The purpose of this guidelines are to ensure that that every member of staff is aware of their individual responsibility in relation to the prevention and control of infection, with regards to clinical practice and patient care within the clinical environment.

The Trust monitors the implementation of and compliance with this procedure in the following ways;

The responsibility for monitoring and reviewing this Procedural Guideline lies with the Director responsible for Infection Prevention and Control. Compliance with this policy and the supporting procedural guidelines will be audited annually using evidence and guidance based approved audit tools. Audit results will be presented to the Infection Prevention and Control Group. Uptake of Infection prevention and Control Training will be monitored as outlined in ICP1 - Infection Control Policy - section 7.0.

<table>
<thead>
<tr>
<th>Services</th>
<th>Applicable</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trustwide</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

The Director responsible for monitoring and reviewing this policy is Executive Director of Mental Health / Executive Nurse
1.0 ASEPTIC TECHNIQUE
2.0 SOURCE ISOLATION (BARRIER NURSING)
3.0 DECONTAMINATION OF EQUIPMENT
4.0 ENVIRONMENTAL CLEANING
5.0 TOYS AND GAMES CLEANING
6.0 ENTERAL FEEDING
7.0 LAUNDRY MANAGEMENT
8.0 MANAGEMENT OF NON INFECTIOUS AND INFECTIOUS DECEASED CLIENTS
9.0 PREVENTION AND CONTROL IN URINARY CATHETER CARE
10.0 SAFE HANDLING OF SPECIMENS
11.0 INTRAVENOUS THERAPY
12.0 MINOR SURGICAL PROCEDURES IN SEPT PREMISES
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ICPG1: SECTION 3 - INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE

ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST

SECTION 3: INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE

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APPENDIX 2 - DECLARATION OF CONTAMINATION STATUS FORM

APPENDIX 3 - SOUTH EAST ESSEX - DECONTAMINATION OF EQUIPMENT FOR HOME LOAN

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ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST

SECTION 3: INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE

1.0 ASEPTIC TECHNIQUE

1.1 Introduction
This guideline sets out the procedures for staff to follow for aseptic technique.

1.2 Asepsis is defined as “freedom from pathogenic micro-organisms” and aseptic as “free from sepsis”. Aseptic technique refers to practices that help to reduce the risk of post-procedural infections in patients by decreasing the likelihood that micro-organisms will enter the body during clinical procedures.

1.3 An aseptic technique should be implemented during any invasive procedure that bypasses the body’s natural defences e.g. the skin, mucous membranes, or when handling equipment such as intravenous cannulae and urinary catheters that are used during these procedures.

1.4 An aseptic non touch-technique, ANTT, (i.e. being able to identify the “key parts” of any procedure and not touching them directly or indirectly), is an important component of achieving asepsis. It is important to prevent contamination of all sterile equipment.

1.5 Indications for using an aseptic technique include:

- Dressing of wounds e.g. surgical incisions, burns
- IV cannulation
- Urinary catheterisation
- Suturing
- Dressing / accessing of IV lines
- Removal of drains
- Medical invasive procedures e.g. minor surgery
- Endotracheal suction
- Enteral feeding

1.6 All infection control standard precautions must be implemented in conjunction with a correct aseptic technique to ensure the prevention of infection i.e.

- Hand washing/decontamination/surgical scrub
- Clean, safe and appropriate environment in the procedure area. All cleaning activities must be suspended whilst aseptic techniques are in progress
- Clean/sterile equipment and maintaining a sterile field
- Use of personal protective equipment e.g. gloves, aprons, surgical attire
- Correct patient preparation, including information required on the process to be performed
The following guidance is adapted from the evidence based "Clinical Nursing Procedures" from the Royal Marsden Hospital, Ninth Edition (2015) and provides a standardised procedure that all staff should follow.

1.8 Equipment Required

- Sterile dressing pack; containing gallipots or indented plastic tray, low-linting swabs
- Fluids for cleaning/irrigation
- Hypo-allergenic tape
- Appropriate sterile wound dressing
- Appropriate hand hygiene preparation (e.g. hand sanitiser, only to be used after handwashing and during procedure if hands not soiled)
- Any other equipment that may be needed; e.g. sterile scissors, catheter etc.
- 2% Chlorhexidine in 70% alcohol and paper towels for cleaning trolley
- Patient record forms for batch numbers of equipment to be recorded etc.

1.9 Procedure for Aseptic Non Touch Technique (ANTT)

- Explain and discuss procedure with patient
- Wash hands with liquid soap and dry on paper towels or use bactericidal hand sanitiser.
- Clean trolley (or surface, upon which sterile pack is to be opened onto) with 2% Chlorhexidine in 70% alcohol using a paper towel
- Place all equipment required onto the bottom shelf of the clean dressing trolley, (if trolley available). In a patient's home it is advisable to ensure there is a hard cleanable surface available for use. A solid plastic tray solely for the use of carrying out aseptic procedures is recommended.
- Take the patient to the treatment area, or environment where the dressing is to be carried out and expose the area to be treated whilst maintaining patients dignity and comfort
- Put on a plastic apron
- Take trolley to treatment area, (if applicable)
- Loosen dressing tape if necessary
- Decontaminate hands with bactericidal alcohol hand rub
- Check pack is dust free, sterile and intact, open pack and slide the contents onto the top shelf of the trolley, or clean hard surface
- Open sterile field using only the corners of the paper
- Check other packs as required for sterility, open and tip contents gently onto the centre of the sterile field
- Decontaminate hands with bactericidal hand sanitiser
- Place hand in sterile disposable bag from pack, arrange contents of dressing pack on the sterile field (NB some packs do not contain a bag and so an additional pack will be required containing a spare sterile field, gloves and a bag),
- Remove used dressing, if necessary, with hand covered with the disposable bag, invert bag and stick or clip to trolley
ICPG1: SECTION 3 - INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE

- Where appropriate swab “tear area” of lotions with chlorhexidine in 70% isopropyl alcohol saturated swab, tear open and pour lotion into gallipot/tray
- Put on sterile gloves, touching only the inside wrist area of the glove

1.10 Carry out procedure

**NB** Any equipment that becomes contaminated during the procedure must be discarded

- Make sure patient is comfortable
- Dispose of clinical waste in clinical waste bag and all other waste e.g. outer bag wrappings into household waste. Remove gloves and apron, dispose in clinical waste
- Clean trolley or hard surface with detergent wipes and dry.
- Clean hands with bactericidal hand sanitiser
- Write records, including adding sterility labels/batch numbers of equipment used etc. Complete care bundle if appropriate to the procedure being carried out

**NB** Different types of sterile packs may be required depending on the procedure to be performed e.g. wound dressing, catheterisation, IV cannulation etc.

1.11 Care in a Patient’s Home

All the same principles apply when performing aseptic technique in a patient’s home but the procedure should be adapted, e.g. a suitable surface should be cleared and cleaned for the pack to be opened to create the sterile field.

1.12 Waste should be disposed as described in the community waste policy.

1.13 Management of Chronic Wounds e.g. Leg Ulcers

1.13.1 In patient’s own home:

If dressings are removed by a “soaking” method, a dedicated bowl/bucket (that allows the whole foot to be placed at the bottom of the ‘container’ to prevent accidental spillage) must be used. A plastic liner should be used where available. If this cannot be undertaken, arrangements may have to be made for the patient to attend a leg ulcer clinic.

1.13.2 After the wound has been washed, the water should be disposed of down the toilet. The dedicated ‘container’ should then be washed with detergent and hot water, dried and stored inverted.

1.13.3 In a leg ulcer clinic:

A thorough and monitored cleaning schedule must be implemented. Staff must ensure that all surfaces are cleaned in between each patient with disposable cleaning products.

1.13.4 The room should have flooring and wall coverings that are washable, impervious and sealed.
1.13.5 The following must be available:

- A dedicated hand washbasin
- A deep sink (butler type sink) or hopper to dispose of contaminated liquids (if neither is available a toilet should be used
- A washable, impervious couch/chair
- Sufficient cupboards to store all equipment with no clutter on any horizontal surfaces (No open shelves etc.) or storage on the floor.

1.13.6 If a shower attachment is used for leg cleansing, this should be incorporated above a floor mounted butler sink to allow the patient’s feet to be placed into the sink, whilst the shower is used to hose/soak the dressings. The butler sink should be connected to a mains drainage exit.

1.13.7 The staff must wear personal protective clothing (including visor if a shower-Attachment is to be used).

1.13.8 If the shower attachment is not being used a dedicated bowl/bucket (that allows the whole foot to be placed at the bottom of the ‘container’ to prevent accidental spillage) must be used. A single-use plastic, impermeable lining bag should be placed in the ‘container’ before filling with water, and the container decontaminated and a new bag fitted between each patient.

1.13.9 All equipment must be decontaminated using general-purpose detergent and hot water or GPD hard surface wipes and then dried, after each use.

1.13.10 Single-use pots/tubes of cream and bandages must be used. Patients may bring in their own prescribed creams/bandages.

1.14 Management of chronic wounds

- If dressings are removed by soaking, a disposable paper-pulp bowl should be used.
- After the wound has been washed the water should be disposed of in a sluice or a dedicated ‘dirty’ sink, not the handwash sink.
- The paper bowl should be disposed of in a macerator or clinical waste bin.
- This process should be undertaken after every patient Episode of care.

1.15 Wound Swabbing
Swabbing should only be undertaken if wound/site of invasive device exhibits signs of infection or failure to progress. They should not be taken routinely, or if wound/site is healing.

1.16 Clean Technique
In many situations a modified aseptic ‘clean’ technique is more appropriate.

1.17 The aim is still to avoid the introduction of potential pathogens to a susceptible site and to prevent the transfer of pathogens to other patients or staff.
1.18 Indications for use of a clean technique may include:

- Oral hygiene procedures
- Catheter care (not insertion of catheter)
- Administration of injections / phlebotomy
- Dressing tracheostomy sites after 6 weeks
- Stoma care

1.19 The procedure is the same as for the aseptic technique, except that appropriate clean unsterile vinyl gloves are worn.

2.0 SOURCE ISOLATION – BARRIER NURSING

2.1 Within the Mental Health or Learning Disability environment, implementing isolation precautions can be problematic and as such the Infection Prevention and Control Nurse must be consulted to determine the best course of action for each individual situation.

2.2 Introduction
The aim of barrier nursing is to control the spread of pathogenic organisms, thereby reducing the risk of cross infection to and from a patient.

2.3 It is important for staff to appreciate that when they are caring for someone with a known or suspected infectious disease, there is the potential for cross-infection if basic infection control principles are not followed.

2.4 One nurse should be allocated to patient care for each shift. This nurse may not be involved with any other patient who has open wounds, or deal with dressings or any other invasive procedures on any other patient.

2.5 NB: Inform the Infection Control Nurse of any clients requiring barrier nursing. Strict Standard Universal Precautions – See ICPG-Section 2 - are to be instituted while barrier nursing a patient.
2.6 **Diseases**

This table lists the infectious diseases to which Barrier Nursing procedures should be applied, and the period required.

