Introduction

Hand hygiene is widely acknowledged to be the single most important activity for reducing the spread of infection, yet evidence suggests that many healthcare professionals do not decontaminate their hands as often as they need or use the correct technique, resulting in areas of the hands being missed.

Hand decontamination refers to “the process for the physical removal of blood, body fluids and transient micro-organisms from the hands, i.e., handwashing, and / or the destruction of micro-organisms”.

Objective

To provide staff with clear guidance on the actions they must take in order to prevent cross infection due to contamination of their own hands.

Scope

This policy applies to all employees of the Practice including bank and agency staff, locums, volunteers, trainees and students. Each member of staff has a personal responsibility to ensure s/he complies with these guidelines.

Responsibilities of all Employees

- To ensure they are aware of, and adhere to, the guidelines and have read and understood them which will enable them to carry out their work according to the Practice’s guidelines.
- To ensure that they undertake adequate hand hygiene and to encourage others delivering care to do so. This applies to all disciplines of staffs that provide care or are associated with care environments / items within it.
- To report any adverse skin reactions / damaged skin to Alison Shariat - clinical nurse lead or Duty Doctor.
- To be aware of the current version of the guidelines and how to access them.
- To attend Practice educational sessions
- To have their hand washing technique assessed annually.
- To attend all relevant training as outlined in the mandatory training policy.

Responsibilities of the Practice

To be responsible for the implementation of, and compliance with the Hand Hygiene Policy and ensuring it is accessible to all staff in both in paper copy and on the intranet.
Responsibilities of the Infection Prevention Control Team (IPCT)

The Practice IPCT comprises the following members:

- Practice Infection Control Lead – Alison Shariat
- Dr Lesley Jeffers.

The IPCT responsibilities are:

- To ensure guidelines are evidenced based and comply with all legislative and DH Directives.
- Provide infection control advice and guidance to Practice staff on an as-needed basis.

Microbiology of the Skin

Micro-organisms found on the skin can be described as:

**Resident Flora:**
Normal flora are commensal organisms forming part of the body's normal defence mechanisms and protecting the skin from invasion of more harmful micro-organisms. They rarely cause disease and are of minor significance in routine clinical situations. However during surgery or other invasive procedures, resident flora may enter deep tissues and establish infections.

**Transient Flora:**
Those acquired by touch (e.g. from the environment, equipment). They are located superficially on the skin, readily transmitted to the next thing touched, and are responsible for the majority of healthcare associated infections. They are easily removed by hand decontamination.

Hand Care

- In order to achieve effective hand hygiene it is important to look after the skin and fingernails. Damaged or dry skin leads to loss of a smooth skin surface, and increases the risk of skin colonisation with resistant organisms such as Meticillin Staphylococcus Aureus (MRSA). Continuing damage to the skin may result in cracking and weeping, exposing the healthcare worker to increased infection risk.
- Staff with acute or chronic skin lesions, conditions or reactions should seek advice from the Occupational Health Department.
- Cuts and abrasions should be covered with a waterproof dressing prior to clinical contact. Staff with open skin lesions that cannot be adequately covered must be risk assessed on their suitability to work and the area in which they are working.
- To maintain skin integrity, staff should apply moisturiser when coming on duty, when going on break and at the end of their shift.
- As natural fingernails harbour micro-organisms, they should be kept short, clean and free from nail varnish.
- Artificial or acrylic nails are not to be worn. Artificial and acrylic nails harbour higher levels of micro-organisms than natural fingernails and these micro-organisms are not removed easily during hand hygiene. It should be noted that artificial nails can also fall off and this may pose an added risk during surgical procedures when an open wound is present.
- Rings, wristwatches and other jewellery worn on the hands and wrists become contaminated during work activities. In addition they prevent thorough hand hygiene techniques. Remove rings (except wedding bands), wristwatches and bracelets before beginning work.
Hand Decontamination in relation to Patient Care.

Current national and international guidance suggests that in deciding when it is necessary to decontaminate hands prior to patient contact, four key factors need to be considered:

1. The level of anticipated contact with the patient or objects;
2. The extent of the contamination that may occur with that contact;
3. The patient care activities being performed;
4. The susceptibility of the patient.

Patients are put at risk of developing Healthcare Associated Infections (HAI) when healthcare workers caring for them have contaminated hands.

Before regular hand decontamination begins, all wrist (and ideally hand) jewellery should be removed. Cuts and abrasions must be covered with waterproof dressings. Fingernails should be kept short, clean and free from nail polish.

