caregivers should sanitize hands using alcohol-based gels or alternatively soap and water prior to and after patient care and after removing gloves.

Guidelines: Use of soap and water requires vigorous rubbing for at least 15 seconds, rinsing, and drying hands using clean paper towels. Sufficient gel complies with manufacturer's recommendations and covers the hands and fingers entirely. Keep fingernails trimmed.

Options: To minimize skin irritation, use a hand lotion twice daily that does not compromise the integrity of the gloves.

Prior to rendering care, home care providers should:

1. Trim long fingernails.
2. For visibly soiled hands, wash with soap and water.
3. For not-visibly soiled hands, use an alcohol-based hand rub. Alternatively, wash with an antimicrobial soap and water.
4. Don vinyl, nitrile, or similar gloves. Be sure hands are dry prior to donning gloves as alcohol hand rubs can agglutinate the cornstarch powder in gloves and alcohol can harden latex.

During care:

1. Wear gloves when providing care for "dirty" patient care procedures.
 - a. While wearing gloves, avoid touching unclean objects (including self) except the patient and items required for the patient's care.

- b. Avoid touching eyes, nose, and mouth while giving care.
 - c. Avoid eating while providing care and wearing gloves.
2. Properly remove gloves, sanitize or wash hands, and don a new clean pair of gloves between caring for more than one patient or between "dirty" and "clean" body-site care on the same patient.
 - a. Remove gloves by turning them inside out.

Post-care:

1. Properly dispose of dressings, bandages, sharps, gloves and soiled clothing.
 - a. Place waste materials inside a plastic bag, and then place that bag inside another plastic bag. Tie both securely. Do not place in rubbish bin. Seek advice from your local health department on disposal options.
 - b. Place sharp objects in a special container that they cannot penetrate prior to placing the container in the plastic bag.
2. After removing gloves, sanitize hands or wash hands thoroughly with soap and water.

Prior to food preparation:

1. Wash hands with soap (with or without antibacterials agents) and water.

Hand hygiene technique

1. When decontaminating hands with an alcohol-based hand rub, apply product to the palm of one hand and rub hands together, covering all surfaces of hands and fingers until hands are dry. Follow manufacturer's recommendation regarding volume of product to use. The routine use of soap and water following using alcohol-based hand sanitizers can lead to dermatitis and is not recommended.
2. 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.
3. 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.
4. Use disposable paper towels for drying hands. Multiple-use cloth towels of the hanging or roll type as well as air dryers are not recommended.

Skin care

1. Apply hand lotions or creams twice daily to minimize the occurrence of irritant contact dermatitis associated with repeated hand sanitizing or hand washing.

Other aspects of hand hygiene

1. Wear gloves when providing care, especially when contact with blood or other potentially infectious materials, mucous membranes and non-intact skin is likely to occur.
2. Remove gloves after caring for a victim. Do not wear the same pair of gloves for the care of more than one victim and do not wash gloves between uses with different patients.
3. Before eating and after using a restroom, both home care givers and their patients should wash hands with a non-antimicrobial soap and water or with an antimicrobial soap and water.
4. Consider antimicrobial-impregnated wipes (i.e., towelettes) 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.
5. Wash hands with soap (either non-antimicrobial or antimicrobial) and water if exposure to anthrax is suspected. The physical action of washing and rinsing hands is recommended because alcohols, chlorhexidine, iodophors, and other antiseptic agents have poor activity against spores.
6. No recommendation regarding the routine use of non-alcohol based hand rubs for hand hygiene. Unresolved issue.
7. No recommendation regarding wearing rings. Unresolved issue.

Question:

For those providing care in the home for someone who is sick or disabled, what is the best method of hand hygiene to protect the patient, the caregiver, and other members of the household from disease transmission?

Introduction/Overview:

Good hand hygiene reduces the transference of microbes that can cause disease. The Centers for Disease Control and Prevention (CDC)¹ provides recommendations for those who work in health care settings, based on current science. However the home health care provider will not have the same resources, level of training, or risks of cross-contamination as health care workers in hospital settings. Therefore, this advisory utilizes CDC's recommendations as a starting point but makes adaptations based on more recent literature reviews and applicability to the home care situation.

Summary of Scientific Foundation:

The options for hand hygiene include soap (with and without microbials) & water, wipes impregnated with alcohol or other cleaning agent, and anti-microbial agents in aqueous, gel or foam solutions. No universal consensus exists on the best types of hygiene agents, the most effective quantities, the contact time with the agent required, or the best method of applying agents to eliminate sufficient infectious agents on the hands to prevent disease transmission.

A literature search was completed to examine the effective use of hand sanitizers in non-health care settings. There is a certain amount of variability in the definition of terms used in hand hygiene practice. Hand hygiene is a general term that encompasses hand washing (also referred to as "scrubs"), antiseptic hand washing, antiseptic hand rub (with either liquids or gels) and surgical hand antisepsis (CDC, 2002). For the purposes of this review hand sanitizer/sanitization will not include hand washing which is defined as washing hands with plain (i.e., non-antimicrobial) soap and water. (CDC, 2002).

¹ Centers for Disease Control and Prevention (2002). Guideline for hand hygiene in health-care settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR* 51(RR-16): 1-44.
<http://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf> accessed 4/15/2006.