Infection Prevention and Control Practice Guidance Note
Hand Hygiene and the use of Gloves– V04

Date issued
Issue 1 – Feb 2019
Issue 2 – Oct 2019
Planned review
February 2022
IPC-PGN 04.1 Part of CNTW(C)23 –
Infection, Prevention and Control Policy

Author/Designation
Kay Gwynn, Infection Prevention Control Modern Matron

Responsible Officer / Designation
Anne Moore Group Nurse Director Safer Care and Director of
Infection Prevention and Control

Issue Notes
This guidance replaces all similar guidance issued by the former organisations.

KEY POINTS

- Practice Guidance Notes form part of the Trust’s Infection Prevention and
  Control policy, and it is expected that staff will follow the guidance contained
  within them unless there is a compelling reason to deviate from it. Such reasons
  should be documented whenever the circumstance occurs and notified to the
  IPC team so that modifications to future editions can be made if necessary.

- Hand cleansing is the single most important procedure in the prevention of
  healthcare associated infection

- Cleaning hands with soap and water is a simple four step procedure

- Hand sanitiser is available to complement hand hygiene practice and can
  be used to decontaminate socially clean hands. It is not an alternative to
  hand washing and should only be used when hands are visibly clean and
  free from dirt, soil and organic material

- Alcohol hand rub is not effective in controlling infections in which bacteria
  have a spore phase, for example, Clostridium difficile infections. In these
  circumstances thorough hand washing should be used

- Disposable gloves are a single use item and should not be washed or
  cleaned with alcohol hand rub
Hand Hygiene and the use of Gloves

<table>
<thead>
<tr>
<th>Section</th>
<th>Content</th>
<th>Page No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Transient and Resident Hand Flora</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Bare Below Elbows</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Risk Assessment – when to perform Hand Hygiene</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Hand Hygiene Technique</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Skin Care</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Gloved Hands</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Patient Hand Hygiene</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Staff Training</td>
<td>9</td>
</tr>
</tbody>
</table>

**Appendix – attached to practice guidance note**

**Appendix 1**  Hand Washing Technique

**Appendix – separate to practice guidance note**

**Appendix 2**  Evaluation of Hand Hygiene

**REMEMBER**

Hand cleansing is the single most important procedure in the prevention of healthcare associated infection
1 Introduction

1.1 Hand cleansing is the single most important and economical means of preventing the spread of infections. Performing hand hygiene means the physical removal of visible dirt, soiling and removal of harmful micro-organisms.

1.2 The spread of infection via hands has been well documented.

1.3 The World Health Organisation (WHO) and others describe the **five key moments** for the patients – to patient transmission of organisms on the hands of healthcare workers:

- Before patient contact
- Before aseptic task
- After body fluid exposure
- After patient contact
- After contact with patient surroundings

1.4 Studies have shown that at least 30% of healthcare associated infections are preventable. Transmission of micro-organisms by the hands of healthcare workers is the main route of spread.

1.5 The aim of this policy is to promote hand hygiene as evidenced-based practice, and to identify responsibilities and equipment required to enable Trust wide compliance with hand hygiene, to prevent the spread of infection via the hands.

2 Transient and Resident Hand Flora

2.1 There are two categories of micro-organisms present on the skin; transient and resident flora.

2.2 Transient flora

- These are organisms temporarily lodged on the skin and may be acquired through contact with patients, equipment or the environment; they do not routinely live on the skin. Procedures, such as lifting and washing of patients result in hand contamination with bacteria that are readily transferred by subsequent touch. The majority of these micro-organisms are easily removed mechanically by washing with soap and water for fifteen to twenty seconds. A good technique is vital. Alcohol rub will also remove transient flora. Removal of transient flora is sufficient for general social contact and most clinical care activities.
2.3 **Resident flora**

- These are present in deep skin crevices and normally colonise the skin. They play an important role in protecting the skin from invasion by other harmful species, but are not readily transferred to other people or surfaces. Reduction is only necessary for highly invasive procedures involving normally sterile body sites e.g. during surgery. Resident flora are not easily reduced by washing with soap and water. Use of alcohol, rub will reduce the numbers of both transient and resident bacteria. Alcohol rub should not be used unless hands are visibly clean.