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>HOW LONG THE DISEASE REMAINS INFECTIOUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta-haemolytic streptococci Group A</td>
<td>The client remains infectious until:</td>
</tr>
<tr>
<td></td>
<td>(a) Clearance of organism is demonstrated Or,</td>
</tr>
<tr>
<td></td>
<td>(b) 48 hours after the start of appropriate antibiotic therapy</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>Infectious until vesicles are dry</td>
</tr>
<tr>
<td><em>Clostridium difficile</em> (Pseudomembranous colitis)</td>
<td>Infectious until diarrhoea has ceased (i.e. formed stools) following treatment or after causative/trigger factors have been addressed.</td>
</tr>
<tr>
<td>Gastro-enteritis – Diarrhoea and/or Vomiting</td>
<td>Infectious until diarrhoea has ceased for 48 hours</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Infectious until 7 days after the onset of jaundice</td>
</tr>
<tr>
<td>Hepatitis B + C</td>
<td>Blood and body fluids should be assumed to be infectious</td>
</tr>
<tr>
<td>HIV</td>
<td>Blood and body fluids should be assumed to be infectious</td>
</tr>
<tr>
<td>Impetigo</td>
<td>Infectious until:</td>
</tr>
<tr>
<td></td>
<td>a) lesions are crusted or healed</td>
</tr>
<tr>
<td></td>
<td>b) however infectivity will be reduced following 24 hours of appropriate antibiotics</td>
</tr>
<tr>
<td>Meningococcal Meningitis</td>
<td>Infectious for 24 hours after start of appropriate antibiotic therapy</td>
</tr>
<tr>
<td>Mumps</td>
<td>Infectious for 9 days after onset of swelling in salivary glands</td>
</tr>
</tbody>
</table>
Rubella | Infectious for 4 days from onset of rash. Non-immune pregnant staff should not nurse these patients
---|---
Scabies | Infectious until one application of a scabicidal treatment has been completed. See ICPG – Section 8
Shingles | The client remains infectious to a person who has not had chickenpox, by direct contact with vesicles. The contact will develop chickenpox.
Pulmonary Tuberculosis (Open) | Infectious until the first two weeks of appropriate antibiotic therapy have been given. The infectious period may be prolonged for Multi-Drug Resistant TB (MDRTB). See ICPG – Section 7

2.7 Precautions should also be taken with clients suffering from the following symptoms, until a diagnosis is confirmed:

- Diarrhoea of unexplained origin
- Pyrexia of unknown origin
- Excessive bleeding
- Rash of unknown aetiology
- Excessive vomiting.

2.8 Procedures

Standard Universal Precautions of Infection Control should be strictly adhered to at all times (refer to ICPG- Section 2)

2.9 All cases of infectious diseases on Trust premises must be reported to the Infection Prevention and Control Team.

2.10 Once a diagnosis has been made, the client (and family) must have their infectious disease carefully explained, the mode of spread and its significance, if any, for the patient’s condition.

2.11 Factsheets and patient information leaflets for the most common infectious diseases can be accessed on the Trust Intranet.

2.12 Whenever a patient is isolated in a single room, a sign should be prominently displayed to alert colleagues and visitors of the potential infection hazard.

2.13 See Appendix 5 – Isolation sign for door to room

2.14 Hand Hygiene

Hand-washing after contact with the patient and before leaving the room is vital.

2.15 Hand sanitiser should be used after normal hand-washing, or an antibacterial soap should be used to wash hands.
2.16 **Disposal of Potentially Infected Items**
Contaminated dressings and all disposable items should be disposed of as clinical waste (orange bag).

2.17 **Urinals / Bedpans and Commodes**
Washer-disinfectors are recommended, but some areas do make use of macerators.

2.18 If not available, disposable pulp urinals/bedpans should be used. Contents should be emptied down the toilet and flushed away, and the container disposed of as clinical waste.

2.19 **Linen**
Should be washed on as hot a wash as the fabric will tolerate, as promptly as possible.

2.20 See: **Laundry management** – section 7 of this guideline.

2.21 **Crockery and Cutlery**
Disposable items are not generally required. General-purpose detergent (GPD) and water at or above 82 degrees (food safety) is sufficient to wash dishes when a dishwasher is not available.

2.22 In some cases when dishwashers breakdown or there is insufficient hot water for whatever reason to sterilise items like this, disposables may be used.

2.23 **Transporting Clients**
Clients should only be sent to other department/premises (i.e. care homes, hospital Out-patient or In-patient departments) when it is essential.

2.24 Staff involved in the direct care of the client should be informed of the risk, so that relevant control measures can be implemented. Ambulance control should be informed when booking transport.

2.25 An **Infection Prevention and Control Admission/Discharge Transfer Form** is to be completed in all instances when a patient is being transferred between healthcare facilities (incl. inter-ward transfers) See **Appendix 1**

2.26 **Deceased infectious clients (See also section 8 of this document)**
Standard Universal Precautions of Infection Control should be maintained when a patient dies.

2.27 Body bags are not necessary in most cases (only used in highly infectious cases i.e. Viral Haemorrhagic Fever). However if there is excessive risk of leakage of body-fluids from the body, body bags should be used.

2.28 The mortuary/funeral director staff should be informed of the potential infectious risk.
2.29 **Daily Cleaning of Isolation Rooms**
All rooms must be cleaned at least daily using freshly prepared General Purpose Detergent (GPD) solution. Horizontal surfaces should be kept dust free and any spillages cleaned immediately.

2.30 Isolation rooms should be cleaned after the other areas of the ward and all equipment such as cloths and mops should be disposable.

2.31 **Decontamination of the environment following discharge/death**
Following the vacation of a room by a client with a known infection, or the successful clearance of infection from a client, the entire room should be deep cleaned for infection.

2.32 All medical equipment used within the room is to be cleaned and decontaminated according to manufacturer’s instructions and/or guidelines within section 3.0.

2.33 Please contact the Infection Prevention and Control Nurse if further advice is required.

### 3.0 DECONTAMINATION OF EQUIPMENT

3.1 **Introduction**
The aim of decontaminating equipment is to prevent potentially pathogenic organisms reaching a susceptible host in sufficient numbers to cause infection.

3.2 Items that are classified as single-use only must never be re-used. If in doubt, refer to the manufacturer’s recommendations.

3.3 After use these items should be disposed of as clinical or sharps waste.

3.4 The single-use logo is usually displayed on the item.

![Single Use logo](image)

3.5 Re-usable equipment e.g. commodes, hoists and wheelchairs, should be appropriately cleaned and decontaminated between each patient using a risk assessment model.

3.6 Use only the method advised by the manufacturer - using any other process may invalidate warranties and transfer liability from the manufacturer to the person using or authorising the process.

3.7 The person who has cleaned the item of medical equipment must affix a signed and dated decontamination/cleaning indicator tape/sticker (e.g. Vernacare or Clinell) to indicate it ready for use on another patient.
3.8 **Risk Assessment**

Medical equipment is categorised according to the risk that particular procedures pose to patients - by assessing the microbial status of the body area being manipulated during the procedure. For example, items that come into contact with intact mucous membranes are classified as intermediate risk and require disinfection between each use as a minimum standard. Items that enter normally sterile body areas, or come into contact with broken skin or mucous membranes, are classified as high-risk and must be sterile before use.

3.9 It is recommended that items used in the vagina or cervix must be single-use. (Vaginal speculae – MHRA recommend single-use disposable.)

3.10 **Risk Assessment for Decontamination of Equipment**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Application of Item</th>
<th>Minimum Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>• In contact with healthy skin or</td>
<td>Cleaning</td>
</tr>
<tr>
<td></td>
<td>• Not in contact with patient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• e.g. furniture, mattresses, surfaces, commodes</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>In contact with mucous membranes</td>
<td>Cleaning followed by sterilization or disinfection, or single-use.</td>
</tr>
<tr>
<td></td>
<td>• Contaminated with particularly virulent or readily transmissible organisms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Before use on immunocompromised patients</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>• In close contact with broken skin or broken skin or broken mucous membrane</td>
<td>Cleaning followed by sterilisation OR Single use</td>
</tr>
<tr>
<td></td>
<td>• Introduced into sterile body areas</td>
<td></td>
</tr>
</tbody>
</table>

MHRA DB2006 (05) November 2006

3.11 The Medical and Healthcare Products Regulatory Agency (MHRA) defines the following terms:

3.12 **Cleaning** is a process which physically removes contamination but does not necessarily destroy microorganisms. The reduction of microbial contamination cannot be defined and will depend upon many factors including the efficiency of the cleaning process and the initial bio-burden.

3.13 Cleaning is an essential prerequisite of equipment decontamination to ensure effective disinfection or sterilisation can subsequently be carried out. It must be carried out before disinfection and sterilisation to make these processes effective.
3.14 **Disinfection** ‘is a process used to reduce the number of viable microorganisms, which may not necessarily inactivate some viruses and bacterial spores’. Disinfection will not achieve the same reduction in microbial contamination levels as sterilisation.

3.15 **Sterilisation** ‘is a process used to render the object free from viable microorganisms, including spores and viruses’.

3.16 HTM 2030 and HTM 2010 are to be replaced by HTM 01-01 Decontamination of Reusable Medical Devices, Part A, and Part B 2007-08.

3.17 **Cleaning Methods**

Cleaning is the first step in the decontamination process. It must be carried out before disinfection and sterilisation to make these processes effective. Thorough cleaning is extremely important in reducing the possible transmission of all micro-organisms, including the abnormal prion protein that causes variant CJD.

3.18 Thorough cleaning with detergent and warm water will remove many microorganisms. Hot water should not be used as it will coagulate protein making it more difficult to remove from the equipment.

3.19 **Disinfection methods**

Disinfection methods apply to handwashing, skin preparation and equipment.

3.20 Disinfection of equipment should be limited and, where possible, disposable used instead. If disinfection is required, use the method recommended by the manufacturer.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine-based: Hypochlorites</td>
<td>Wide range of bacterial, virucidal, sporicidal and fungicidal activity.</td>
<td>Inactivated by organic matter. Corrosive to metals. Diluted solutions can be unstable. Need to be freshly prepared. Does not penetrate organic matter. Bleaches fabrics. Need ventilation.</td>
<td>can be used on surfaces and for body fluid spills</td>
</tr>
<tr>
<td>(e.g. Domestos, Milton)</td>
<td>Rapid action. Non-toxic in low concentrations. Can be used in food preparation. Cheap.</td>
<td></td>
<td>as above</td>
</tr>
<tr>
<td>NB Undiluted commercial hypochlorite contains approx. 100,000ppm available chlorine</td>
<td></td>
<td></td>
<td>as above</td>
</tr>
<tr>
<td>Sodium Dichloroisocyanurates (NaDCC) e.g. Presept, Haz-Tab, Sanichlor</td>
<td>Slightly more resistant to inactivation by organic matter. Slightly less corrosive. More convenient. Long shelf-life.</td>
<td>as above</td>
<td>as above</td>
</tr>
</tbody>
</table>
### Alcohol 70% e.g. isopropanol
- Good bactericidal, fungicidal and virucidal activity.
- Rapid action.
- Leaves surfaces dry.
- Non-corrosive.
- Non-sporicidal.
- Flammable.
- Does not penetrate organic matter.
- Requires evaporation time.
- Can be used on surfaces, or for skin and hand decontamination.

### Chlorhexidine e.g. hibiscrub, chlorhexidine wound cleaning sachets
- Most useful as disinfectants for skin.
- Good fungicidal activity.
- Low toxicity and irritancy.
- Limited activity against viruses.
- No activity against bacterial spores.
- Inactivated by organic matter.
- For skin and hand decontamination.

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### Sterilisation Methods

Within EPUT Mental Health and some community services, sterile instruments are obtained by purchasing pre-sterilised single use items. These avoid the need for re-sterilisation and are a practical and safe method. These must be stored using a stock rotation system according to manufacturer’s instructions.

### Single use means that the manufacturer: **intends the item to be used once, then thrown away**; considers the item unsuitable for use on more than one occasion; has insufficient evidence to confirm that re-use would be safe.

### Single patient use means that the item can be reused if re-processed using an appropriate method and is used on the **same patient only** e.g. disposable hoist slings. The duration of use is dependant upon undertaking a risk assessment of individual risk factors.

