Hand Hygiene Procedure

(IPC Manual)
1. **AIM**

The aim of this procedure is to provide staff with the information required to ensure that best practice in relation to hand hygiene practices is followed.

Hands are the most common vehicles for transfer of micro-organisms and are a major factor in the spread of infection. To reduce the spread of micro-organisms hand hygiene must be performed appropriately and effectively to minimise the risk of cross infection. It is important to note that hand hygiene is the single most effective method in preventing the transmission of infectious agents during the delivery of care (Pratt et al 2007).

The hand hygiene procedure being undertaken should consider actual and potential hazards which are likely to contaminate hands, and any risks that may present as a result.

It must always be assumed that every person could be carrying potentially harmful micro-organisms that might be transferred creating opportunities for infection. For this reason hand hygiene must be applied as standard.

2. **SCOPE**

This procedure applies to all staff, whether in a direct or indirect patient care role. It also applies to patients, visitors, contractors and other persons who enter Trust owned or rented buildings or grounds.

Adherence to the procedure is the responsibility of all Trust staff, including agency, locum and bank staff.

3. **LINK TO OVERARCHING POLICY**

3.1 Infection Prevention and Control Manual


3.2 LINKS TO RELEVANT POLICIES/PROCEDURES

Uniform and Appearance at Work/Dress Code policy


4. **PROCEDURE**

4.1 Hand Decontamination

The Trust adopted the Department of Health (2010) recommendations that uniforms and work wear (i.e. sleeves, cuffs and jewellery) should not
impede effective hand hygiene. These recommendations, also known as “Bare Below Elbows” (BBE) have been implemented throughout the United Kingdom with the intention of removing some of the barriers to good hand hygiene practice rather than the perceived risk of cross infection from contaminated cuffs. In order to comply with the recommendations staff must ensure short sleeves are worn or long sleeves can be rolled or pushed above the forearm to expose wrists during episodes of direct patient care activity when hand decontamination is required.

This applies to all staff working in all care and treatment settings where patients are seen, including all wards, departments and out-patient clinics. Visiting staff to these areas must have the ability to be BBE and comply with recommendations if having direct patient care or face to face contact (NICE 2012). See appendix 45.

The wearing of hand/wrist jewellery increases the bacterial load on hands and impedes effective hand decontamination (Trick et al 2003). False nails have been identified as vectors for cross infection in a number of outbreaks (Gordin et al 2007, Gupta et al 2004). Subsequently, nothing must be worn that could compromise patient or staff safety during patient care activities including false nails/nail extensions, nail varnish (including gel varnish), nail art, wrist and hand jewellery/adornments and fitness trackers. The only exception to this being one plain metal ring (no stones, ridges or engravings) is permitted. However, staff must ensure that the ring is manipulated during hand washing to ensure that the skin underneath the ring can be washed, rinsed and dried thoroughly to reduce microbial contamination.

It is also a health and safety requirement that none of the aforementioned items are worn during restraint procedures due to the risk of injury to staff and patients.

Dermal piercings and anchors are not permitted anywhere on the hands, wrists or lower arms as these impede hand hygiene and may also provide a portal of entry for organisms.

Where, for religious reasons, members of staff are required to cover their forearms or wear a metal bracelet (Kara), sleeves/bracelets must be pushed above the forearm and secured in place prior to hand decontamination and all direct patient care activity. Alternatively, disposable over sleeves may be worn for single episodes of care only. Strict adherence to decontaminating hands and wrists must be observed before and after use of these.

If Medic Alert jewellery is required it must be worn off the wrist by securing it to the high/mid forearm area or worn as a necklace, anklet, or attached to the uniform.

Staff requiring hand/finger splints or who have a hand plaster cast must not undertake direct clinical care as splints/casts become readily and heavily
contaminated and prevent adequate hand decontamination. Staff should seek advice from the Occupational Health Provider (OHP) and be considered for temporary redeployment to non-clinical activities.

Staff wearing lymphoedema compression garments on their arms should ensure a clean sleeve is worn every day and that the sleeve is rolled above the wrist to facilitate hand washing. Disposable oversleeves may be worn as described above.

The Trusts Uniform and Personal Appearance at Work/Dress Code Policy supports these recommendations. In cases of repeated failure to abide by the policy disciplinary action may be considered and could result in an individual's dismissal from employment with the Trust.

