

# Hand Hygiene

An educational service of CME Resource

## Ask Your Patients ...

"Did you know that it's OK to ask your healthcare providers if they have washed their hands?"

## If Your Patient Asks ...

"What can I do to avoid infections?"

## UNDERSTAND the problem

Proper hand hygiene is the single **most important preventive measure** in controlling the spread of resistant bacteria and the occurrence of **nosocomial infections**. If every healthcare professional would perform hand hygiene before and after caring for each patient, an immediate and vast **reduction of the spread of resistant bacteria** would occur<sup>3</sup>. This task has recently become even easier with the employment of alcohol-based handrub solution. However, **universal hand hygiene compliance** among healthcare workers still only ranges from 16% to 81%<sup>2; 4</sup>.

Why are the statistics so low? Common reasons for noncompliance are<sup>1; 2; 3; 5; 6</sup>:

- Lack of time or opportunity (e.g., emergency situations, due to understaffing)
- Poor access to handwashing facilities
- Denial of risks
- Forgetfulness
- Belief that gloves are sufficient
- Avoidance due to skin irritations from frequent handwashing
- Lack of understanding of proper hand hygiene techniques
- Lack of knowledge of hand hygiene recommendations
- Insufficient institutional commitment to promoting and supporting proper hand hygiene

## HOW to proceed

### Involve your staff<sup>2; 7; 8</sup>

- Provide targeted training during staff meetings (including information regarding gloving policies, jewelry and artificial nails).
- Provide educational material for staff, which may include a test or evaluation of material learned.
- Include hand hygiene as part of the checklist for placement of central lines.
- Provide pocket-size bottles of alcohol-based handrub for staff.
- Provide hand lotions or creams for staff to minimize the irritating effects of frequent handwashing.
- Keep soap/alcohol-based hand hygiene dispensers prominently placed.
- Make universal precautions equipment, such as gloves, available only near hand sanitation equipment.
- Collect environmental and personnel cultures as a part of an education/awareness initiative.

## Hand Hygiene

- Solicit input from staff regarding the feel, fragrance, and skin tolerance of hand hygiene products, as this will inadvertently affect staff compliance.
- Post reminder signs at the entry and exits to patient rooms and other strategic places in your facility.
- Create an environment in which reminding each other about hand hygiene is encouraged.

### WHICH issues to consider

The CDC states that healthcare workers must decontaminate their hands in the following instances:

- Before having direct contact with patients
- Before putting on sterile gloves when inserting a central intravascular catheter
- Before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure
- After contact with a patient's intact skin
- After contact with body fluids or excretions, mucous membranes, nonintact skin, and wound dressings if hands are not visibly soiled
- After removing gloves

There are three types of hand hygiene: washing with nonantimicrobial soap and water, washing with antimicrobial soap and water, and application of alcohol-based handrub solutions.

The CDC specifically recommends the use of alcohol-based handrub solutions based on several advantages<sup>2</sup>:

- Better efficacy
- More rapid disinfections than with soap and water
- Less damaging to skin
- Time savings

Alcohol-based handrub solutions may be used in all clinical situations except for when hands are visibly dirty or are contaminated with blood or body fluids. Soap and water must be used in these cases.

### WHERE to find more information

- **Centers for Disease Control and Prevention (CDC)**  
*Guideline for Hand Hygiene in Healthcare Settings*  
<http://www.cdc.gov/handhygiene>
- **World Health Organization (WHO)**  
*Prevention of Hospital-Acquired Infections. A Practical Guide, 2nd ed.*  
<http://www.who.int>
- **Institute for Healthcare Improvement (IHI)**  
*The Sound of Two Hands Washing: Improving Hand Hygiene*  
<http://www.ihl.org>
- **Hand Hygiene Resource Center**  
<http://www.handhygiene.org>

### SHARE the responsibility

#### Involve your patients<sup>1</sup>

- Inform patients of the importance of their compliance with hand hygiene recommendations.
- Educate patients on proper hand hygiene techniques.
- Encourage patients to ask staff if they have performed hand hygiene before examining them or beginning a procedure.
- Post “It’s OK to ask” messages in rooms and other strategic places in your facility to remind patients and visitors of the importance of hand hygiene.

#### Change the System

Develop or update your organization’s policy to reflect hand hygiene regulations. Implement these changes in procedures, staff roles, and the facility itself. Make hand hygiene the norm.

#### Teach the Individual

Healthcare professionals must emphasize the importance of hand hygiene to their staff and patients in order to minimize the spread of resistant bacteria and the occurrence of nosocomial infections. Inform staff of the morbidity and mortality caused by nosocomial infections, including those caused by multidrug-resistant pathogens.

Personal accountability is crucial for improvement to occur. Be an example to both staff and patients.

Make hand hygiene a consistent part of your own routine.

- 1 Institute for Healthcare Improvement. *The Sound of Two Hands Washing: Improving Hand Hygiene*. 2006. Available at <http://www.ihl.org/IHI/Topics/CriticalCare/IntensiveCare/ImprovementStories/FSSoundofTwoHandsWashing.htm>. Last accessed June 14, 2007.
- 2 Healthcare Infection Control Practices Advisory Committee, HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. Guideline for hand hygiene in health-care settings. *MMWR Recomm Rep*. 2002;51(RR16):1-48.
- 3 Goldmann D. System failure versus personal accountability: The case for clean hands. *N Engl J Med*. 2006;355(2):121-123.
- 4 Burke JP. Infection Control -- A Problem for Patient Safety. *N Engl J Med*. Feb 2003;348(7):651-656.
- 5 Weinstein R. Hospital-acquired infections. In: Kasper DL, Braunwald E, Fauci AS, Hauser SL, Longo DL, Jameson JL, Isselbacher KJ, eds. *Harrison’s Principles of Internal Medicine*. 16th ed. New York: McGraw Hill; 2004.
- 6 Clark AP, Houston S. Nosocomial infections: an issue of patient safety: Part 2. *Clin Nurse Spec*. 2004;18(2):62-64.
- 7 Wilson B, Miller K, Wong B, et al. Improvement story: Improving hand hygiene practice with Six Sigma. Available at <http://www.ihl.org/IHI/Topics/PatientSafety/SafetyGeneral/ImprovementStories/ImprovingHandHygienePracticewithSixSigma.htm>. Last accessed June 14, 2007.
- 8 Institute for Healthcare Improvement. Getting started kit: prevent central line-associated bloodstream infection. How-to guide. Available at: <http://www.ihl.org/IHI/Programs/Campaign/Campaign.htm?TabId=2#PreventCentralLine - AssociatedBloodstreamInfection>. Last accessed June 14, 2007.

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