Hands must be decontaminated by using soap and water or alcohol gel solution in the following situations:

- Hands must be decontaminated immediately before each and every episode of direct patient contact or care and after any activity or contact that could potentially result in hands becoming contaminated.
- If hands are visibly soiled or covered with body fluids, hands should be washed using soap and water and dried thoroughly with disposable paper towels;
- If you are about to, or have had contact with a patient and your hands are visibly clean, decontaminate hands by using alcohol gel;
- Hands should be decontaminated between caring for different patients or between different care activities for the same patient.
- An alcohol-based hand gel can be used unless hands are visibly soiled. The hand gel solution must come into contact with all surfaces of the hand and the hands must be rubbed together vigorously, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers, until the solution has evaporated and the hands are dry.
- If you are about to perform an aseptic technique, hands should be washed with soap and water, dried thoroughly with disposable paper towels followed by alcohol gel;
- Before commencing work/after leaving a work area;
- Before preparing or eating food;
- Before performing aseptic technique e.g. Venepuncture;
- Before wearing and after removing gloves (gloves are not a substitute for effective handwashing- they can develop holes when in use and hands can become contaminated on removal of the gloves);
- After handling contaminated laundry and waste;
- After using the toilet;
- Before and after contact with a patient during outbreak situations;
- If you are about to don a pair of sterile gloves and perform a sterile procedure, hands should be decontaminated by performing a surgical scrub using chlorhexidine or betadine solution;
- An emollient hand cream should be applied regularly to protect skin from the drying effects of regular hand decontamination.
- If a particular soap, antimicrobial hand wash or alcohol product causes skin irritation an occupational health team should be consulted.
**Recommended Hand Washing / Cleansing Solutions**

The Health and Safety Executive recently investigated how to initiate reducing the instances of skin problems amongst health care staff.

This initiated dermatological and toxicology screening and testing of soaps and moisturisers to enable the latest standards of quality and dermatology for implementation of the new National contract for soaps and moisturisers.

Antibacterial soap did not pass the first stage of screening and therefore is not recommended for general use. Recommended products and their use are listed below:

- **Ecolab simple soap.** Washing the hands with plain liquid soap and water is adequate for most routine activities. Handwashing with soap lifts transient micro-organisms from the surface of the skin and allows them to be rinsed off.
- **Hibiscrub and chlorhexidine gluconate** containing skin antiseptics and are used in surgery. Solutions containing these agents act by lifting transient micro-organisms from the skin and destroying both transient and some resident micro-organisms. These should be used when a reduction in numbers of resident flora are required for invasive procedures.
- **Purell alcohol hand gel** may be used in place of soap and water if hands are visibly clean. These agents have disinfectant activity and destroy transient microorganism.
- **Ecolab moisturising cream** (used as a protective hand cream) should be used at the beginning and the end of a working session to keep hands in good condition.

**Patient Empowerment**

Patients are encouraged to actively participate and be involved in their care and are empowered to remind health care workers to wash their hands before undertaking any patient care.

**Education and Audit**

- Hand hygiene will be stressed at induction and annual update training for infection control
- Hand hygiene training will include:
  - Transmission of organisms via hands;
  - Hand hygiene technique;
  - Use of hand gel;
  - National Patient Safety agency “Clean your hands” campaign.
- All clinical staff receive Hand Hygiene training through Mandatory training. This is part of the Infection Control training. All DNAs at Mandatory Training are followed up as per the Mandatory Training Policy.
- All clinical staff directly involved with clinical care are expected to attend the training sessions on an annual basis.
Correct Handwashing Technique

It cannot be stressed too highly that effective handwashing is one of the main contributors to infection control.

**An effective handwashing technique involves three stages:**

**Preparation:**
Requires wetting hands under tepid running water **before** applying the recommended amount of liquid soap or an antimicrobial preparation.

**Washing:**
The handwash solution must come into contact with all surfaces of the hands. The hands must be **rubbed** together for a minimum of 10-15 seconds paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers.

**Rinsing and drying:**
Hands should be rinsed thoroughly before drying with good quality paper towels.

**Steps to effective handwashing**
See “10 Steps to Effective Hand Hygiene Wall Chart” in [Appendix 1](#).

**Hand Areas most commonly missed:**

![Hand Areas most commonly missed](image_url)
Alcohol Gel

The use of alcohol gel should be frequent and routine on non-soiled hands, as it is quick, effective, well tolerated by the skin, and can easily be placed in areas where needed the most (for example at the point of patient care, such as treatment rooms, couches, patient chairs etc.), as well as adjacent to each clinically-designated sink.

It may be used following hand washing, but is also effective on otherwise clean hands where no hand washing facilities are available, and for this purpose a small container may easily be carried in a doctor’s bag.

It may also be used:
- Prior to a patient contact – protect the patient from germs on your hands;
- Prior to an aseptic task – protect the patient from germs, including their own, entering the body;
- After a body fluid exposure risk – protect yourself and the environment of the room;
- After a patient contact - protect yourself and the environment of the room;
- After contact with a patient’s surroundings - (e.g. a chair or door handle).

Sterilisation is not a substitution for handwashing as gel does not clean hands, however where hand-wash facilities are not available the use of a sterilising gel is appropriate before or after undertaking any of the above activities (e.g. on external visits etc.).