3 **Bare Below the Elbows**

3.1 In November 2007 the Department of health announced that all Trusts should adopt a ‘Bare below the Elbows’ policy whilst providing / undertaking clinical care procedures. This has been implemented by the Trust, refer to Uniform and Dress Code Policy.Vo1

**Definition of bare below the elbow**

Hands can only be decontaminated effectively by ensuring the correct technique is used. In order to do this hands and wrists need to be fully exposed and should be free of long sleeved clothing and jewelry.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep finger nails short and clean</td>
<td>Microbes can thrive beneath finger nails</td>
</tr>
<tr>
<td>Do not wear false nails or nail polish</td>
<td>False nails and nail polish discourage thorough hand washing Micro-organisms thrive in nail glue and in cracked nail polish</td>
</tr>
<tr>
<td>Do not wear, bracelets or rings with stones and ridges. One plain band is permitted.</td>
<td>High numbers of bacteria can be found on skin under rings and bracelets. Wearing these discourages effective hand washing.</td>
</tr>
<tr>
<td>Sleeves must be short or rolled up to facilitate effective hand decontamination.</td>
<td>Hand decontamination cannot effectively take place, putting patients at risk</td>
</tr>
<tr>
<td>Any breached skin - cuts, dermatitis or abrasions - must be covered with a waterproof dressing.</td>
<td>To reduce the risk of cross contamination</td>
</tr>
<tr>
<td>Wrist watches MUST be removed prior to procedures requiring hand hygiene</td>
<td>High numbers of bacteria can be found under wrist watches and straps</td>
</tr>
<tr>
<td>Permissible Jewellery</td>
<td>Unacceptable Jewellery</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Plain band</td>
<td>Rings other than a plain band</td>
</tr>
<tr>
<td>It is the employee's responsibility to ensure that all other rings are removed prior to commencing their shift or direct patient care</td>
<td>• Engagement rings</td>
</tr>
<tr>
<td></td>
<td>• Eternity rings</td>
</tr>
<tr>
<td></td>
<td>Ridges, stones or grooves harbour higher levels of micro-organisms &amp; could potentially damage the integrity of a patient’s skin</td>
</tr>
<tr>
<td>Kara bracelet</td>
<td>Bracelets other than a Kara</td>
</tr>
<tr>
<td>A steel bracelet (usually worn on the right wrist) by members of the Sikh faith</td>
<td>• Charity bracelets</td>
</tr>
<tr>
<td></td>
<td>• Friendship bands</td>
</tr>
<tr>
<td></td>
<td>• Silks loosely tied around the wrists by Hindus are not acceptable and must be removed.</td>
</tr>
<tr>
<td></td>
<td>• Woven silk or cotton bracelets such as the Rakhis worn by Hindus and Jains for the festival of Raksha Bandhan will need to be removed for compliance with this policy.</td>
</tr>
</tbody>
</table>

Medic-Alert Bracelets- May be worn after consultation with Occupational Health. These must be non-fabric.

All staff working or visiting patients in Acute Trusts will be required to be Bare Below the Elbow at all times.
3.2 **Preparation for Hand Hygiene**

3.2.1 The efficacy of hand hygiene is improved if staff are bare below the elbow the following principles are adhered to;

- Keep nails short as most micro-organisms come from underneath the finger nails
- Remove ring with ridges and stones as the level of bacteria counts are higher when rings are worn
- Do not wear artificial nails and nail varnish which can harbor bacteria
- Remove wrist watches, bracelets and rollup long sleeves prior to patient contact

4 **Risk Assessment – When to perform Hand Hygiene**

4.1 There is no set frequency for performing hand hygiene, it is determined by a risk assessment of actions completed or intended to be performed.

4.2 Consider the following:

- Do you need to perform hand hygiene before this activity/contact?
- Do you need to perform hand hygiene after this activity/contact?

4.3 **Hand Hygiene must be performed in the following instances:**

- On entering and leaving a clinical area
- Immediately before /after each direct patient contact/care
- After any activity or contact that potentially results in hands becoming contaminated
- Before/after handling food
- Before/after wearing gloves
- Before preparing/dispensing medications
- Between different procedures for the same patient (i.e. mouth care, catheter care)
- After visiting the toilet
- When hands feel unclean or visibility dirty
4.4 Liquid soap should be used for most routine hand hygiene episodes or hand sanitisers if hands are not visibly soiled.

