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## Hand Hygiene

In October 2002 the Centers for Disease Control (CDC) released new guidelines for hand hygiene in health-care settings.<sup>1</sup> These recommendations were developed by CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC), in collaboration with the Society for Healthcare Epidemiology of America (SHEA) the Association of Professionals in Infection Control and Epidemiology (APIC) and the Infectious Disease Society of America (IDSA), to improve adherence to hand hygiene in health care settings. According to the CDC, using gloves in health care settings reduces hand contamination by 70% to 80%, prevents cross-contamination and protects patients and health care personnel from infection; but does not eliminate the need for hand hygiene.

Some of the hand hygiene recommendations made in the CDC guidelines are:

- 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.
- If hands are not visibly soiled, wash with an antimicrobial soap and water or use an alcohol-based hand rub for routinely decontaminating hands.
- Decontaminate hands before having direct contact with patients.
- Decontaminate hands before donning sterile gloves.
- Decontaminate hands before inserting invasive devices that do not require a surgical procedure.
- Decontaminate hands after contact with a patient's intact skin.
- Decontaminate hands after contact with body fluids or excretions, mucous membranes, nonintact skin, and wound dressings if hands are not visibly soiled.
- Decontaminate hands if moving from a contaminated-body site to a clean-body site during patient care.
- Decontaminate hands after contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient.
- Decontaminate hands after removing gloves.
- Before eating and after using a restroom, wash hands with a non-antimicrobial soap and water or with an antimicrobial soap and water.
- 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 healthcare workers, they are not a substitute for using an alcohol-based hand rub or antimicrobial soap.

Hand hygiene preparations include: plain (non-antimicrobial) soap, alcohols, chlorhexidine, chloroxylenol, hexachlorophene, iodine and iodophors, quarternary ammonium compounds, and triclosan.



In addition to regular handwashing with soap and water, the new CDC hand hygiene guidelines also recommend the use of alcohol-based handrubs. This recommendation was made to address obstacles to frequent handwashing in health care settings. The benefits of using alcohol-based handrubs are that: 1) they are fast acting, 2) they are more accessible than sinks, 3) they take less time to use, and 4) skin irritation or allergic contact dermatitis is very uncommon. Handrub dispensers should not be placed by sinks, where they could be confused with soap dispensers.

Since these recommendations were made, the installation of alcohol-based hand rub dispensers has raised fire safety concerns in hospitals. These hand rubs are classified as a Class I flammable liquid, which limits placement of dispensers, volume of solution in storage, and disposal of containers. For an update visit <http://www.cdc.gov/handhygiene/firesafety/default.htm>.

For the complete CDC Hand Hygiene Guidelines visit <http://www.cdc.gov/handhygiene>.

1. Boyce JM, Pittet D. Guideline for Hand Hygiene in Health-Care Settings. CDC MMWR 2002;51:1-44.

### **Skin Care and Lotion Use With Latex Gloves**

Frequent washing and use of gloves can be irritating to skin. Skin is a natural barrier of infection, therefore it is important to keep hands free of cracked and peeling skin. To keep skin healthy, hands should be dry before donning gloves. Not allowing skin to thoroughly dry exacerbates irritated skin. Hand lotion can be applied to help keep skin from becoming irritated, dry, and chapped. Choose a lotion that has *water-soluble* ingredients, or states that it is *compatible with latex*, because natural rubber latex gloves degrade much more easily than gloves made of synthetic materials. Oil-based ingredients are not compatible with latex and may cause the glove to degrade.<sup>1</sup> For this reason, lotions that contain petroleum or other oil emollients should only be used at the end of the work day. Additionally, if using alcohol-based hand rubs, make sure that hands are dry before donning gloves, because hands still wet with an alcohol-based hand hygiene product may increase the risk of glove perforation.<sup>2</sup>

<i>Lotion Ingredients</i>	
<i>Can be used with latex gloves</i>	<i>Not to be used with latex gloves</i>
Aloe vera	Mineral, palm, coconut or jojoba oils
Vitamin A	Petroleum jelly
Vitamin E	Lanolin
Glycerin	



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1. Marino C, Cohen M. Washington State hospital survey 2000: gloves, handwashing agents, and moisturizers. *Am J Infect Control*. 2001;29:422-4.
2. Pitten FA, Herdemann G, Kramer A. The integrity of latex gloves in clinical dental practice. *Infection* 2000;28:388-92.

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