

INFECTION PREVENTION DEPARTMENT

PROCEDURES

Title:	Hand Hygiene Procedure
Aim:	Instructions to inform all staff, patients and visitors how and when to decontaminate their hands.
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Responsible Director:	Cath Moran, Director of Operations & Nursing
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Implementation	To feature on Trust Intranet Include in GMW Infection Prevention Training Programme

HAND HYGIENE PROCEDURE

Version:	1.2
Target audience:	All GMW Service Users, Staff and Visitors

DOCUMENT CONTROL

CHANGE CONTROL

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REVIEWERS

Date	Name	Position
11/12/07	Infection Prevention Committee	
11/12/07	Carol Twist	Head of Infection Prevention

DISTRIBUTION

Date	Name	Position

RELATED POLICIES/PROCEDURES

Date	Policies/Procedures
	Management of Infection Prevention

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1. HAND HYGIENE SUMMARY

One of the major contributing factors in reducing the transmission of health care associated infections is effective hand hygiene. The National Audit Office report (2000) states that hospital acquired infections can be reduced by up to 30% if health care workers all decontaminated their hands effectively.

Hands must be decontaminated immediately before each and every episode of direct patient contact and after any activity or contact that potentially results in hands becoming contaminated. Hand hygiene is an infection control practice with a clearly demonstrated efficacy, and remains the corner stone of good practice to reduce the spread of health care associated infection (see appendix 1 for most frequently missed areas).

2. PRINCIPLES

2.1 The purpose of hand hygiene is to protect both the patient and the health care worker from harmful micro-organisms.

2.2 The hands carry two types of micro-organisms:

(a) Transient micro-organisms – which are acquired by contact with other people and the environment. These organisms rarely survive longer than 24 hours and are easily washed off the skin and require regular removal on a regular basis.

(b) Resident micro-organisms – which colonise the skin as normal flora. These survive and multiply on the skin and are not easily removed by washing. They rarely cause infection unless introduced into the body through invasive procedures.

2.3 The transient and resident micro-organisms require removal prior to invasive procedures.

3. WHEN SHOULD HANDS BE WASHED?

- ◆ When you come on duty.
- ◆ Before and after any aseptic or invasive procedure.
- ◆ Before and after direct patient contact.
- ◆ Before and after contact with a susceptible patient or site.
- ◆ After handling an item that is or may be soiled e.g. bed linen, catheter bag.
- ◆ After using the toilet or smoking.
- ◆ After removing protective clothing.
- ◆ After handling secretions, excretions, body fluid and waste.
- ◆ Before and after handling food and drinks.
- ◆ Before going off duty.
- ◆ When visibly soiled.

Points to remember when working in clinical areas:

1. Wear short sleeves or roll up sleeves.
2. Keep nails clean and short.
3. Do NOT wear jewellery, watches or rings (except plain bands).
4. Cover cuts with a waterproof dressing.
5. Do NOT wear nail polish, artificial or nail extensions.
6. Bars of soap must be used for individual patient use only.

4. LEVELS OF HAND HYGIENE

Social – the transient organism requires removal. Hand washing using liquid soap, running water and disposable paper towels is usually adequate.

Antiseptic – when carrying out an aseptic technique this requires antiseptic solution i.e. Hibiscrub, warm running water and disposable hand towels.

The success of hand hygiene relies on staff compliance to use the correct technique with a suitable hand cleanser at the appropriate time.

4.1 Social Level

Appropriate times for social hand hygiene:

- Between patient contact
- Before commencing duty
- Before leaving for home
- Before and after removing gloves
- After visiting the lavatory
- Before and after preparing, serving or eating food
- When hands are known to be visibly soiled

4.2 Suitable cleansing agents for social hand hygiene:

Liquid soap The dispenser must be of a cartridge type, not a fill up system and replenishment is important to facilitate availability for use.

Alcohol hand gel These contain an antiseptic in alcohol. Useful for routine patient care when time or location of sinks cause problems in using soap and water. Alcohol hand rubs are inactivated if hands are physically soiled.
NB: Alcohol gel should not be used for 'disinfection' of gloves – they are a single use disposable product.

Alcohol solution may not be effective against some micro-organisms that can cause outbreaks of diarrhoea and vomiting and c.diff spores, therefore washing hands with soap and water prior to the use of alcohol hand rub is advised in an outbreak situation. **NB. A risk assessment must be undertaken before the placement of alcohol gels due to their inflammability and also the possible ingestion by patients or visitors.**

5. CORRECT TECHNIQUE FOR SOCIAL HAND HYGIENE (SEE APPENDIX 2)

An effective hand washing technique involves three stages: preparation, washing and rinsing, and drying. Preparation requires wetting hands under tepid running water **before** applying liquid soap. The hand wash solution must come into contact with **all** of the surfaces of the hand. The hands must be **rubbed** together vigorously for a minimum of 10-15 seconds, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers.

5.1 Correct Technique at Social Level:

1. Skin cleanser/soap
2. Sink with warm water supply
3. Disposable paper towels

Action	Rationale
1. Select water at a warm temperature.	A warm temperature facilitates a lather. Hot water caused skin damage.
2. Wet hands under warm running water (at a hand wash basin that is reserved for this purpose).	To moisten skin prior to application of cleanser to prevent skin damage. Friction will loosen dirt, organic material and transient micro-organisms.
3. Apply soap to wet hands.	
4. With friction, rub all areas of the hands, the palms, the tips of the fingers, the interdigital spaces, wrists and thumbs (see diagrams in appendix).	All hand surfaces need attention.
5. Rinse of all lather under running water.	To remove loosened micro-organisms.
6. Dry thoroughly using two paper towels.	To remove residual micro-organisms, leave skin dry. To prevent multiplication of skin flora and prevent chapping.