4.2 Opportunities for Hand Decontamination

The World Health Organisation (2009) initiative ‘5 Moments for Hand Hygiene’

The aim of this initiative is to simplify the opportunities for when hand hygiene needs to occur within healthcare at those moments which are likely to yield the maximum return in terms of patient safety and reduce unnecessary hand hygiene practice.

This approach recommends that healthcare workers should clean their hands:

| 1. BEFORE PATIENT CONTACT | WHEN? Clean your hands before touching the patient |
| 2. BEFORE AN ASEPTIC/CLEAN TASK |
| 3. AFTER BODY FLUID EXPOSURE | WHEN? Clean your hands immediately after an exposure risk to body fluids (including after removal of personal protective equipment) |
| 4. AFTER PATIENT CONTACT | WHEN? Clean your hands after touching the patient and his/her immediate surroundings when leaving |

| WHY? To protect the patient against harmful germs carried on your hands |
| WHY? To protect the patient against harmful germs entering his/her body |
| WHY? To protect yourself and the healthcare environment from harmful patient germs |
| WHY? To protect yourself and the healthcare environment from harmful patient germs |
5. AFTER CONTACT WITH PATIENT SURROUNDINGS

| WHEN? | Clean your hands after touching any object or furniture in the patient’s immediate surroundings, when leaving |
| WHY? | To protect yourself and the healthcare environment from harmful patient germs |

The 5 moments can be applied to any health and social care setting including wards, out-patient departments, community homes and the patient's own home. Regardless of where the patient is being cared for or treated, the principles of hand decontamination remain the same.

There may be some situations where performing hand hygiene after every contact is inappropriate. For example, where staff are involved in social interactions or group activities (e.g. shaking hands, playing games etc), they must risk assess the need for hand decontamination depending on the degree of contact/activity and how vulnerable the patient/s is/are. Once the activity/interaction is completed staff must then ensure they clean their hands prior to the next activity or before undertaking clinical procedures.

It is also essential to decontaminate hands before and/or after a range of activities including preparing, handling and consuming food and drinks, and after visiting the toilet.

4.3 Choice of Decontamination Agents

Choosing the most appropriate method of hand decontamination will depend upon assessment of what is appropriate for the episode of care, the resources available and what is practically possible.

Three types of cleansing/disinfecting agent can be used to remove micro-organisms from hands:

1. Liquid/Foam Soap Preparations

Thorough hand washing with soap and water will remove most transient micro-organisms and render the hands socially clean.

This level of decontamination is sufficient for general social contact and most clinical care activities (Epic 3, 2014).

In patient care areas pump dispensed or non-touch action soap is used for routine hand washing. Dispensers should be wall mounted and be cleaned and replenished regularly. Free standing pump dispensers are also available. Liquid soap dispensers that require manual filling of the chamber must not be used.

Bar soap must never be used for staff hand decontamination.
2. Alcohol Based Hand Rub

Alcohol based hand rub is advocated as an alternative to soap and water and can be used if hands are visibly clean. They are useful if hand washing and drying facilities are not available or where there is a need for rapid or frequent hand decontamination. These agents have a disinfectant activity and destroy transient micro-organisms. The effective use of alcohol hand rub will also substantially reduce resident flora/micro-organisms.

Hand rubs are not effective against spore forming micro-organisms, inclusive of Clostridium difficile and some viruses. In these instances hand decontamination must be performed using liquid/foam soap and water. Hands should be dried thoroughly using disposable paper towels.

There are some units in the Trust where the use of alcohol based hand rub is not appropriate due to potential interactions with medication. An alternative product is available for these areas within Drug and Alcohol Services.

Whilst every effort to have hand rub at the point of care delivery should be made, a risk assessment and management of risk must be undertaken. Individual staff carriage of tottles must be considered where bedside dispensers are deemed unsuitable.

Wall mounted dispensers must have drip trays fitted and be cleaned/maintained regularly.

3. Aqueous Antiseptic Solutions (Surgical Scrubs)

These are not routinely used within the Trust. The use of preparations containing an antiseptic is required where prolonged reduction in microbial flora on the skin and sterile barrier precautions are necessary (e.g. prior to major aseptic procedures in an operating department or for central line insertion).

4.4 Hand Decontamination Procedure

Hand decontamination protects both patient and healthcare worker from acquiring micro-organisms that may cause harm (pathogens). A technique covering all surfaces of the hands is essential. If a plain ring is worn this should be cleaned as part of the hand-washing process, including underneath to prevent build-up of micro-organisms and dead skin cells.