4.5 Bar soap must not be located in communal areas and must not be used by clinical staff in clinical areas. It may be used on an individual patient basis, kept in the patient’s room and discarded after patient discharge/transfer.

4.6 Soap and water must be used following contact with patients with confirmed Clostridium difficile or Norovirus or patients who have diarrhoea and or vomiting of an unknown cause.

5 Hand Hygiene Technique (Appendix 1)

5.1 An effective hand washing and drying technique plays a key role in standard infection control practice to prevent cross infection.

- Wet hands first using water.
- Apply soap and rub hands together, the hand-wash solution must come into contact with all surfaces of the hand and wrist:
  - Rub hands palm to palm
  - Right palm over the other hand with interlaced fingers and vice versa
  - Palm to palm with fingers interlaced
  - Backs of fingers to opposing palms with fingers interlocked
  - Rotational rubbing of left thumb clasped in right palm and vice versa
  - Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa
  - Rinse hands with water thoroughly before they are dried
  - Dry thoroughly with towel.
  - Hand drying is important because wet surfaces transfer micro-organisms more effectively than dry ones. Cloth towels and hot air dryers are not recommended. A good-quality paper towel should be used to dry thoroughly. The action of drying will also assist in rubbing away transient organisms.

5.2 Duration of procedure: At least 15 seconds

5.3 It takes at least fifteen seconds to wash your hands properly – this is about how long it takes to sing ‘Happy Birthday to You’ twice through!
5.4 The containers used to dispense soap and moisturiser should be pump-operated to prevent cross-contamination.

5.5 **Hand Hygiene for community based staff**

- Staff working in the community visiting patients in their own home should have access to hand wipes that can be used to clean hands and individual bottles of hand sanitiser.
- Community staff performing hands on care and contact ie taking blood physical observations should also be bare below the elbow.

5.6 **Using sanitisers**

- Hands must be free from dirt and organic matter; if not, wash first. If you are on a home visit use a hand wipe.
- The hand rub must come into contact with all surfaces of the hands, so hands must be rubbed together vigorously and systemically to include wrists, tips of fingers, backs of hands, palms, thumbs and webs of fingers, for ten to fifteen seconds until the solution has evaporated.
- Duration of procedure: 20-30 seconds.
- If the hand sanitiser contains Alcohol it is flammable and must be correctly stored.
- Clinical staff will be asked to undertake evaluation of hand hygiene procedure at the request and supervision of the IPC matron. Results of the audits will be shared with the Clinical Manager (CM)/Associate Nurse Director. Evaluation of Hand Hygiene procedure (Appendix 1)

6 **Skin Care**

- Healthy intact skin acts as a barrier to dirt and bacteria. The following will help maintain healthy skin and allow hand cleansing to be carried out successfully
- Cover cuts and abrasions with an impermeable waterproof dressing
- Remove wrist and hand jewellery before hand-cleansing
- Use an emollient hand cream to protect against the drying effects of regular hand cleansing
- Do not use communal pots of hand cream
- Inform the Occupational Health Department if you have any skin irritation
7 Gloved Hands

- Gloves can reduce the transfer of micro-organisms to and from the wearer’s hands. Gloves should be worn as part of standard infection control precautions.

- Hand hygiene should be performed before using and after removal of gloves. Disposable gloves are a single use item and should not be washed or cleaned with alcohol hand rub.

- The close relationship between glove use and infection prevention and control has been emphasised in this resource, as inappropriate glove use (over or under use of gloves) can place staff or patients at risk of contact dermatitis, infection and missed opportunities for hand hygiene.

- Gloves should never be used as an alternative to hand hygiene.

- Prolonged contact with water or wearing gloves for extended periods prevents sweat evaporation, and can lead to skin becoming over hydrated or soggy. This causes the production of fewer natural moisturising factors, which disrupts the intact skin and its barrier function.

- The Health and Safety Executive (HSE) has produced guidance on glove selection to minimise the risk of latex glove allergy to health care staff.