### Using a sterile supplies department (SSD)

SSDs provide a cost effective and efficient service. There should be a contract specifying the responsibilities of both parties. Since June 1998 SSDs have been bound by the Medical Device Directive 93/42/EEC, which requires the department to have a quality system of audit and to have been assessed and validated as CE compliant.

### A-Z of Equipment and the Decontamination Method

Decontamination of equipment should always be carried out by taking the manufacturer’s instructions into consideration.

### Use Available Chlorine (ppm):
- Blood Spillages 10,000ppm
- Environmental disinfection 1,000ppm

### Ensure that manufacturers’ instructions are followed to obtain correct concentration of solution.
<table>
<thead>
<tr>
<th><strong>EQUIPMENT</strong></th>
<th><strong>CLEANING METHOD</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baths</td>
<td>Must be cleaned between users. With gloved hand, clean bath surface, grab rails and taps with hot water, GPD and paper towels or GPD wipes.</td>
</tr>
<tr>
<td>Bedpans</td>
<td>Disposable pans are recommended and disposed of in a Macerator. Reusable pans must be decontaminated in Washer Disinfector. Manual cleaning is not advised.</td>
</tr>
<tr>
<td>Bedpan washers/ macerators</td>
<td>These should be used, cleaned and serviced according to manufacturer’s guidance.</td>
</tr>
<tr>
<td>Beds, backrests, bed cradles and mattresses</td>
<td>To be cleaned between users and/or minimum weekly, with hot water and GPD or GPD wipes. If soiling is evident clean immediately as above and wipe over with chlorine-releasing compound or disinfectant wipes. Please refer to manufacturer’s cleaning instructions.</td>
</tr>
<tr>
<td>Bowls &amp; jugs - patient washing</td>
<td>Disposable paper pulp bowls and jugs preferable Clean between each use with hot water and GPD or GPD wipes, dry using disposal paper towels. Rinse and store dry.</td>
</tr>
<tr>
<td>Commode armrests and seats</td>
<td>If no soiling is evident, clean with hot water and GPD or disinfectant/detergent wipes, and dry with paper towels if necessary. If soiling is evident, or there is an outbreak of diarrhoea, or the previous user had a loose stool, clean with hot water and GPD. Wipe over with a chlorine-releasing compound (e.g. Actichlor, Chlortabs) or disinfectant wipes. <strong>Use separate wipes for armrests and seats.</strong></td>
</tr>
<tr>
<td>Ear pieces from auroscopes</td>
<td>Single-use only is recommended If not available, clean thoroughly with GPD and hot water, using thin disposable brushes to clean inside. Rinse and dry thoroughly before storage.</td>
</tr>
</tbody>
</table>
| ECG Equipment - Electrodes - Leads - Machine | - Use disposable electrodes  
- Wipe well with hot water and GPD, or detergent wipes  
- Wipe over with damp cloth, keep covered when not in use |
<p>| Examination couches                   | Surface must be in a good state of repair (no rips/tears/exposed foam), clean with hot water and GPD or GPD wipes at start and finish of each session and between patient care episodes. Cover with disposable paper roll and change between each client use. |</p>
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Disinfection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoists and slings</td>
<td>After each patient use, clean thoroughly using hot water at 60 degrees in a washing machine and GPD and store dry. Single use patient slings are available use of these is advisable. Launder after discharge or if soiled. Disposable Slings are available</td>
</tr>
<tr>
<td>Nail brushes</td>
<td>Single use only.</td>
</tr>
<tr>
<td>Nebulisers</td>
<td>Use disposable masks and tubing. The nebuliser machine must be thoroughly decontaminated using disinfectant wipes between patient uses. All tubing, mask, and filters should be disposed of after use, and replaced with new, disposable components before the item is used by another client. Staff must maintain a register of use (giving patient details and date of use) for each nebuliser including a record of the decontamination process detailing the date, time, cleaning method used, items replaced, and the signature and name of the member of staff responsible.</td>
</tr>
<tr>
<td>Stethoscopes</td>
<td>Clean with GPD wipe after each use</td>
</tr>
<tr>
<td>Suction equipment</td>
<td>Disposable liners to be used in suction units are recommended. After each use (or 24 hours if in frequent use) the disposable components should be disposed of in the appropriate waste stream. Non-disposable bottles – it is recommended that these are changed to disposable systems. Tubing should be disposable. Filters - should be replaced when wet and at appropriate intervals in keeping with the manufacturer’s instructions. Ensure accurate records are kept in order to evidence this</td>
</tr>
<tr>
<td>Thermometers</td>
<td>Single-use recommended If an electrical device is used disposable probe covers must be used.</td>
</tr>
<tr>
<td>Trolleys (dressing trolleys)</td>
<td>Clean top and all surfaces with hot water and GPD daily or disinfectant wipes. Dry thoroughly. Clean trolley between each episode of patient care</td>
</tr>
<tr>
<td>Toys</td>
<td>See section 3.5</td>
</tr>
<tr>
<td>Urinals</td>
<td>Single-use recommended. Non disposable urinals mechanically cleaned as described in bedpans.</td>
</tr>
<tr>
<td>Urine jugs</td>
<td>Single-use recommended. Reusable - Wearing gloves and apron, a separate clean jug should be used for each urine collection. Empty the contents into the toilet or sluice hopper and rinse. Clean thoroughly with hot water and GPD or GPD wipe, dry using disposable paper towels. Store inverted. Allocate a jug per individual resident/patient.</td>
</tr>
</tbody>
</table>
Walking frames, wheelchairs etc. | Clean with GPD and hot water, or GPD wipes and dry. Clean thoroughly weekly or daily during outbreaks and immediately after contamination with body fluids

Weighing scales | Clean with GPD and hot water, or GPD wipes and dry. Clean thoroughly weekly or daily during outbreaks and immediately after contamination with body fluids

Work surfaces | **General Cleaning**
Use GPD and hot water or GPD wipes

**Contaminated Surfaces**
Clean with GPD and then wipe with GPD

Vaginal specula | Use single-use only.

3.28  *Equipment kept in an in-patient environment that has been exposed to micro-organisms pose a risk of cross infection therefore, ‘deep’, or ‘terminal’ cleaning is required when the patient leaves that environment.*

3.29  This will be carried out using the method stated above, followed by a chlorine releasing agent (e.g. Actichlor, Chlorclean) or a combined detergent and chlorine releasing agent such as Actichlor–plus. Chlorine dioxide solution is also acceptable.

3.30  When cleaning equipment which has been used by or for a patient with a suspected or confirmed Healthcare Associated Infection (HCAI) or in a contaminated area, the following must be adhered to:

- The equipment must be cleaned immediately after use and prior to removal from that area
- Hands must be decontaminated with soap and water before and after cleaning the equipment
- PPE must be worn and disposed of correctly in the orange waste stream after use
- Cleaning must be performed using a general purpose detergent followed by a 1,000 parts per million chlorine-containing disinfectant solution or other sporicidal product.
- Disposable cloths must be used
- Cleaning of equipment must be systematic (from the top down)
- Clean items must be stored separately from used items and away from areas where cleaning is taking place
- The item must be labelled as clean and cleaning documented by the person undertaking the cleaning process
3.31 When cleaning equipment following use by, or for a patient with no known or suspected infection in a non-contaminated environment, the following must be adhered to:

- The equipment must be cleaned immediately after use in a designated area or away from clean items
- Hands must be decontaminated with soap and water before and after cleaning the equipment
- PPE must be worn and disposed of correctly in the tiger stripe offensive waste stream after use
- Cleaning must be performed using a detergent
- Cleaning of equipment must be systematic (from the top down)
- Clean items must be stored separately from used items and away from areas where cleaning is taking place
- The item must be labelled as clean and cleaning documented by the person undertaking the cleaning process

3.32 Equipment which is being sent away for servicing or repair is to be thoroughly cleaned before despatch and a decontamination certificate is to be completed by the member of staff tasked with cleaning to indicate that it has been cleaned and rendered safe for transporting. See Appendix 3 – Declaration of Contamination status

3.33 Use of fans in clinical environments – please see Appendix 12

4.0 ENVIRONMENTAL CLEANING

4.1 The environment plays a relatively minor role in transmitting infection, but dust, dirt and liquid residues will increase the risk. They should be kept to a minimum by regular cleaning and by good design features in buildings, fittings and fixtures.

4.2 Work surfaces and floors should be smooth-finished, intact, and durable, of good quality, washable, not allow pooling of liquids and be impervious to fluids.

4.3 All surfaces should be kept clear of unnecessary equipment or clutter to ensure regular and thorough cleaning can be carried out. The most important component of an effective cleaning programme is the regular removal of dust from all horizontal surfaces.

4.4 GPD and water should be used for all environmental cleaning – follow the manufacturer’s instructions. Disinfectant such as a chlorine releasing solution, should only be used to decontaminate spills of blood or blood stained body fluids, or for deep cleaning of an area after a known
case or outbreak of infection. Do not use on urine or vomit spills due to the excessive chlorine fumes which will result from the acid/alkali mix.

4.5 Carpets are not recommended in treatment rooms or areas where clinical procedures take place due to the risk of body fluid spills. However, for agreed carpeted areas within nursing homes, carpeting should be able to withstand regular steam cleaning and frequent disinfection with a hypochlorite solution due to the frequency of incontinence/body fluids behavioral incidents on these units. Carpets should have a waterproof backing, joints should be sealed and pile fibres should preferably be water repellent and non-absorbent. Additionally Hepa-filtered cleaning equipment should be available to support adequate cleaning. The Trust should ensure that a robust cleaning regimen is in place.

4.6 Walls require spot cleaning to remove splashes/marks

4.7 Difficult to reach/clean areas should have contracts arranged for regular planned preventive maintenance (PPM) and cleaning e.g. behind radiator guards, fans, ventilation units/grills etc

4.8 All cleaning equipment should be colour-coded for different areas of use, as per National colour-coding guide (see below). E.g. buckets, mop handles, aprons, gloves and disposable cloths etc.

4.9 The water used for cleaning, in buckets, must be changed frequently and disposed in a sluice sink/hopper. Clean the mop handle and bucket after use. Dry and store bucket inverted.

4.10 Mop heads should be removed after each use for laundering in a hot wash and then stored dry, but if heavily soiled they must be discarded. Single use mop heads should be used if industrial washing machine laundering facilities are not available.

4.11 Single-use, non-shedding cloths or paper roll should be used for cleaning and drying. Where the Microfibre system is used, cloths and mops to be laundered strictly according to the manufacturer's instructions.

4.12 Equipment and materials used for general cleaning should be kept separate from those used for dealing with body fluids.

4.13 All equipment used for cleaning including vacuums and floor polishers should be clean and maintained properly.

4.14 Colour-Code for Hygiene
Based on the Safer Practice Notice – Colour-coding hospital cleaning materials and equipment, published by the National Patient Safety Agency.
National Colour Coding Scheme for Hospital Cleaning Materials and Equipment

All NHS organisations should adopt the colour code below for cleaning materials. All cleaning items, for example, cloths (re-usable and disposable), mops, buckets, should be colour coded. This also includes those items used to clean catering departments.

**Important:** Work must be carried out from the cleanest to the dirtiest area. This greatly reduces the risk of cross contamination.

- The aim of the colour-coding system is to prevent cross-contamination
- It is vital that the colour coding system forms part of any employee induction or continuous training programme
- The colour-coding system must relate to all cleaning equipment, cloths and gloves.
- Monitoring of the system and control of colour-coded disposable items against new stock release is extremely important.