5.2 Correct technique for use of alcohol gel:

Action	Rationale
1. Apply as directed on the container.	For the correct amount required.
2. Ensure all parts of the hands are covered including finger tips.	Contact with all parts of the hands is required to reduce micro-organisms.
3. Rub all areas of the hands, palms, dorsum, tips of fingers, the interdigital spaces and wrists and thumbs.	This action will evaporate the alcohol and therefore destroy micro-organisms leaving the skin dry.
4. If gloves are to be donned i.e. prior to surgical procedure, check that alcohol has completely evaporated.	When the glove is donned this will prevent any further evaporation. This can inhibit the antiseptic effect and cause skin irritation.

Alcohol gel is valuable for situations where time or facilities inhibit hand washing.
Alcohol gel is NOT of value to PHYSICALLY SOILED HANDS.

5.3 Antiseptic Level

Appropriate times for antiseptic level of hand hygiene are:

- Prior to any invasive procedure
- During an aseptic technique

Suitable cleansing agents for antiseptic level of hand hygiene:

1. Wash hands followed by
2. Alcohol Gel) and/or
3. Chlorhexidine gluconate (Hibiscrub))

This antimicrobial has a broad level of activity, but is more effective against gram positive than gram negative pathogens. It is considered of most value against Methicillin Resistant Staphylococcus Aureus.

Correct technique for antiseptic hand hygiene:

5.4 Equipment

1. Antiseptic skin cleanser
2. Sink with warm water supply
3. Disposable towels

Action	Rationale
1. Select a warm water temperature.	Warm water facilitates a lather. Hot water causes skin damage.
2. Wet hands under running warm water to the wrists.	To moisten skin prior to application of the cleanser to prevent skin damage.
4. Apply antiseptic to wet hands. With friction rub all areas of the hands, the palms, dorsum, tips of the fingers, the interdigital spaces, wrists and thumbs.	Friction will loosen the dirt, organic material and transient micro-organisms.
4. Continue procedure for 30 seconds.	Contact time is required for antiseptic to destroy transient and resident micro-organisms.
5. Rinse off all lather under running water.	To remove residual micro-organisms and antiseptics to prevent skin irritations.
6. Dry thoroughly using two paper towels.	This removes any residual micro-organisms leaving the skin dry. Prevents multiplication of skin flora and prevents chapping.

If hand taps are used, they can be turned off with paper towels following washing and drying of hands.

(see previous page for correct technique using liquid soap and alcohol gel)

6. ORDERING AND STORING OF ALCOHOL GELS

Alcohol gels should be stored in a metal cabinet. Ordering of alcohol gel should be restricted to ensure overstocking does not occur

7. SKIN CARE

1. Cover all cuts and abrasions with waterproof, occlusive dressings.
2. Always wet hands before applying soap or aqueous antiseptic solutions.
3. Apply hand cream from a dispenser regularly (communal pots of cream can become contaminated and should not be used).
4. Always wash hands after removing gloves.
5. Seek Occupational Health advice if a particular hand hygiene product is thought to be causing skin irritation.

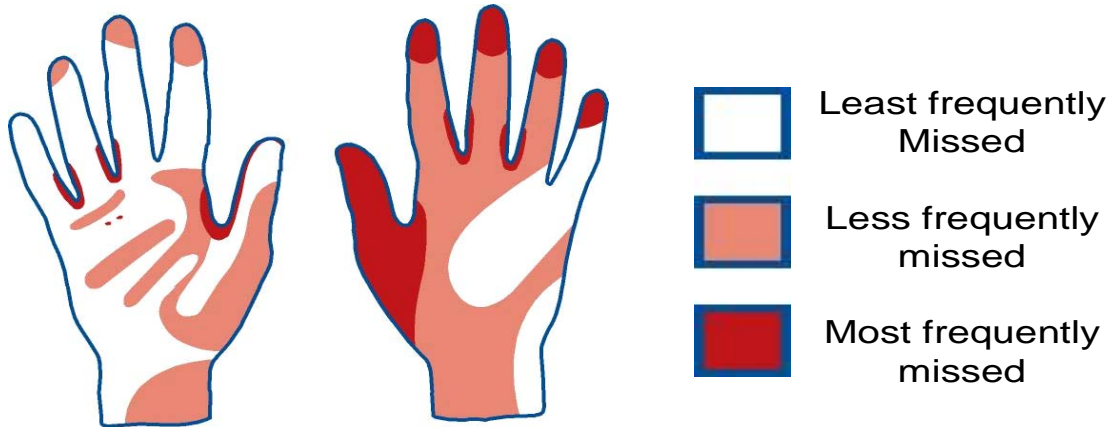
8. TRAINING

Please see the Trust TNA (Training needs analysis)

9. MONITORING

Monitoring of compliance with this procedure will be via the Infection Control audits.
See Clinical Audit programme.

AREAS ON HANDS MOST FREQUENTLY MISSED



CORRECT HAND WASHING TECHNIQUE



Palm to palm



Right palm over left dorsum and left palm over right dorsum.



Palm to palm fingers interlaced.



Backs of fingers to opposing palms with fingers interlocked.



Rotational rubbing of right thumb clasped in left palm and vice versa.



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.