Alcohol gel is not the preferred primary hand cleansing product where:
- Hands are visibly soiled;
- Patient is experiencing vomiting and / or diarrhoea;
- There is direct hand contact with body fluids;
- There is an outbreak of norovirus, clostridium difficile or other diarrhoeal illness.

In this case hands should always be washed first with liquid soap and water.

The Practice will ensure that small dispensers (e.g. 125ml) are carried in every doctor’s bag specifically for use on home visits and wall-mounted dispensers will be made available above every clinical sink.
Audit

To ascertain the awareness and knowledge of infection control processes and procedures of Practice Staff, the practice will undertake an audit every year, to identify the effectiveness of effective hand preparation and hand decontamination of all staff within the Practice to minimise the risk of transmission of infection.

The audit will also provide an opportunity to evaluate the effectiveness of training in hand hygiene procedures, plus an opportunity for staff to reflect on their own hand hygiene practices, improving their technique where required.

Methodology

• Appoint Alison Shariat- clinical nurse lead as the Audit Lead;
• Appoint trained nurses as members of the Audit Team;
• Observational audit;
• Compile a list of all staff trained and untrained in effective safe hand hygiene procedures;
• Identify a practice lead for infection prevention and control to carry out an observational audit or encourage staff to ‘buddy’ with another colleague to perform the audit;
• Observe one staff member at a time;
• Collect relevant data for each individual staff and record using the data collection sheet provided;
• Feedback the results immediately to the staff member;
• Where 100% is not achieved by an individual they should be advised / encouraged to reflect on their practice. The audit should be repeated at an agreed time until 100% is achieved
• Aggregate data from completed audits for analysis using the summary sheet
• The Audit Lead / Team will analyse the overall results of the audit, review themes identified from the analysis and recommend any changes considered appropriate to existing hand hygiene practices and training.
• A repeat of the overall audit within the practice be undertaken every year, as part of the practices’ infection control audit programme.
Danetre Medical Practice  
Hand Hygiene - Quality Improvement Audit  
Individual staff data entry template Checklist

Staff Name: ............................................................................................................. Date: ............................................

Practice Infection Control Lead: ..........................................................................................................................

<table>
<thead>
<tr>
<th>Criteria – All criteria are essential</th>
<th>Achieved (Criteria met in full)</th>
<th>Not achieved (Criteria not met in full)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAND WASHING</strong></td>
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<tr>
<td><strong>Hand Preparation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hands and wrists are free from watches and jewellery (non-stoned wedding rings are acceptable)</td>
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<tr>
<td>Nails are short and without nail extensions and varnish</td>
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<tr>
<td>Sleeves are short or rolled up during hand washing</td>
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<tr>
<td>Cuts are covered with a waterproof dressing</td>
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<tr>
<td><strong>Hand washing technique</strong></td>
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<tr>
<td>Hands are wet under continuously running water</td>
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<tr>
<td>Warm Water is used to wash hands</td>
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<tr>
<td>Dispensed liquid soap is used</td>
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<tr>
<td>Liquid soap is applied to wet hands</td>
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<tr>
<td>Hands are rubbed to create a lather</td>
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<tr>
<td>A copy of the 10 steps to effective hand hygiene wall chart is prominently displayed at each wash basin (See Appendix 1)</td>
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<tr>
<td>The lather is rubbed over all surfaces of the hands for 10-15 seconds, including the thumbs, between the fingers, fingertips and the wrist (demonstrating the 10 steps to effective hand hygiene technique (See Appendix 1))</td>
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<tr>
<td>Hand are rinsed thoroughly under running water</td>
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<tr>
<td><strong>Drying of Hands</strong></td>
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<tr>
<td>Taps are turned off using wrist/elbow levers or using a clean paper towel</td>
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<tr>
<td>Hands are dried using paper towels</td>
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<tr>
<td><strong>HAND HYGIENE USING ALCOHOL BASED HAND RUBS</strong></td>
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<td>Cuts are covered with a waterproof dressing</td>
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<tr>
<td>Hands are visibly clean</td>
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<tr>
<td>Alcohol based hand gel is dispensed onto the hands</td>
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<tr>
<td>Alcohol hand gel is rubbed onto the hands ensuring all surfaces are covered by the alcohol</td>
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<tr>
<td>Hands are rubbed until the alcohol has evaporated</td>
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</table>
Appendix 1
10 Steps to Effective Hand Hygiene – Wall Chart

To ensure that all parts of the hands are cleaned properly the following technique should be followed. The same principles can be applied when using alcohol hand gels.

1. Wet hands and forearms
2. Soap up and rubbing palm to palm
3. Rub with fingers interlaced
4. Massage between fingers. Right palm over back of Left hand, left palm over back of right hand
5. Scrub with fingers locked, including finger tips
6. Rub rotationally with thumb locked
7. Rinse thoroughly
8. Dry palms using Paper Towels
9. Work towel between fingers
10. Dry around and under nails