



Hand Hygiene Australia

www.hha.org.au

Generic Hand Hygiene Guidelines

Introduction:

All Health Care Workers (HCWs) are required to perform effective hand hygiene before and after every patient contact, before and after performing any clinical procedures and after touching the patient's environment according to the 5 Moments for Hand Hygiene (See www.hha.org.au). Hand hygiene (HH) is the single most effective intervention to reduce the risk of Healthcare Associated Infections (HCAI's). [1]

Purpose:

To provide effective guidelines for hand hygiene practices.

Rationale:

The hands of HCW's are the most common way that bacteria causing infections are spread between patients in hospitals. [4]

Poor HH practice among HCWs is strongly associated with HCAI and is a major factor in the spread of antibiotic-resistant pathogens within hospitals.

Expected Outcome:

- Decreased HCAs
- Increased HH compliance
- Maintain optimal care for all patients
- Successful completion of HH online learning package

Techniques:

There are four HH techniques that can be undertaken (refer Table 1). The method used in any given situation depends on the level of patient contact and/or procedure that is being performed. The most common technique is the routine/social HH in which the use of Alcohol Based Hand Rub (ABHR) is preferred when hands are not visibly soiled. ABHR is favored as it is available at point of care, is quick acting, air dries, contains an emollient and is less harsh on hands. If hands are visibly soiled then hand washing is required, as the friction of the wash is needed to remove the transient microorganisms

General Hand Care

Any breached skin (cuts, dermatitis or abrasion) should be covered with a semi-permeable film dressing. Band-aids are not recommended in clinical areas as once wet they stay moist and potentially become an ideal environment for microorganisms.

Intact skin is an excellent barrier to microorganisms and the use of hand moisturizing lotion to prevent drying is strongly recommended. It is recommended that HCWs use the supplied moisturiser a minimum of 3 times of per shift.

The management of hand skin problems requires early recognition and a systematic approach.

HCWs should notify their supervisor or manager if skin irritation occurs. Hospitals should have referral access to an Occupational Dermatologist for HCWs with persistent problems

Jewellery:

Minimal jewellery is recommended such as a plain flat band. Bracelets, wrists watch and rings with stones or ridges should not be worn when providing clinical care. Jewellery must

not interfere with effective HH. Several studies have demonstrated that skin underneath rings is more heavily colonized than comparable areas of skin on fingers without rings. [4]

Nails:

Nails should be kept short and clean and the use of nail polish avoided. Artificial nails have been implicated in a number of outbreaks of health care associated infections and must not be worn by any HCW with direct patient contact. [4]

Cutaneous Absorption:

Recent studies have demonstrated minimal rates of cutaneous alcohol absorption such that this should not be a concern to HCWs. However, there are some data to suggest that isopropanol may be less likely to be absorbed than ethanol. Thus, HCWs concerned about absorption for religious reasons may elect to use an ABHR that contains isopropanol rather than ethanol. [7]

Product Placement:

ABHR should be readily available to HCWs at the point of care with clear signage regarding the appropriate use of the HH product. Usually there is no advantage in placing dispensers next to sinks as this causes confusion for some HCWs who may think they need to rinse their hands with water after using ABHR.

Education:

A HH education program should be established for all staff, as education is the key component to any HH program. Ongoing education will assist to maintain and sustain the HH program

- Staff need to be aware of the HH policy and guidelines used and how to access them.
- All HCW’s should undertake on-line learning package on hand hygiene at commencement of employment and then annually. (Refer: www.hha.org.au)
- All HCWs should be familiar with type and location of HH products available in their work area.
- Minimum education for all HCWs should include knowledge of the 5 Moments

<p>1 BEFORE TOUCHING A PATIENT</p>	<p>WHEN: Clean your hands before touching a patient and their immediate surroundings WHY?: To protect the patient against acquiring harmful germs from the hands of the HCW.</p>
<p>2 BEFORE A PROCEDURE</p>	<p>WHEN: Clean your hands immediately before a procedure WHY?: To protect the patient from harmful germs (including their own) from entering their body during a procedure.</p>
<p>3 AFTER A PROCEDURE OR BODY FLUID EXPOSURE RISK</p>	<p>WHEN: Clean your hands immediately after a procedure or body fluid exposure risk WHY?: To protect the HCW and the healthcare surroundings from harmful patient germs</p>
<p>4 AFTER TOUCHING A PATIENT</p>	<p>WHEN: Clean your hands after touching a patient and their immediate surroundings WHY?: To protect the HCW and the health care surroundings from harmful patient germs</p>
<p>5 AFTER TOUCHING A PATIENT'S SURROUNDINGS</p>	<p>WHEN: Clean your hands after touching any objects in a patient's immediate surroundings when the patient has not been touched WHY?: To protect the HCW and the health care surroundings from harmful patient germs</p>