**NB:** It is important to ensure that there is the clean to dirty flow (e.g. basins are cleaned before toilets)

**RED**
- Bathrooms, Washrooms, Showers, Toilets, Basins and Bathroom Floors

**BLUE**
- General Areas including Wards, Departments, Offices and Basins in Public Areas

**GREEN**
- Catering Departments, Ward Kitchen Areas and Patient Food Service at Ward Level

**YELLOW**
- Isolation Areas

EPUT gives acknowledgement to the NPSA for this poster. Text has been added to the red box to assist with clarity.
### TOYS AND GAMES CLEANING

5.0 TOYS AND GAMES CLEANING

5.1 Toys are important in the social and educational development for children. They are also used in clinics and wards during children's therapy sessions and for inpatient leisure purposes. However, the sharing of toys between children can be classed as a potential source of infection as they become contaminated with germs from unwashed hands, spills of body fluids, or by children putting their mouths to them. Germs can survive on the surface of

<table>
<thead>
<tr>
<th><strong>DOMESTIC</strong></th>
<th><strong>CLEANING</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket (plastic)</td>
<td>Empty contents down toilet or slop hopper. Wash after every use with GPD and dry. Store inverted.</td>
</tr>
<tr>
<td>Curtains</td>
<td>Launder 6 monthly or at once if visibly soiled or after an outbreak of infection as part of the deep clean. Disposable curtains are recommended where a laundry service is not available</td>
</tr>
<tr>
<td>Door Handles / push plates</td>
<td>Under normal conditions clean daily with GPD. During outbreak, increase frequency as advised by the IPC Team</td>
</tr>
<tr>
<td>Mop (wet)</td>
<td>Rinse, dry and store with the mop head off of the floor (inverted) after use; heat disinfects in washing machine and dry thoroughly daily. If disposable, change daily.</td>
</tr>
<tr>
<td>Mop (dry)</td>
<td>Single-use covers – dispose of after use</td>
</tr>
<tr>
<td>Lavatory brushes</td>
<td>Rinse in flushing water and store dry – only use “hanging” style toilet brush holder. Only to be used in staff toilets and low risk areas</td>
</tr>
<tr>
<td>Suggested colour coding of cleaning equipment</td>
<td>Red: toilet bathroom/sluice, Blue: General areas, Green: kitchen/pantry, Yellow: isolation</td>
</tr>
<tr>
<td>Floors</td>
<td>Dust control - dry mop/vacuum, Wet cleaning - wet mop, wash with hot water and GPD, If known contamination - follow with hypochlorite 1000 ppm</td>
</tr>
<tr>
<td>Furniture and fittings</td>
<td>Damp dust with hot water and detergent. If known contamination - follow with hypochlorite 1000 ppm</td>
</tr>
<tr>
<td>Lavatory seat and handle</td>
<td>If soiling is evident, or there is an outbreak of diarrhoea, or the previous user had a loose stool, clean with hot water and GPD followed by chlorine-releasing compound (i.e. Haztabs, Actichlor, Chlortabs) 1000 ppm</td>
</tr>
<tr>
<td>Showers</td>
<td>Should be clean and maintained. Launder curtains 3 monthly. Shower heads should be de-scaled when necessary. If not in use – contact Estates for Legionella flushing advice (potential Legionella risk)</td>
</tr>
<tr>
<td>Walls and ceilings</td>
<td>Not an infection problem. When visibly soiled use hot water and detergent. Splashes of blood, urine or known contaminated material should be cleaned promptly with hypochlorite solution 1000ppm</td>
</tr>
</tbody>
</table>
toys in sufficient numbers to present a risk of infection e.g. MRSA, influenza and viruses which cause gastro-intestinal infections e.g. Norovirus.

5.2 *The Health and Social Care Act 2008 – Code of Practice for health and adult social care on the prevention and control of infections and related guidance* sets out criteria by which managers of NHS organisations are to ensure that patients are cared for in a clean environment, to prevent and control Health Care Associated Infections (HCAI).

5.3 Criterion 2 – Duty to Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections requires that: Decontamination of equipment – including cleaning and disinfection of items that come into contact with the patient or service user, but are not invasive devices

5.4 Toys or games, shared by children or adults during treatment sessions or in waiting rooms, fall into this “equipment” category.

5.5 **Toy Selection Criteria**

When selecting and purchasing toys/games, the following must be considered:

5.6 Ensure that all toys/games can be easily, and regularly, cleaned i.e.

- Soft toys – withstand regular washing at 60 °C
- Plastic and wooden toys – withstand washing with warm, soapy water
- Books – withstand regular wiping with detergent wipes.
- Electrical/computerised gaming equipment can be wiped regularly with detergent wipes.

5.7 **General Instructions**

A schedule/checklist for regular cleaning should be devised by the manager, depending on the kind of toy/game and the likelihood of soiling (i.e. number, and age of children used by, placed in mouth etc), and responsibilities allocated to relevant clinical staff.

5.8 All toys/games should be checked regularly and replaced if broken/damaged and not left out for use.

5.9 Toys/games should be stored away in a clean state and in clean, washable, lidded containers or cupboards.

5.10 Any toy/game that is visibly soiled should be cleaned immediately or disposed of.

5.11 Any toy/game that is contaminated with blood/blood-stained body fluids must be decontaminated immediately (e.g. disinfectant wipes), or discarded.
5.12 Children should not be allowed to take toys/games into the toilet area.

5.13 Specific Cleaning Instructions

Soft Toys: Keep these to a minimum
If used by small children and placed in their mouths, should be washed at 60°C, between use by each child i.e. daily. If there is no access to a washing machine, they should not be purchased. For specialist toys i.e. those used in speech and language therapy a risk assessment should be completed outlining control measures for soft toys in use that cannot be laundered.

5.13.1 Hard-surfaced toys:
If used by small children and placed in their mouths, should be washed with hot, soapy water, between use by each child.

5.13.2 If used by older, physically well children and not contaminated with body fluids, wash regularly with hot, soapy water, rinse and dry thoroughly.

5.13.3 Older children’s toys and larger play equipment (e.g. doll’s house) should be inspected on a weekly basis and cleaned if necessary.

5.13.4 Books:
Inspect weekly and wipe surfaces with detergent wipes. Books that are visibly soiled/contaminated with body fluids should be discarded. Books with signs of dampness or mildew should also be disposed of.

5.13.5 Play dough / Plasticine:
Skin lesions should be covered and hands washed before and after play. Replace soft modelling materials and dough regularly.

5.13.6 Electronic equipment:
As this is often shared by many on the unit, hand held controls and control panels should be inspected and wiped down with detergent wipes daily with a thorough clean at least once per week. Stringent hand hygiene should be encouraged at all times, by all children who will be sharing this equipment. Posters should be displayed to encourage children to clean hands or their parents to assist with the child’s hand hygiene.

6.0 ENTERAL FEEDING

6.1 Preparation and storage of feeds
Effective hand decontamination must be carried out before starting feed preparation.

6.2 Wherever possible pre-packed, ready-to-use feeds should be used in preference to feeds requiring decanting, reconstitution or dilution.

6.3 When decanting, reconstituting or diluting feeds, a clean working area should be prepared and equipment dedicated for enteral feed use only must be used.
6.4 Where ready-to-use feeds are not available, feeds may be prepared in advance, stored in a refrigerator, and used within 24 hours. Feeds must be appropriately labelled with identification of preparation time and who prepared it.

6.5 The administration system selected should require minimal handling to assemble, and be compatible with the patient’s enteral feeding tube.

6.6 Feeds should be mixed using cooled boiled water or freshly opened sterile water and a non-touch technique.

6.7 Feeds should be stored according to the manufacturer’s instructions and, where applicable, in accordance with food hygiene legislation.

6.8 **Administration of feeds**
Minimal handling and an aseptic non-touch technique should be used to connect the administration system to the enteral feeding tube.

6.9 Ready-to-use feeds may be given for a whole administration session, up to a maximum of 24 hours.

6.10 Reconstituted feeds should be administrated over a maximum 4 hour period.

6.11 Administration sets and feed containers are single use only and must be discarded after each feeding session.

6.12 In some areas, single patient use syringes are used to administer drugs. Check the packaging to ensure it is single patient use, and, if it is, follow the manufacturer’s instructions on decontamination between uses. Syringes used for flushing the line or medication administration must be specifically for oral administration and compatible with the system used.

6.13 Flush tube with water following the feed to remove any milky residue.

6.14 **Care of the insertion site and enteral feeding tube**
The stoma should be washed daily with water and dried thoroughly.

6.15 To prevent blockage, the enteral feeding tube should be flushed with fresh tap water before and after feeding or administering medications.

6.16 Enteral feeding tubes for patients who are immunosuppressed should be flushed with either cooled freshly boiled water or sterile water from a freshly opened container.

6.17 **Appendix 8 – Enteral Feeding Care Bundle**
**ICPG1: SECTION 3 - INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE**

### 7.0 LAUNDRY MANAGEMENT

#### 7.1 Procedures for Handling Laundry

This procedure deals with all laundry management from storing clean linen, to washing of linen and staff uniforms and the equipment required.

#### 7.2 When used linen is sent to a central/commercial laundry follow the laundry’s protocols and / or The Facilities Department Guidelines.

#### 7.3 A laundry area must be designated for that purpose only, with separate ventilation and away from anywhere that food is prepared.

#### 7.4 It should be ensured that soiled linen does not come into contact with clean linen.

#### 7.5 An industrial washing machine with both sluice and hot wash cycles (65°C minimum, preferably 90°C) should be used.

#### 7.6 A dryer is recommended to ensure that linen is thoroughly dried in inclement weather.

#### 7.7 Individual contingency plans should be made for dealing with laundry in the event of equipment breakdown.

#### 7.8 A maintenance programme and a record should be kept of the checks made as evidence of diligence and care.

#### 7.9 Hand-washing facilities for staff handling laundry should be available.

#### 7.10 Categories of Laundry

**7.10.1 Used Linen** - all used linen, at 65°C (150°F) for not less than ten Minutes OR 71°C for not less than 3 mins.

**7.10.2 Foul Linen** - is used linen contaminated by blood, faeces, urine, saliva or other body fluids. A sluice cycle is necessary for foul linen, the washing cycle is then the same as for used linen. Foul linen should not be soaked or sluiced by hand. Place in a red soluble bag. If used, the inner water-soluble bag should be transferred to the washer without opening, followed by the outer bag which should be washed in a similar fashion. The washing cycle is then the same as for used linen. Ideally, infected linen should be washed after all other washing is completed and a further cycle used to flush the machine especially if a non-industrial machine is used.

**7.10.3 Foul linen must be laundered separately and not mixed with other laundry.**

**7.10.4 Infected Linen** includes all linen from patients with or suspected of suffering from an infection. Linen in this category should not be sorted but ideally should be sealed in a red water-soluble bag immediately on removal from the patient’s bed or person. If used, the inner water-soluble bag should be
transferred to the washer without opening, followed by the outer bag which should be washed in a similar fashion. The washing cycle is then the same as for used linen. Ideally, infected linen should be washed after all other washing is completed and a further cycle used to flush the machine especially if a non-industrial machine is used.

7.10.5 **Patient's clothing** includes any personal items which belong to individual patients and require washing on the ward. Please ensure these items are washed on as hot a temperature as the fabric will allow. Consult item label.

7.11 **Laundry handling**

Laundry bags should be colour coded.

7.12 Colour coded bags should always be used when sending laundry to a commercial laundry, as per their instructions. Please consult your local protocol.

7.13 Bags must only be 2/3 filled to enable the bags to be securely fastened before being sent to the laundry. Bags should be stored in a designated location which is secure, cool, dry and free from pests. The designated storage area should be separated from areas for the storage of clean linen, food preparation areas and those parts of the home frequented by clients.

7.14 Pillows should be either machine washable for single patient use or have a breathable wipe-down cover and pillow cases washed at least weekly or immediately if soiled.

