

## ROUTINE HAND WASH

**Hands must be washed using plain soap or an antimicrobial agent and water if visibly soiled or potentially grossly contaminated with dirt or organic matter.**

In most cases plain liquid soap and water is adequate for every day clinical practice.

Antimicrobial agents with a residual effect may be used for invasive procedures and in outbreak situations.

Effective hand washing technique:

- Wet hands with tepid water before applying hand wash agent
- Hand wash agent must come in contact with all the surfaces of the hand
- Hands must be rubbed together vigorously, paying attention to finger tips, thumbs, areas between the fingers and around wedding band (if worn)
- Rinse thoroughly prior to drying with a single use paper towel or cloth

If liquid soap is dispensed from reusable containers, these must be cleaned when empty and dried prior to refilling with fresh soap. DO NOT TOP UP

## HAND CARE

Hand care is important – intact skin is a natural defence against infection

- Nails should be short and clean
- Ornate rings, bracelets and wristwatches are not to be worn while giving direct care. They prevent adequate hand hygiene, and are more likely to harbour microorganisms
- Artificial nails have been linked with outbreaks of hospital-acquired infections due to *Pseudomonas aeruginosa*, *Serratia marcescens*, *Klebsiella pneumoniae* and *Candida albicans*. Health care workers must not wear artificial nails
- Cuts and abrasions must be covered by water-resistant occlusive dressings
- Regular use of appropriate aqueous based hand cream can protect hands
- Sleeves should be worn above the elbow to allow for hand and forearm washing/rubbing.

## DEFINITIONS

**Resident flora** – microorganisms that normally reside on the skin. They are not readily removed by mechanical friction. Unless introduced into body tissue by trauma or medical devices/procedures, the pathogenic potential of resident flora is low.

**Transient flora** – microorganisms that have contaminated the skin. They are easily removed by hand hygiene. Transient flora cause most hospital infection resulting from cross-contamination.

**Pathogen** – an organism capable of initiating infection in a susceptible host.

**Plain soap** – detergent-based cleanser with no bactericidal activity. It is effective for removing transient flora.

**Antimicrobial agents** – contains an ingredient to kill or inhibit transient flora. (eg. alcohol, chlorhexidine, triclosan.)

## REFERENCES

1. Infection Control Guidelines. Australian Government Department of Health and Ageing 2004
2. Guidelines for Hand Hygiene in Health Care Settings. HICPAC/SHEA/APIC/IDSA. 2002
3. World Health Organisation Guidelines, Hand Hygiene in Health Care, 2007

*This brochure is based on the latest information available as of January 2009. Produced by the Rural Infection Control Group (RICPRAC) Vic 2006. Photograph of clinical setting reprinted with the permission of the Austin Repatriation Infectious Diseases Department 2002.*

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# HAND HYGIENE



YOUR MOST  
POWERFUL DEFENCE  
AGAINST INFECTION

**RICPRAC**  
RURAL INFECTION CONTROL  
PRACTICE GROUP

# TRANSMISSION OF HOSPITAL ACQUIRED INFECTIONS

Body secretions, surfaces and hands of all health care workers can be contaminated with bacteria, viruses and fungi that are potentially infectious.

There are four modes of transmission in which an organism moves from an infected or colonised person or environmental reservoir to the susceptible host:

1. Contact – direct or indirect touching of another person or object
2. Airborne – airborne or droplet
3. Common vehicle transmission – contaminated food, water, blood, medication
4. Vector borne – insects or rodents

*Transmission of microorganisms by the hands of health care workers is recognised as the main route of spread – hand hygiene reduces the risk of transmission of infectious pathogens.*

## HAND HYGIENE

Hand hygiene is the simplest, most effective measure for preventing hospital-acquired infections.

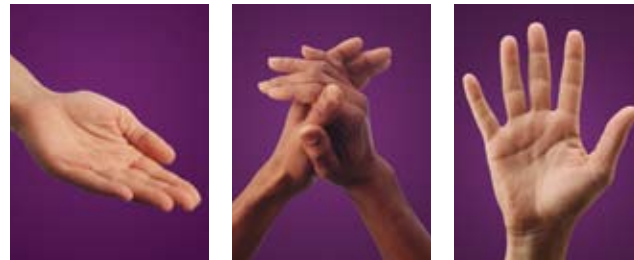
If hands are known or suspected of being contaminated, transient flora must be eliminated by washing or disinfecting the hands to render them safe for the next patient contact.

Hand hygiene prevents cross-infection in hospitals. Health care workers' adherence to hand hygiene is improving

**Compliance is usually estimated to be around 60%.**

Research has shown that the main reasons staff do not wash their hands include lack of time, lack of sinks, rough paper towels and skin damage.

Easy, timely access to both hand hygiene products and skin protection is necessary for satisfactory hand hygiene behaviour.



The Department of Human Services advocate the use of alcohol hand rubs for routine hand hygiene. Studies show a 20% increase in compliance by using feedback and encouraging the use of alcohol hand rubs.

It is okay to ask our staff if their hands are clean.

Alcohol-based hand rubs:

- Require less time
- Can be strategically placed to be readily accessible at multiple sites in all patient care areas
- Act faster
- Have excellent bactericidal activity
- Are less irritating
- Contribute to sustained improvement in hand hygiene or are compliance associated with decreased infection rates.

## ALCOHOL HAND RUBS

Alcohol hand rubs offer a practical and acceptable alternative to handwashing when the hands are not grossly soiled. They are increasingly being recommended for use.

**Hands that are visibly soiled or grossly contaminated with dirt or organic matter MUST be washed with liquid soap and water.**

When decontaminating hands using an alcohol hand rub:

- Hand rub solution should come in contact with all surfaces of the hands
- Hands should be rubbed together vigorously
- Pay particular attention to tips of fingers, the thumbs and the areas between the fingers
- Rub until the solution has evaporated and hands are dry



- Alcohol hand rubs should be readily accessible
- Should be placed at multiple sites in all patient care areas
- Choose agent carefully to ensure adequate antimicrobial efficacy<sup>3</sup> and compatibility with other hand hygiene products

## 5 moments for HAND HYGIENE