Hand washing using liquid soap and water is adequate for most routine daily activities and general social contact. If soap and water and hand drying facilities (liquid soap/kitchen towels in the community) are not available then soapy/antibacterial hand wipes are to be used. The technique described in appendix 46 must be followed regardless of whether soap and water or soapy/antibacterial hand wipes are used.

Clinell Universal wipes which are routinely used for decontaminating equipment are skin friendly and safe to use for hand decontamination by
community staff if hand washing facilities are unavailable.

Hand decontamination using hand rub is achieved by following a similar technique to hand washing (appendix 47). As long as hands remain visibly clean hand rub can be re-applied to achieve hand decontamination. Hands should be washed with soap and water/soapy hand wipes if they become sticky. Individual tottles must not be refilled from larger dispensers but replaced with new ones.

Prior to undertaking aseptic non-touch technique (ANTT) hand decontamination with soap and water or hand rub is sufficient (e.g. urinary catheterisation, wound care) unless procedures requiring maximal sterile barrier precautions are being undertaken.

4.5 Hand Drying

Wet surfaces transfer micro-organisms more effectively than dry ones. Consequently hands must be dried thoroughly using good quality paper hand towels. Paper towels must be housed in a wall mounted dispenser within easy reach of a sink but beyond splash contamination.

Communal linen towels are not recommended and warm air dryers must not be installed in clinical areas.

Taps should be turned off using a paper towel if wrist/elbow operated taps are not available. This will reduce the risk of hands becoming re-contaminated.

4.6 Skin Care

Bacterial counts increase when the skin is damaged. Hands that are very dry or have skin damage can be uncomfortable, painful, and harder to clean and are therefore more likely to acquire and transfer potentially infectious organisms.

The following principles will help protect skin integrity:

- Wet hands prior to applying soap. Thoroughly rinse and dry to avoid soreness and chapping
- Apply hand cream regularly. This will help protect the skin from the drying effects of regular hand decontamination
- Do not use communal pots of hand cream as the contents are likely to be contaminated with microbes. Use Trust approved moisturiser which must be made available in all patient care and treatment bases
- Report any skin irritation/skin problems to your Line Manager. A referral to the Occupational Health Provider must be made for health surveillance
• Cover cuts or abrasions with a suitable waterproof plaster or dressing

• Do not use nailbrushes. Scrubbing can cause breaks to the skin which may harbour microorganisms and create portals of entry for infection

4.7 Compliance

Many factors have been identified as contributing to poor adherence to hand decontamination. To improve compliance and encourage staff to decontaminate their hands regularly and appropriately it is essential that adequate facilities are provided therefore all managers must ensure that:

• clinical hand wash basins are accessible

• clinical hand wash basins are dedicated for that purpose only

• water temperature is conducive to hand hygiene

• supplies of hand wash/drying products are available

• all dispensers are kept clean and replenished promptly

• posters promoting hand decontamination techniques must be displayed in areas visible to staff, patients and visitors

• appropriate waste bins are available and suitably located

Clinical hand wash basins should meet Health Building Note 00-09: Infection control in the built environment guidelines (2013). Estates and Facilities must ensure these guidelines are implemented when new builds and refurbishments are being planned.

4.8 Patient Hand Hygiene

Patients should be reminded about good hand washing practices and help should be offered if they are unable to wash their own hands. Non ambulant patients must be offered means of decontaminating their hands before eating and after using bedpans/commodes for example. Hand cleansing wipes are suitable for this purpose and should be available in relevant areas.

4.9 Visitor Hand Hygiene

It is good practice for visitors to perform hand hygiene prior to and after visiting patients. They should be encouraged to clean their hands before entering the health care setting and before they leave using the appropriate products. If visitors assist with caring duties hands need decontaminating more frequently and visitors need to be advised of this.

5. REFERENCES


- Department of Health (2010) Uniforms and workwear: Guidance on uniform and workwear policies for NHS employers
- National Evidence Based Guidelines for Preventing Healthcare Associated Infections in NHS Hospitals in England. Journal of Hospital Infection. 65S: S1-S64
- World Health Organisation (2012) Hand Hygiene in Outpatient and Home-based Care and Long Term Care Facilities

6. APPENDICES

To access/download Appendices please see IPC Manual Home page on the web.

Appendix 53 – Bare Below Elbows Flow Chart
Appendix 54 – Hand washing with soap and water technique
Appendix 55 – Hand decontamination with hand rub