- Key issues to consider when deciding on the choice of gloves include the following, and form the basis of a risk assessment for glove use:
  - Task to be performed
  - Anticipated contact and compatibility with chemicals and chemotherapeutic agents
  - Latex or other sensitivity
  - Glove size required

<table>
<thead>
<tr>
<th>Gloves On</th>
<th>1</th>
<th>Before an aseptic procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>When anticipating contact with blood or another body fluid, regardless of the existence of sterile conditions and including contact with non-intact skin and mucous membrane</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Contact with a patient (and his/her immediate surroundings) during contact precautions</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>When anticipating contact with chemical hazards such as disinfectants or preserving agents</td>
</tr>
</tbody>
</table>
### Gloves off

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note</strong></td>
<td>Any cuts or abrasions present on hands should be covered (e.g. plaster) prior to donning gloves</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>As soon as gloves are damaged (or non-integrity suspected)</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>When contact with blood, another body fluid, non-intact skin and mucous membrane has occurred and has ended.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>When contact with a single patient and his/her surroundings, or a contaminated body site on a patient has ended</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>When there is an indication for hand hygiene</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>When contact with chemicals has ended</td>
</tr>
</tbody>
</table>

#### 7.1 Glove use and Hand Hygiene

7.1.1 Gloves are not a substitute for hand hygiene and do not provide a failsafe method of preventing hand contamination. Glove use must be coupled with appropriate and timely hand hygiene to prevent spread of microorganisms between patient contacts and staff.

7.1.2 Health care workers should wash their hands immediately after taking off gloves.

7.1.3 If alcohol hand rub is used prior to wearing gloves. Staff must allow the hand rub to evaporate completely before new gloves are put on, hand hygiene should never be performed while wearing gloves.

7.1.4 Gloves are single use items and should be disposed of after each task is complete in line with local waste policies. The type of glove selected must be fit for purpose and well-fitting to avoid interference with dexterity, friction, excessive sweating and finger and hand muscle fatigue.

Double gloving is not recommended for non-surgical procedures or practices (e.g. manual evacuation of faeces). Double gloving does not obviate the need for hand hygiene.

7.1.5 The supply of gloves must include a choice of glove size e.g. small, medium or large. Expiry dates/lifespan of gloves should be adhered to and according to manufacturers’ instructions. Follow manufacturer and local recommendations to store gloves to avoid contamination.

#### 8 Patient Hand Hygiene

8.1 Hand washing by patients is equally important in the prevention of infection. Staff must ensure that patients are encouraged to wash their hands after visiting the toilet and before meals, and that hand washing facilities are readily available. Alcohol hand rubs are not appropriate for patient hand hygiene.
9 Staff Training

9.1 The Trust will ensure that all staff has access to appropriate levels of training, it is the responsibility of each operational director to ensure staff attend. Levels of training are identified in the training needs analysis (see Appendix B of policy) and are included within the Essential Training Guide which forms part of the Trust’s CNTW (HR) 09 – Staff Appraisal Policy and practice guidance notes.

9.2 Each ward will have an identified member of staff who has undertaken hand hygiene competency training. They will be responsible for delivering this training and completing hand hygiene competencies in their clinical areas.

10 References


Infection Prevention Society (2017) Bare Below the Elbow’ (BBE) Guidance for Mental Health and Learning Disabilities Settings Infection Prevention Society Mental Health Special Interest Group


World Health Organisation (2009) WHO Guidelines on hand hygiene in health care:
Hand Washing Technique

What we should be doing

- Staff should always clean their hands before and after each care activity.
- Staff should use correct hand hygiene procedure.

1. Palm to palm.
2. Right palm over left dorsum and left palm over right dorsum.
3. Palm to palm and fingers interlaced.
4. Backs of fingers to opposing palms with fingers interlocked.
5. Rotational rubbing of right thumb clasped in left palm and vice versa.
6. Rotational rubbing backwards and forwards with clasped fingers of right hand in left palm and vice versa.

How should we be doing this

- Preparation:
  Wetting hands under running water before applying liquid soap.

- Washing:
  The hand wash solution must come in to contact with all surfaces of the hand.

- Rinsing:
  Hands should be rinsed thoroughly before they are dried.

- Drying:
  A good quality paper towel should be used throughout.