7.15 All other linen, such as blankets and sheets must be laundered weekly or immediately if soiled. Duvets should either be machine washable or have a breathable wipe-down cover.

7.16 In clinic rooms disposable paper roll should be used to cover plastic pillows and couches, where possible, rather than linen.

7.17 **Risks to Staff from Infected Linen**

The organisms in soiled and fouled linen are unlikely to cause infection in healthy workers provided that care is taken.

7.18 To further minimise the risk, ensure that staff are trained to carry out the necessary procedures wear waterproof aprons and gloves when dealing with used laundry.

7.19 Ensure that adequate hand washing facilities are available and conveniently located either within the laundry room or within close proximity.

7.20 Remove any protective clothing and dispose of into clinical waste bag. Wash hands before returning to other duties.

7.21 Smoking and eating is not allowed in the laundry room.

7.22 Cover cuts and abrasions with waterproof dressing.
7.23 Be familiar with the sharps injury procedure should an injury occur from needle/sharps hidden in the laundry.

7.24 **Storage of Linen**
There should be a separate area for drying, ironing and storage of clean linen, well away from used linen to prevent contamination.

7.25 Clean linen should be stored in a dry area raised at least six inches/15 centimetres above the floor level. It must not be stored in bathrooms or sluices.

7.26 Unused clean linen, once taken out onto the ward, should not be returned into the linen store. Therefore only small amounts should be removed at a time.

7.27 **Staff Uniforms or Work Clothes**
Staff at risk of contamination from body fluids to their uniforms should always change into ‘home’ clothes as soon as possible - preferably before leaving the work place or as soon as home is reached.

7.28 Under no circumstances should staff go shopping or socialising in uniforms/work clothes that may have been in contact with body fluids.

7.29 Uniforms or work clothes should be washed as soon as possible on as hot a wash as the fabric will tolerate, separate from other clothing.

7.30 Cardigans/jumpers should be washed at least weekly and not worn while delivering any form of clinical patient care (ideally not at all in the clinical setting).

7.31 It is advisable that worn uniforms should be stored away from other household washing.

7.32 Shoes should be cleaned immediately if contaminated with body fluids, using general purpose detergent and hot water - disposable gloves should be worn.

7.33 **Advice to carers laundering in a patient’s own home**
The basic elements of standard infection prevention and control precautions should be explained and followed by patients and carers in the community in relation to laundry. In particular the use of protective clothing such as gloves and aprons and the importance of hand washing should be emphasised. In addition the following should be noted:

- Dispose of plastic bags used to carry items.
- Launder at as high a temperature as possible as per washing instructions.
- Use normal washing powder.
- Tumble dry where possible.
- Iron where possible.
- Wash hands after dealing with soiled items and after removing gloves.
- Hand washing / rinsing of used linen is not recommended, but if absolutely necessary submerge items to avoid aerosolisation and splashes. Do not leave items in soak or add disinfectants.
- Generally personal items do not need to be separated for washing.
- **Heavily soiled items**: dispose of any solids in toilet, place in washing machine and use sluice/prewash cycle before washing in main wash cycle on as hot a wash as the fabric will allow. If items are heavily soiled, dispose of item with consent by wrapping well and placing in domestic waste.

### 8.0 MANAGEMENT OF NON INFECTIOUS AND INFECTIOUS DECEASED CLIENTS

8.1 This guideline sets out the procedures for staff to follow for the management of non-infectious and infectious deceased clients.

8.2 **Management of deceased clients**
The deceased should be treated with the due respect and dignity appropriate to their religious and cultural background. Last Offices which vary according to religious and cultural practices may be compromised by the need for specific measures if an infectious disease was associated with the death, or co-existed at the time of death. Any problems should be discussed with the Consultant in Communicable Disease Control who may wish to consult the appropriate priest or religious authority.

8.3 Most bodies are not infectious, however through the natural process of decomposition the body may become a source of potential infection whether previously infected or not, therefore sensible precautions should be taken routinely:
- Disposable gloves and aprons should be worn when washing and preparing the body
- Washing the body with soap and water is adequate
- Dressings, drainage tubes, etc. should be removed unless the death occurred within 24 hours of an operation or was unexpected in which cases a post-mortem is likely.
- Clean dressings should be applied to any wounds
- Profusely leaking orifices may be packed with gauze or cotton wool.
8.4. **Additional last offices for a known infected body**

The body of a person who has been suffering from an infectious disease may remain infectious to those who handle it therefore strict Universal Precautions should be applied.

8.5 Body bags are available from either the undertaker or the stores centre from where all other care equipment is requested.

8.6 The mortuary/funeral director staff should be informed of the potential infectious risk.

8.7 It would be rare for a patient within the Community or Mental Health environment to die from one of the following diseases, but should this occur, expert guidance should be sought from the Infection Control team and/or the Health Protection Agency with regards preparing the body for transport.

- Anthrax
- Brucellosis
- Cholera
- Diphtheria
- Food Poisoning (if faecal matter is leaking)
- Hepatitis B
- Hepatitis C
- HIV/AIDS
- Leprosy
- Meningococcal Septicaemia (with or without meningitis)
- Plague
- Acute poliomyelitis
- Psittacosis
- Pyrexia of unknown origin
- Q fever
- Rabies
- Smallpox
- Tuberculosis (infective)
- Viral Haemorrhagic fever
- Yellow fever.

**or** if there are large quantities of body-fluids present.

8.8 A ‘Notification of Death’ label and a ‘Danger of Infection’ label should be attached discreetly to the outside of the bag. Neither label should state the diagnosis which is confidential information. It is the responsibility of the certifying clinician to ensure the funeral directors have sufficient information about the level of risk of infection and stating the type of precautions required.

8.9 Once the body is sealed in the body bag, protective clothing will no longer be necessary.

8.10 Relatives and friends who wish to view the body should do so as soon after death as possible. The bag can be opened by a member of staff wearing gloves and plastic apron, but relatives should be told that there is a risk of infection and should be advised to refrain from kissing or hugging the body. In some rare instances the bag could not be opened e.g. if the patient suffered from Anthrax, Plague, Rabies, Smallpox or Viral Haemorrhagic Fever.
PLEASE NOTE: These guidelines must be read in conjunction with The Royal Marsden Guidelines

9.1 **Routes of Entry for Infection**
Urinary catheters are inserted into the bladder via the urethra or through an artificial supra-pubic tract to provide urinary drainage.

9.2 Bacteria may enter the bladder of the catheterised patient in one of four ways:
- introduced via the catheter at the time of insertion.
- travel along the outside of the catheter.
- travel along the inside lumen of the catheter.
- Through a break in the closed system.

9.3 **Insertion**
This should follow a strict aseptic technique, by a healthcare worker who is Appropriately trained and competent to carry out catheter insertion.

9.4 The ONLY exception to this may be when an individual performs intermittent self-catheterisation, when a clean technique is required.

9.5 **Equipment**

9.6 Typical equipment consists of:
- Catheter
- Leg Bag
- Night Bag.

9.7 The leg bag, attached to the end of the catheter can remain in place for up to 7 days or in accordance with manufacturer’s guidelines. Should the bag be removed or become detached for any reason before the 7 day period, a new sterile bag must be applied.

9.8 To provide the patient/client with a greater capacity of drainage a night bag should be attached to the end of the leg bag. Drainable night bags for non-self-caring patients are not advisable.

9.9 Where more than one care provider is delivering care, single-use, non-drainable/disposable, night bags must be used.

9.10 Disposable night bags should be emptied by snipping the bottom corner of the bag or according to manufacturer’s instructions and emptying contents into a toilet, gloves and plastic apron should be worn.
9.11 When emptying the bags, or for any manipulation of joins, hands must be washed and disposable aprons and gloves worn. Wash and dry hands after removal of gloves.

9.12 Straps
A catheter should always be securely positioned, usually to the patient’s leg to prevent trauma and potential infection.

9.13 Manufacturer’s guidelines pertaining to the use of straps should be read and adhered to in relation to securing leg bags. Night Bags should be securely fastened to a drainage bag stand.

9.14 Washouts
Bladder washouts using approved irrigation products/solutions should only be performed by appropriately trained nurses as the correct technique is of paramount importance. clients/patients and carers should NOT perform bladder washouts without prior instruction. Bladder irrigation solution packs must be sterile. Advice regarding bladder washout regimes and technique is available from the Continence Advisor / District Nurse.

9.15 Care of Catheters
The catheter bag should ALWAYS hang at least 30 cms below the bladder, this assists in a good flow of urine and prevents stagnation of urine.

9.16 When a catheter bag is emptied it should be performed whilst wearing vinyl gloves and apron and into a specified individual container for each client.

9.17 This container should then be washed with detergent and water and stored dry. Urine can be disposed of into the toilet or the sluice.

9.18 Healthcare personnel should ensure that the connection between the catheter and the urinary system is not broken except for good clinical reasons, (for example changing the bag in line with the manufacturer’s recommendations).

9.19 Good personal hygiene should be maintained at all times. This can be achieved with soap and water by washing the genital/meatal area from front to back and taking care not to contaminate the catheter itself. The use of talc and lotions should be avoided.

9.20 If an infection is suspected (presence of pyrexia, groin pain, foul smelling and cloudy urine), a specimen of urine should be taken and bacteria identified before antibiotics are commenced. Specimens of urine should only be taken from the sample port, using an aseptic technique not from the drainage tap.

9.21 Supra pubic urinary catheters require the same assessment and drainage procedures.

9.22 A sterile dressing to the suprapubic entry/exit site will be necessary until the site heals following which normal washing/bathing may resume.
9.23 If a catheter becomes blocked with debris or a blood clot it may be necessary to use a ‘bladder’ syringe filled with sterile water to clear the blockage. This should ONLY be performed by staff who have received adequate instruction/training and are competent to carry out this procedure.

9.24 Bladder irrigation solution or washouts must not be used to prevent catheter associated infections.

9.25 Antibiotic prophylaxis when changing catheters should only be used for patients with a history of catheter-associated urinary tract infection following catheter change, or for patients who have a heart valve lesion, septal defect, patent ductus or prosthetic valve. The GP should be consulted for community patients.

9.26 Mental Health Inpatient wards – IPC Team to be informed, via the Catheter Notification form, when a patient on the ward has an indwelling urinary catheter in situ.

9.27 See Appendix 4 – Catheter Care Advice sheet for patient/carers

9.28 See Appendix 6 - High Impact Intervention – Urinary Catheter Care

9.29 See Appendix 10 – Catheter Notification Form – South Essex Mental Health Inpatient Wards

9.30 See Appendix 11 – Catheter Notification Form – West and North Essex Mental Health Inpatient Wards

10.0 SAFE HANDLING OF SPECIMENS

10.1 Clinical specimens include any substance, solid or liquid, removed from the patient for the purpose of analysis.

10.2 Staff should use Universal Precautions to handle specimens safely and receive regularly updated immunisation cover.

10.3 General Principles

   All specimens should be collected using Standard Principles of Infection Control (i.e. wearing of appropriate gloves, disposable plastic apron, washing and drying of hands before and after the procedure and safe management of sharps).

10.4 When a patient is asked to provide a specimen, they should be provided with the appropriate container and given instructions as to how to collect the specimen.

10.5 Laboratory approved containers must be labelled with patient identification details, date of specimen and specimen details. The lids should be screwed on tightly. The container with the specimen must be placed in an individual transparent plastic transport bag as soon as it has been labelled.
10.6 The transport bag must be sealed. The request form must always accompany the specimen but should not be put inside the bag with the specimen. If a wound swab, state type of wound, where on the body, whether deep or superficial and if antibiotics have been used, either topical or systemic.