	<i>Routine/Social Hand Rub</i>	<i>Routine/Social Hand wash</i>	<i>Aseptic (non-surgical) hand wash</i>	<i>Surgical hand wash</i>
Product	Alcoholic Based Hand Rub	Liquid soap - no additives	Chlorhexidine gluconate 2% soap	Chlorhexidine gluconate 4% soap
Indications	<ul style="list-style-type: none"> ✎ Only if hands are NOT visibly soiled ✎ Before and after touching the patient ✎ Before handling an invasive device for patient care, regardless of whether or not gloves are used ✎ After contact with body fluids or excretions, mucous membranes, non-intact skin, or wound dressings ✎ If moving from a contaminated body site to another body site during care of the same patient ✎ After contact with inanimate surfaces and objects (including medical equipment) in the immediate vicinity of the patient ✎ After removing sterile or non-sterile gloves ✎ Before handling medication or preparing food 	<ul style="list-style-type: none"> ✎ If hands are visibly soiled ✎ If exposure to potential spore-forming pathogens is strongly suspected or proven, including outbreaks of <i>Clostridium difficile</i> ✎ As for hand rub if ABHRs not available ✎ Before handling medication or preparing food 	<ul style="list-style-type: none"> ✎ Before any procedure that requires an aseptic technique 	<ul style="list-style-type: none"> ✎ Before any invasive surgical procedure
Technique	<ul style="list-style-type: none"> ✎ Remove jewellery ✎ Checks hands for cuts,abrasions, lesions ✎ Squirt hand rub undiluted once into the palm of the hand ✎ Rub over all surfaces of hands including under rings between webbing and back of hands ✎ Distribute over all surfaces till thoroughly dry (10-15 seconds) 	<ul style="list-style-type: none"> ✎ Remove jewellery ✎ Checks hands for cuts,abrasions ,lesions ✎ Wet hands thoroughly, apply using a neutral pH soap and lather all over hands vigorously for 15-30 seconds ✎ Rinse under running water ✎ Pat dry using paper towel 	<ul style="list-style-type: none"> ✎ Remove jewellery ✎ Checks hands for cuts,abrasions ,lesions ✎ Wet hands thoroughly apply antimicrobial soap and lather all over hands vigorously for approximately 1 minute ✎ Rinse under running water ✎ Pat dry using paper towel 	<ul style="list-style-type: none"> ✎ Remove jewellery ✎ Checks hands for cuts,abrasions, lesions ✎ Wash hands, nails and forearms thoroughly and apply approved hand disinfectant and or antiseptic ✎ 3 to 5 minutes for the first procedure of the day followed by 2 to 3 minutes for subsequent surgical procedures ✎ Dry with sterile towels

References:

1. Hand Hygiene Australia, Advanced Draft August 2008, 5 Moments for Hand Hygiene Manual
2. Austin Health: Clinical Nursing Standard: Effectively performing Hand hygiene, 2003: revised 2005
3. Peninsula Health: Policies and Procedures Infection Prevention and Control, Hand Hygiene, 5:4:2, 2007
4. Centres for Disease Control and Prevention. "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", Morbidity and Mortality Weekly Report, 2002; 51 (No. RR-16):
5. "Start Clean" Victorian Infection Control Strategy 2007-11 (September 2007). Department of Human Services, Victoria, 2007
6. Grayson ML, Jarvie LJ, Martin R, Jodoin ME, McMullan C, Gregory RHC, Bellis K, Cunnington K, Wilson FL, Quin D, and Kelly A-M, on behalf of the Victorian Quality Council Hand Hygiene Study Group and Victorian Quality Council Hand Hygiene State-wide Roll-out Group. Significant reductions in methicillin-resistant *Staphylococcus aureus* bacteremia and clinical isolates associated with a multi-site, hand hygiene culture-change program and subsequent successful state-wide rollout. Med J Aust 2008
7. Brown TL, Gamon S, Tester P, Martin R, Hosking K, Bowkett GC, Gerostamoulos D, O'Brien M. Can alcohol-based hand rub solutions cause you to lose your driver's licence? Comparative cutaneous absorption of various alcohols. Antimicrobial Agents Chemotherapy 2007; 51:1107-8.
8. Royal Adelaide Hospital Infection Prevention & Control Unit and Occupational Health Unit "Management Plan for Skin Problems".
(Adapted for use by Country Health SA.)