10.7 Specimens must be sent to the laboratory as soon as possible after collection. This will mean planning work load carefully. Whilst awaiting transport, specimens should be stored securely, for as short a time as possible i.e. not overnight and away from food and medicines.

10.8 During transit, whether by hand or in a vehicle, specimens must be carried in an approved, rigid protective container.

10.9 If specimens have to be stored awaiting transport for more than 4 hours, specimens should be stored in an air-tight container in a designated fridge – not a food fridge or a drug fridge.

10.10 Sputum specimens must be received by the laboratory within 24 hours.

10.11 NB: In the event of a suspected outbreak of infection it is important for specimens to be collected promptly and for the request form to be marked as ‘Possible Outbreak’ and request “bacteriology and virology testing”.

Stool specimens should be sent as soon as an outbreak is suspected e.g. the second loose stool.

11.0 INTRAVENOUS THERAPY

11.1 This section specifically relates to the infection prevention and control aspects of intravenous therapy. Refer to The Royal Marsden Hospital Manual of Clinical Nursing Procedures. Always follow the manufacturer’s recommendations for all devices.

11.2 The following guidance takes into account the advice from epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England (2014)

11.3 Control of infection during intravenous therapy is of paramount importance. Catheter-related sepsis causes significant morbidity and mortality.

11.4 Micro-organisms that colonise catheter hubs and the skin adjacent to the insertion site are the source of most catheter related blood-stream infections (CR-BSI). Staphylococci e.g. Staphylococcus epidermidis are the most frequently implicated micro-organisms associated with CR-BSI. Other micro-organisms involved include Staphylococcus aureus, Candida species and enterococci.

11.5 A vascular access device (VAD) is a device that is inserted into either a vein or an artery, via the peripheral or central veins to provide for diagnostic (e.g. blood sampling), or therapeutic (administration of medication, fluids, blood
etc). There are many different types of VADs available and information for their insertion and management should be followed according to individual clinical guidelines and manufacturer’s instructions of use. Central venous access devices (CVAD) are inserted for long term access e.g. for; cytotoxic therapy, repeated transfusion or parenteral nutrition.

11.6 **Principles of Care**

Regardless of the type of VAD used the principles of care remain the same:

- To prevent infection
- To maintain a closed intravenous system with as few connections as possible
- To maintain a patent device that is suitable for the needs required

11.7 Healthcare workers and patients need to be educated and assessed as competent, in the care of VAD. Before discharge, patients and their carers should be taught any techniques required, on how to manage their device.

11.8 The community nursing service should continue to support the patient at home according to the instructions from the discharging hospital/manufacturer’s instructions.

11.9 A single lumen catheter device should be used unless multiple ports are essential for the management of the patient. If a multi-lumen catheter is used, one port should be designated and identified for parenteral nutrition use only.

11.10 A tunnelled or implanted CVAD should be used for long term vascular access (more than 3-4 weeks)

11.11 In selecting an appropriate insertion site, the risks for infection against the risks of mechanical complications will be assessed. The need for continuing venous access must be assessed on a regular basis and removal of a CVAD should be considered as soon as clinically possible in order to reduce the risk of infection.

11.12 All patients should have a patient record that documents the reason for VAD placement, type of device, insertion site, type of catheter, when replaced and the care required.

11.13 A cannulation care bundle must be completed if a peripheral VAD is inserted.
11.14 **Prevention of Infection**

**Asepsis**

An aseptic non-touch technique (ANTT) must be used and hands washed with liquid soap and water followed by use of alcohol hand gel:

- For insertion of peripheral lines
- Whenever the insertion site is exposed
- Whenever the intravenous system is accessed, manipulated or broken

11.15 Following antiseptic hand decontamination, clean gloves and an ANTT or sterile gloves should be worn as part of the aseptic technique.

11.16 **Skin decontamination**

Decontaminate the skin site with a single patient use application of 2% chlorhexidine gluconate in 70% isopropyl alcohol.

11.17 Allow to dry for 30-60 seconds and do not touch the disinfected skin surface again.

11.18 Do not routinely apply antimicrobial ointment prior to insertion.

<table>
<thead>
<tr>
<th>Active ingredient</th>
<th>Product details</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% Chlorhexidine Gluconate 70% isopropyl alcohol</td>
<td>ChloraPrep</td>
<td>Cleaning of catheter insertion sites during dressing changes</td>
</tr>
<tr>
<td></td>
<td>ChloraPrep (SEPP)</td>
<td>Skin cleansing prior to peripheral cannulation</td>
</tr>
<tr>
<td>2% Alcoholic Chlorhexidine</td>
<td>Clinell Alcoholic 2% Chlorhexidine individual wipe</td>
<td>Disinfection of medical devices such as invasive lines, including hubs and ports</td>
</tr>
<tr>
<td>0.5% Alcoholic Chlorhexidine</td>
<td>Sterets H Pre-injection swab</td>
<td>Venepuncture and giving of IM injections and for the decontamination of intravenous drug vials</td>
</tr>
</tbody>
</table>

11.19 **Dressing and insertion site care**

A sterile, transparent semi-permeable dressing should be used to cover the catheter insertion site. The site should be checked regularly for signs of infection, at least daily.

11.20 This should be changed every 7 days or sooner if not intact or if moisture collects under dressing.

11.21 If profuse sweating, bleeding at insertion site or oozing, a sterile gauze dressing is preferable. Assess daily and change when necessary. Replace with transparent dressing as soon as possible.
11.22 A single use application of 2% chlorhexidine gluconate in 70% isopropyl alcohol should be used to clean the catheter insertion site during dressing changes.

11.23 Disinfection of ports or hubs should be carried out using a 2% alcoholic chlorhexidine wipe, before and after it has been used to access the system, and allowed to air dry. (Refer to manufacturer’s information on use of lotions and to check compatibility of all materials used)

11.24 **Filters, locks and needle-free devices**
In-line filters should not be used routinely for infection control purposes

11.25 Antibiotic lock solutions should not be used routinely to prevent catheter-related bloodstream infections

11.26 Do not routinely administer intranasal or systemic antimicrobials before insertion or during the use of a central venous access device to prevent catheter colonisation or bloodstream infection

11.27 Preferably sterile 0.9% sodium chloride for injection should be used to flush and lock catheter lumens that are in frequent use (Unless the manufacturer recommends a heparin sodium flush)

11.28 Systemic anticoagulants should not be used routinely to prevent catheter-related bloodstream infections

11.29 The introduction of new intravascular devices that include needle-free devices should be monitored for an increase in the occurrence of device associated infection (report to MHRA).

11.30 Follow manufacturers recommendations for changing needle-free devices and for ensuring all components are compatible

11.31 When using needle-free devices decontaminate the access port before and after use as described above.

11.32 **Administration Sets and IV fluids**
Examine all IV fluid bags and drugs for administration for dates of expiry and evidence of damage or contamination.

11.33 Check fluid against prescribed medication chart.

11.34 Replace administration sets for solutions in continuous use, at 72 hours unless become disconnected earlier

11.35 Administration sets for blood and blood components should be changed when the transfusion episode is complete or every 12 hours (whichever is the sooner)

11.36 Administration sets used for parenteral nutrition should be changed every 24 hours. If only contains glucose and amino acids in continuous use, do not need to replace more frequently than every 72 hours
Recognising Venous Access Device Associated Infections
Localised effects may occur at the insertion site or along the track of a tunnelled device. These include:

- Thrombophlebitis
- Exudate formation
- Heat at site
- Oedema
- Pain
- Irritation
- Erythema

11.38 Systemic effects include:

- Pyrexia
- White cell count elevation
- Raised Creatinine Reactive Protein (CRP)

11.39 The visual infusion phlebitis score (VIP) tool should be completed at each visit.

11.40 If an infection is suspected:

- Do not inject via the catheter or use the intravenous line
- Contact the Doctor in charge of the patient’s care – an alternative route or site of administration should be considered (cannula should be removed at first indication of local infection)
- Take swab for Microbiology culture and sensitivity if exudate present
- Blood cultures may be required, however these must only be taken by staff trained and assessed as competent to do so due to the risk of contamination of the sample.

11.41 Total Parenteral Nutrition
Total Parenteral Nutrition (TPN) is the administration of nutrient solutions via a central or peripheral vein. It is most commonly administered through a peripherally inserted central venous catheter into the superior vena cava and it is only used when the patient’s gastro-intestinal tract is not functional.

11.42 Preferably a single lumen catheter should be used to administer parenteral nutrition.
11.43 Strict asepsis is required when dealing with parenteral nutrition procedures.

11.44 Administration sets should be changed every 24 hours.

11.45 All clients who are self-caring can get advice and support from the Nutrition Support Team based at the local acute hospitals.

11.46 Appendix 7: Peripheral Cannulation Care Bundle

11.47 Appendix 9: Central Venous Catheter Care Bundle

11.48 Please note: Care Bundles have also been incorporated with Systmome templates.

12.0 MINOR SURGICAL PROCEDURES IN EPUT PREMISES

12.1 Infection Prevention and Control is an important aspect of an effective risk management programme to improve the quality and safety of patients’ care and the occupational health of staff.

12.2 Patients undergoing invasive procedures such as minor surgery will have an increased susceptibility to infection. There is evidence that adherence to good infection prevention and control principles can significantly reduce the risk of surgical site infection (SSI) post procedure.

12.3 Purpose

- To ensure an adequate infection prevention and control programme is in place for the protection of patients undergoing minor surgical procedures in designated EPUT premises.

- To ensure practitioners involved in minor surgery are protected against infectious hazards by maximising occupational and procedural safety.

12.4 This policy describes the working practices, standards and procedures that the organisation recommends Health Care Workers to implement when performing minor surgery.

12.5 Levels of Risk

For the purpose of this policy minor surgical procedures are considered under two different groups, so as to reflect the need for a higher standard of infection prevention and control as the procedures become more invasive.

12.5.1 Group One

Injections
Aspirations
Curette, cautery and cryo-cautery
12.5.2 **Group Two**
- Incisions
- Excisions
- ‘Lumps and Bumps’
- Toenail removal
- Vasectomy

12.5.3 **Please note that there may be additional requirements for specialised procedures.**

12.6 **Standards for Group One Procedures**
- Injections, Aspirations, Curette, Cautery and Cryo-cautery
  - These can be undertaken in a consultation/examination room or in a treatment room as long as the room is clean and tidy, has washable walls, ceilings and flooring (not carpeted).
  - **And:**
    - All infection prevention and control standard precautions as detailed in this policy and as summarised below are implemented.

12.7 **Standards for Group Two Minor Surgical Procedures**
- Incisions, excisions, ‘lumps and bumps’, toe nail removal, vasectomy
  - Ideally, these should be undertaken in a room designated for the purpose of minor surgical procedures only. Minor Surgery rooms should be a minimum of 16m².

12.7.1 **As a minimum requirement, a dedicated treatment room may be utilised; however, this room must be clean and tidy with:**
  - washable, impervious floors, walls and ceiling
  - intact, washable, impervious work tops and enclosed cupboards
  - No clutter on any surfaces (or cleared and cleaned prior to minor surgery sessions)
  - deep cleaned between sessions

12.8 **In addition the following summaries of infection prevention and control standards must be implemented for ALL minor surgical procedures**

12.9 **The Environment**
- **Standard** - The environment is in good order and a good standard of repair, to ensure cross-infection does not take place.
IGPC: SECTION 3 - INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE

12.10 The ceiling, walls and floors must be washable, in a good state of repair, and visibly clean. Flooring should be intact with sealed joins and coved edges.

12.11 The lighting must be of a good quality, florescent tubes must be covered with diffusers. Examination lamps must be correctly designed so as to ensure they give enough light and that the bulb is encased within the lamp casing.

12.12 There must be sufficient storage space, to ensure that there is no clutter on the surfaces. The cupboards and worktops must be in a good state of repair, orderly and clean inside and out.

12.13 The couch covering must be washable and in good repair. No linen should be used and the disposable paper towelling must be changed between patients.

12.14 Couch curtains should be disposable (available from NHS supply chain) or for non-disposable curtains they should be laundered regularly (3 monthly, in a commercial laundry), or immediately if contaminated.

12.15 Vertical blinds are recommended if required at windows. The windows and ledges must be clean and dust free and not used for storage. Blinds should be cleaned regularly.

12.16 A designated stainless steel, free standing dressing trolley which is in a good state of repair and which can be cleaned with general purpose detergent wipes between uses.

12.17 **Ventilation**

The building regulations require that all enclosed workspaces be ventilated by either natural or mechanical means. The following are some of the factors that determine the ventilation requirements of workspaces.

- Human habitation
- Activities of the department, that is, extraction of odours, aerosols, gases, vapours, fumes and dust – some of which could be toxic, infectious, corrosive, flammable or otherwise hazardous.
- Dilution and control of airborne pathogenic material
- Thermal comfort
- Removal of heat generated by equipment

12.18 Increased health risks to patients will occur if ventilation systems do not achieve and maintain the required standards. The links between surgical site infection and air quality has been well established (HTM 03 -01). All Ventilation systems should conform to the principles set out in the Health and Safety Commissions Approved Code of Practice and guidance document ‘Legionnaires’ bacteria in water systems’ (Referred to as L8), and Health Technical Memorandum 04 -01 – The Control of Legionella hygiene.
12.19 The Department of Health publication ‘Health and Social Care Act 2008: code of practice for the prevention and control of healthcare associated infections’ is a code of practice that has been brought out to help NHS bodies plan and implement measures to prevent and control Healthcare Associated infections.

12.20 Natural ventilation is always the preferred solution for a space, provided that the quantity and quality of air required, and consistency of control to suit the requirements of the space are achievable. If this is not the case a mechanical ventilation system will be required.

12.21 Further advice can be sourced from Department of Health Heating and Ventilation Systems Health Technical Memorandum 03-01; Specialised ventilation for healthcare premises.

12.22 **Hand Hygiene**

   **Standard** - To minimise the risk of cross-infection, all staff have access to hand cleansing facilities using a technique recommended by the Infection Prevention & Control Team.

12.23 There must be a designated hand-wash sink, with elbow/wrist mixer taps.

12.24 Access to the hand basin should be clear.

12.25 The sink should be visibly clean.

12.26 Wall dispensed liquid soap should be available from a cartridge style dispenser.

12.27 Anti-bacterial soap or hand washing with liquid soap followed by alcohol hand rub/gel should be used prior to performing minor surgery.

12.28 Wall dispensed paper towels for hand-drying should be available.

12.29 Only single-use nailbrushes should be used.

12.30 **Protective Clothing**

   **Standard** - The health care worker demonstrates the appropriate usage of protective clothing.

12.31 Single-use, non-sterile, vinyl gloves should be readily available, in a range of sizes.

12.32 Single-use disposable aprons should be readily available and worn if exposure to body fluids is possible.

12.33 Single-use, latex free, sterile gloves should be available (Vinyl or Nitrile).

12.34 Eye protection (a pair of plastic goggles/ face visor) should be available in the surgery for use when excessive splashing of body fluids is anticipated.
12.35 **Decontamination**  
**Standard** - Sterile instruments must either be sourced from a single-use equipment supplier, or via a Sterile Services Department. Local decontamination and sterilisation of instruments is not permissible.

12.36 All equipment should be rotated to ensure products are used within expiry times

12.37 **Single-use equipment**

12.38 Single use items must **never** be re-used.

12.39 Sterile products should be stored above floor level in cupboards.

12.40 All sterile products (including cautery tips) must be single-use. All single use, disposable equipment must be disposed of immediately after use as per Manufacturer’s instructions; therefore a sharps container that conforms to BS7320 and an appropriate waste bag (infectious or offensive/hygiene) supported in a foot operated, rigid bin must be available.

12.41 **Sterile equipment obtained from Sterile Services Department (SSD):**  
Stock rotation must be implemented to ensure products are used within expiry times Sterile packs and all equipment should be stored in cupboards or drawers. Used equipment should be stored separately in a designated safe area prior to collection within a 7 day period.

12.42 **Spillages**  
**Standard** The health care worker will demonstrate safe handling and disposal of all body fluids.

12.43 Staff should be familiar with the policy for dealing with spills of body fluids.

12.44 All equipment required for dealing with spillages, i.e. spillage kit and disinfectant should be readily available for use. Spillage kits should be re-stocked/replaced after use.

12.45 **Waste Disposal**  
**Standard** All waste from health care premises is segregated and identified at source, transported and disposed of safely without risk of contamination, infection or injury to health care staff and the general public.

12.46 There should be correct segregation of glass, hazardous, offensive and household waste, the correct colour coded bags must be used.

12.47 Waste bags should be no more than 2/3rds full, then sealed and labelled.

12.48 Foot operated and rigid sided bins should be available and be clean inside and out.

12.49 There should be a designated area to store all waste prior to collection, which is kept secure from unauthorised persons, entry by animals and free from infestations.
12.50 All waste is to be collected on a regular weekly basis

13.0 WASTE MANAGEMENT

This section should be read in conjunction with the EPUT waste policy (RM13) and local Authority arrangements.

13.1 Introduction
All healthcare organisations have a legal responsibility to dispose of waste safely, ensuring no harm is caused either to staff, members of the public or the environment. The healthcare organisations' responsibility begins when waste is generated and ends with its final disposal, even where properly authorised agents are used.

13.2 It is essential that persons handling waste exercise care to prevent injury or transmission of infection to themselves or others. This is to fulfil their responsibilities under the current legislation (for list see end of this Section).

13.3 HTM 07-01 – Safe Management of Healthcare waste 2013 has been produced to provide a framework for best practice in waste disposal. The guidance is designed to help healthcare organisations and other producers of waste to meet their legislative requirements.

13.4 Definition of Clinical Waste
The definition of clinical waste remains the same.

13.4.1 Clinical waste is:
   a) Any waste which consists wholly or partly of human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, soiled swabs or dressings, or syringes, needles or other sharp instruments, being waste which, unless rendered safe, may prove to be hazardous to any person coming into contact with it; and
   b) Any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any other person coming into contact with it.

13.5 HTM 07-01 – Safe Management of Healthcare waste 2013
The regulations subdivide healthcare clinical waste into:
   a) Waste that poses a risk of infection
   b) Medicinal waste.

13.6 Infectious Waste
The Hazardous Waste Regulations define infectious waste as:
H9 Infection: Substances containing viable micro-organisms or their toxins, which are known or reliably believed to cause disease in man or other living organisms, (traditionally known as “clinical waste”.)
13.7 Medicinal Waste
Classified into two categories:

a) Cytotoxic and cytostatic medicines (Classified as Hazardous Waste)

b) Medicines other.

13.8 Failure to segregate cytotoxic and/or cytostatic medicines from other medicines will mean that the entire medicinal waste stream will need to be classified as hazardous. Cytotoxic and cytostatic classifications can be found in CLPG13 – Appendix 10, Annex 1 and 2, as well as RMPG13a – Waste handling procedure.

13.9 Offensive/Hygiene Waste
Non-infectious (human waste and sanitary protection waste such as nappies, incontinence pads etc), which does not require specialist treatment or disposal, but which may cause offence to those coming into contact with it.

13.10 Handling of Waste
Waste should be segregated at the point of origin

13.11 Personal protective clothing should be worn when handling waste

13.12 Waste should be:

- Correctly bagged in the appropriate coloured bag of 225 gauge to prevent spillage
- Double bagged where:
  - The exterior of the bag is contaminated
  - The original bag is split, damaged or leaking
  - Kept in a rigid-sided holder or container with a foot operated lid, and, so far as is reasonably practicable, out of the reach of children
  - Only filled to ¾ full
- Securely sealed and labelled with coded tags at the point of use to identify their source.

13.13 Waste should not:

- Be decanted into other bags, regardless of volume
- Be contaminated on the outside
- Sharps must be disposed of into appropriate colour-coded sharps containers that meet BS7320/UN3291
ICPG1: SECTION 3 - INFECTION PREVENTION & CONTROL IN CLINICAL PRACTICE

- Sharps container should **NEVER** be placed into a waste bag.
- All staff handling waste should receive appropriate training to carry out the procedure safely.

13.14 **Disposal of Waste**
The bag should be removed and securely fastened at least once a day or when ¾ full, labelled with its place of origin (e.g. clinic details) and placed in the designated waste collection point.

13.15 **Disposal of Sharps**
A risk assessment is required to identify the correct waste stream required.

13.16 Syringes, needles, razors, ampoules and other sharps should always be placed in the correct sharps container (See Waste-packaging and colour-coding). These items should never be placed in a waste bag of any kind.

13.17 Care should be taken to ensure that sharps containers are correctly assembled according to the manufacturer’s instructions.

13.18 Use the appropriately sized sharps container to prevent used sharps being stored for long periods of time.

13.19 It is the responsibility of the person who uses a sharp to dispose of it safely.

13.20 Always place sharps in the sharps container as soon as possible.

13.21 Sharps containers must be sealed, labelled with the point of origin and placed in the designated clinical waste collection point when ¾ full.

13.22 Sharps containers should conform to BS 7230/UN 3291.

13.23 Sharps containers should be kept in a safe location (on a flat surface, below eye level but not on the floor). This will reduce the risk of injury to patients, visitors and staff.

13.24 For **community staff carrying sharps boxes in their cars:**
Sharps should only be carried by staff if there is no alternative for safe disposal.

13.25 The container should be carried in a secure area i.e. the boot of the car, to prevent tipping over whilst driving.

13.26 The container carried should be out of sight.

13.27 Waste Carriage regulations state that all healthcare hazardous waste must be contained in UN approved rigid packaging when transported on the road.

13.28 **Diabetic Sharps**
All diabetic sharps should go into a sharps container (this includes lancets).
13.29 Clinicians should ensure that their patients are aware of the correct method for disposal of the filled sharps bin.

13.30 Patients within Essex can obtain fully assembled sharps bins from clinic bases and should return full sharps bins to the clinic bases for disposal.

13.31 Essex clinic personnel should ensure that the returned sharps bins have been correctly closed and signed before disposal.

13.32 Alternatively General Practitioners may prescribe sharps boxes on FP10, it is then the General Practitioners responsibility to ensure the patient is aware of the correct method for assembling sharps boxes and where to return the filled sharps box for disposal.

13.33 **Disposal of Pharmaceutical Waste - Medicinal Waste**

Pharmaceutical waste includes all part-used and out of date medicines, cream and ointment tubes and aerosols.

13.34 All pharmaceutical waste should be placed directly into the pharmaceutical waste container, or returned to the local chemist for them to place into their pharmaceutical waste container.

13.35 Ensure that the container is clearly labelled, and that all associated documentation is signed off at the time of collection.

13.36 **Storage of Hazardous/Non-Hazardous Healthcare Waste**

Infectious waste should be removed from the point of generation as frequently as circumstances demand, and at least weekly.

13.37 Between collections, waste should be:

- Stored in correctly coded bags, with bags of each colour-code kept separate
- Situated in a centrally designated area of adequate size related to the frequency of collection
- Sited on a well-drained, impervious, hard-standing floor, which is provided with wash-down facilities
- Kept secure from unauthorised persons, entry by animals and free from infestations
- Accessible to collection vehicles.

13.38 **Sharps Disposal**

**Sharps Yellow Top European Waste Code 180103 or 180109 (body fluid/ medicinal products only)**

13.39 These are provided for the disposal of infectious sharps, which are partially discharged of medicinal residues, the minimum disposal is by incineration. Liquid waste and tablet waste in its primary packaging must be consigned as 18.01.09 and in a blue lidded pharmaceutical container. EWC 180109 refers to the disposal of medicinal products only.
13.40 **Sharps Orange Top European Waste Code 180102 or 180103**
These are sharps that are non infectious and/or potentially infectious, that are not medically contaminated – i.e. body fluids only. The minimal disposal is by alternative technology treatment.

13.41 **Sharps Purple Top European Waste Code 180103 or 07 or 08**
The clinical waste contractor will provide these when Cytotoxic or Cytostatic medication is dispensed. Sharps or medicinal residues that are contaminated with cytotoxic or cytostatic medicines must be discarded in purple-lidded boxes. These have to be tagged appropriately and incinerated in permitted or licensed facility.

13.42 **Additional Waste guidance:**

13.42.1 **Wound vacuum drains**
Treat as infectious waste and dispose via the orange bag/hazardous wastestream.

13.42.2 **Maggots/larvae**
Dispose in a secure airtight rigid yellow container (UN3291). Do not use a yellow sharps box.

13.42.3 **Incontinence sheets/pads**
If the contaminate is solid and can be easily and safely emptied into the toilet and flushed away, it should be

13.42.4 The sheet/pad should be double wrapped in plastic bags before being placed in the household waste. If incontinence pads are produced in bulk an offensive/tiger stripe waste collection should be arranged.

13.42.5 If diarrhoeal illness is present and an infectious organism such as Clostridium difficile has been confirmed, any incontinence waste must be disposed of in the orange waste stream and a collection arranged.

13.42.6 **Dialysis equipment**
When a programme of home dialysis is commenced it should include a collection service of used items. Usually as new equipment is delivered, used items are collected.

13.42.7 **Arranging waste collections**
Any waste collection that is required from a patient’s home must be arranged by the service providing the care to that patient, not by the infection control nurse.
14.0 WATER SAFETY

14.1 **Legionella** is a common bacterium which multiplies in water. It occurs naturally in environmental sources of fresh water such as lakes, rivers and streams, it is also found in wet soil. There is a strong likelihood of low concentrations of legionella in all water systems, however the following conditions have been found to promote the growth of the organism;

- Water temperatures between 20º - 45ºC favour growth. The optimum temperature for growth is 37 ºC. Legionella will not survive in temperatures in excess of 60ºC.

- Poor water flow and areas where the water has become stagnant. Areas of risk include water tanks, disused outlets and dead legs in water systems. Legionella also colonises certain types of water fittings such as mixing valves.

- The presence of biofilm which protects the organism from heat and chemicals.

- The presence of nutrients such as sludge, scale, and other microorganisms.

14.2 The risk of infection is related to the number and types of Legionella in the water at the point of use and with the length of exposure. Approximately 40 different species of legionella have been identified, however, Legionella pneumophila serogroup 1 is responsible for about 90% of cases of Legionnaires’ disease.

14.3 The organism is disseminated through aerosols of contaminated water produced by items such as showers, taps, air conditioning systems and spa baths.

14.4 **Legionellosis**

Legionellosis refers to the diseases caused by Legionella. Some of these are bacterial infections others are allergic reactions to the organism.

14.5 Exposure is through inhalation of aerosols of contaminated water, aspiration of contaminated water or as a result of intubation. There is also some evidence of exposure through inhalation of moist air from compost. There is no evidence of person to person spread.

14.6 **Pontiac Fever**

This is an allergic reaction to the bacteria and produces flu like symptoms without pneumonia. Onset of illness is about 2-3 days. Symptoms are generally mild and short lived. There have been no reported deaths as a result of Pontiac fever.
14.7 **Lochgoilhead Fever**
This is named after an outbreak in Scotland caused by exposure to *Legionella micdadi*. This is a flu like illness with no pneumonia. It appears to have a high attack rate so large numbers of those exposed develop symptoms. The average incubation period is 9 days. There have been no deaths associated with this form of legionellosis.

14.8 **Legionnaires’ Disease**
This was identified following an outbreak of pneumonia at an American Legion convention in Philadelphia in 1976. The previously unknown bacteria *Legionella pneumophila* was identified as the cause. There are approximately 200-250 cases of Legionnaires’ disease reported in the UK each year but it is thought that the actual rate may be higher as mild forms may not be diagnosed. About half the cases in the UK are associated with travel abroad.

14.9 Outbreaks in are often associated with cooling towers and water systems in factories, hotels, and hospitals. Approximately 7% of all UK cases are associated with exposure in hospitals.

14.10 The average incubation period is 3-6 days but can be between 2-10 days. The severity of the symptoms varies from person to person and ranges from mild flu like symptoms to severe pneumonia and death. Legionnaires’ disease can be treated effectively with antibiotics however it is fatal in approximately 12% of cases. This rate may be higher in more susceptible groups.

14.11 Symptoms include:

- Fever
- Chills
- Headache
- Muscle pains
- Dry cough
- Shortness of breath
- Diarrhoea and vomiting
- Confusion and delirium

14.12 Some groups are at higher risk of contracting disease than others. Men are more susceptible than women and those over 45 years of age are at higher risk. Smokers and alcoholics are at higher risk as are the immunosuppressed, diabetics, those with respiratory conditions, cancer or renal disorders. Recently the risk of exposure via aspiration among patients with swallowing difficulties has been highlighted.

14.13 Diagnosis is based on the presence of symptoms and a combination of tests, these include culture of the organism from sputum or bronchial washings and detection of the antigen in blood or urine specimens.

14.14 Legionnaires’ disease is not notifiable. There is no evidence of person to person spread, therefore no need to isolate infected individuals.
14.15 **Control of Legionella**

The Health and Safety at Work Act 1974 extends to risk form Legionella bacteria which may arise from work activities. This requires that Legionella risk assessments and policies are in place and that organisations take measures to control Legionella. These measures are explained in the Trust’s Legionella policy.

14.16 **Summary of control measures**

For legionellosis to occur you need:

- A contaminated source
- A means of dissemination
- A susceptible person

14.17 Legionella can be controlled by preventing growth of the organism, preventing dissemination and preventing exposure of susceptible individuals. This can be achieved by:

- Temperature control
- Flushing
- Chemical disinfection
- Physical processes such as filtration or UV light

14.18 **Temperature**

Maintaining the hot water system at high temperature and the cold water system at low temperature restricts the growth of the organism. Hot water systems should store water at 60ºC or above and water should be circulated at no lower than 50ºC. Cold water systems should store and circulate water at less than 20ºC.

14.19 In practice this means that water from the hot system can be very hot and use of water directly from a hot tap may result in scalding. Sinks intended for hand washing and patient facing outlets should be fitted with mixers at the point of use which distribute the water at no more than 43ºC bath temperatures must always be measured before use.

14.20 **Flushing**

Stagnation in water systems promotes biofilm formation and growth of the organism. Flushing of little or unused outlets helps to prevent this. In health care facilities little or unused outlets should be flushed at least twice weekly and this should be recorded on a flushing log. Clinical and administrative staff may be required to carry out flushing in some areas.

14.21 Flushing is a key factor in preventing the growth of Legionella in the water system and protecting service users and staff from infection. Where there are unused outlets removal of these should be considered in order to reduce the risk of infection and requirement for flushing.
14.22 **Chemical disinfection**
Chemicals such as chlorine dioxide may be used either as a single treatment or on a continuous basis where high levels of Legionella occur in the water system. Where this is not appropriate ionisation with silver and copper ions may be used.

14.23 **Filtration**
Municipal water supplies are filtered using coarse filtration methods, this removes debris and some microorganisms, however it does not remove all pathogenic microorganisms. Fine filtration is commonly used as a point of use treatment for drinking water. The level of filtration depends on the pore size of the filter, the finer the filter the more it removes. Absolute filtration is used where organism free water is required, this is normally confined to the hospital setting. These filters are applied at the outlet and are usually referred to as point of use or POU filters. These may be used where high levels of Legionella have been detected in the water and in areas where there are very high risk patients.

14.24 **UV Light**
Disinfection by ultraviolet light may be used at the point of use in some instances. This is an effective form of disinfection but has limited use as it is not suitable for turbid water and can only be applied to a limited volume of water.

14.25 **What happens if high levels of Legionella are detected?**
The Trust undertakes routine testing for the presence of Legionella. Should these tests indicate unacceptable levels of the organism clinical staff, in conjunction with the infection control team, will be required to carry out risk assessment of patients/service users within the affected area.

14.26 **Action taken will depend on the outcome of the risk assessments and # assessment of the type and number of organisms in the water. Where a patient is considered to be at high risk they may need to be moved away from the affected outlet/s or POU filters may need to be applied. Advice will be given by the infection control team on an individual basis.**

14.27 **In the event of detection of high levels of Legionella in the water supply the requirement for flushing of outlets is likely to be increased. The infection control team and estates department will advise on the frequency required.**

14.28 **Any patient presenting with signs and symptoms suggestive of Legionella will require antigen testing and treatment as appropriate if positive.**

14.29 **Staff are generally at low risk of acquiring Legionella but if concerned or presenting symptoms suggestive of Legionellosis they should consult the IPC team and occupational health for advice.**

14.30 **What to do if a patient is infected?**
If you suspect that a patient has Legionellosis seek medical advice immediately and inform the IPC team. The patient may need urgent referral to an acute facility. Care for the patient using standard precautions. There is no requirement for isolation as there is no evidence of
person to person spread. In the event of a confirmed case of Legionellosis and incident report must be completed.

14.31 **Pseudomonas aeruginosa**

14.32 *P. aeruginosa* is a Gram-negative bacterium, commonly found in wet or moist environments. It is commonly associated with disease in humans with the potential to cause infections in almost any organ or tissue, especially in patients compromised by underlying disease, age or immune deficiency.

14.33 Contaminated water in a hospital setting can transmit *P. aeruginosa* to patients through the following ways:

- direct contact with the water through:
  - ingesting
  - bathing
  - contact with mucous membranes or surgical site, or
  - through splashing from water outlets or basins (where the flow from the outlet causes splashback from the surface);
- inhalation of aerosols from respiratory equipment, devices that produce an aerosol or open suctioning of wound irrigations;
- medical devices/equipment rinsed with contaminated water;
- indirect contact via healthcare workers’ hands following washing hands in contaminated water, from surfaces contaminated with water or from contaminated equipment such as reusable wash-bowls.

14.34 Controls as outlined above for Legionella should be followed to ensure the risk of *P. aeruginosa* is minimised. Whilst EPUT does not provide any high risk augmented care units, controls are necessary particularly in environments where tap water is used as part of clinical care i.e. leg ulcer clinics.

14.35 For further information and reference please consult

### 15.0 REFERENCES


NICE guideline 139 ‘Prevention and control of healthcare-associated infections in primary and community care’ (2012)

The Essex Health Protection Unit 2007, Community Infection Control Guidelines

Clinical Procedures

Decontamination
MDA (2000) guidance on the Purchase, Operation and Maintenance of Vacuum benchtop steam sterilisers MDA DB 2000 (05)

Enteral Feeding

Laundry

Public Health

Single Use

Vaccinations
BNF 47, March 2004

Protective Clothing
Toys and games cleaning


Waste

DH: HTM 07-01 Safe management of healthcare waste (2013)
NPSA: Environment and Sustainability: Safe management of healthcare waste conference notes (March 2007)

Sharps

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Water Safety

DoH (2013) Management of pseudomonas aeruginosa in health sector (HTM 04-01)