

Decontamination and Disinfection of Equipment and Environment	Type: Policy Register No: 04070 Status: Public
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	Decontamination Group	March 2014
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1. Purpose

- 1.1 The purpose of this policy is to ensure a system is in place for effective decontamination of all equipment used before and between each patient and that risks associated with decontamination facilities and processes are properly managed across the Trust.

2. Aims

- 2.1 To ensure that appropriate national guidelines are followed and that the Trust has effective systems for ensuring that all individuals involved in decontamination have effective information, training and supervision.
- 2.2 The objective of this policy is to manage quality and performance measures for the decontamination process as one of the impacts on the quality of clinical service provision.

3. Scope

- 3.1 This policy will cover all aspects of decontamination required to protect staff, service users and visitors (including contracted staff).

4. Equality and Diversity

- 4.1 The Trust is committed to the provision of a service that is fair and meets the needs of all individuals.

5. Accountability

- 5.1 Accountabilities within the Trust are as follows:

- 5.2 **The Chief Executive** is responsible for:

- ensuring that the Trust has an effective Decontamination policy
- ensuring sufficient resources to comply with this policy

- 5.3 **Director of Infection Prevention Control (DIPC) is responsible for**

- working directly with the Chief Executive
- operational responsibility for decontamination in the Trust
- leading on investigation of serious incidents involving decontamination issues
- developing and maintaining the Trust Decontamination Policy
- providing accurate and updated guidance on decontamination for the Trust
- providing guidance on government legislation and policies for the executive lead
- monitoring compliance through decontamination legislation for the Trust
- advising on matters related to decontamination for new buildings and service changes
- in conjunction with the Director of Estates and Facilities agree any purchasing decisions or changes in practice that have decontamination implications
- working with the Trust infection prevention team on specific infection prevention policies guidelines and campaigns related to decontamination.

- 5.4 **Director of Estates and Facilities** is responsible for:
- ensuring hospital cleanliness is high on the corporate agenda
 - providing plans for year on year improvements in hospital cleanliness
 - ensuring robust systems, processes and adequate resources are identified in order to achieve high standards of cleanliness
 - in conjunction with the DIPC agree any purchasing decisions or changes in practice that have decontamination implications providing monthly cleaning reports to the Chief Executive and quarterly cleaning reports to the Board of Directors
- 5.5 **Chief Nurse** is responsible for:
- ensuring that nursing practice is in line with Trust policies and those objectives, job descriptions and appraisals are in place and reflect the importance of decontamination.
 - ensuring that Nurses & Midwives are trained effectively in key techniques
- 5.6 **Heads of Service/Nursing** are responsible and accountable for
- effective decontamination processes in their area of responsibility. This includes any item which passes from one patient to another e.g. surgical instruments, endoscopes, mattresses and frequently used items such as drip stands and commodes
 - ensuring that all decontamination processes are in keeping with current national guidance
 - ensuring that anyone involved in a decontamination process has been adequately trained, has adequate information and has adequate supervision
 - providing the decontamination group with evidence of decontamination compliance in their directorate on a regular basis and at least annually
 - ensuring monitoring of planned preventative maintenance contracts and programmes relating to decontamination including operating theatres
 - ensuring reporting of all decontamination issues to the Director of Infection Prevention and Control
 - ensuring adequate decontamination processes and procedures are being used for equipment
 - ensuring monitoring of any inter hospital transfer of equipment and its decontamination
- 5.7 **Lead Nurses/Heads of Departments** are responsible for:
- reporting directly to the Heads of Nursing and/or Clinical Directors on all issues regarding decontamination, including endoscopy
 - maintaining up-to-date records on decontamination of their unit
 - ensuring risk analysis and COSHH assessments for decontamination in their directorate as appropriate
 - ensuring maintenance of training records for staff involved in decontamination
 - ensuring maintenance and monitoring of traceability system as appropriate
 - keeping registers of agreed reusable single items
 - ensuring that no new piece of equipment is introduced into their directorate without formal approval of the decontamination group regarding decontamination arrangements
 - ensuring that all items which pass from one patient to another are adequately decontaminated

5.8 **Surgical Services Lead** is responsible for:

- ensuring that all national guidance and accreditation processes are in place and evidenced
- providing annual assurance of full compliance with national theatre guidelines including air quality

5.9 **Sterile Services Manager** is responsible for:

- ensuring that all national guidance and accreditation processes are in place and evidenced

5.10 **Ward Manager is responsible for:**

- delivering a safe and clean care environment with direct responsibility for ensuring that cleanliness standards are maintained
- ensuring that all patient equipment is cleaned between patient use to standards as outlined within the National Specification for Cleanliness, April 2007
- ensuring that correct documentation is completed to evidence that cleaning has been undertaken as seen in appendix 6

5.11 **All Staff** are responsible for:

- ensuring they comply with the Hygiene Code
- ensuring all equipment used for patient care is adequately decontaminated prior to use and between each patient and is fit for purpose

5.12 All areas should have

- COSHH assessments and documentation for cleaning and disinfection products
- Copy of a planned preventative maintenance programme for decontamination of all equipment
- Training record of all staff involved in decontamination
- A dedicated cupboard for disinfection products with secure storage
- Instructions for using disinfection products
- The record of all repairs and maintenance of decontamination equipment
- A means of escalating and prioritising requests for maintenance and repair to the Facilities department within the Trust
- Evidence of compliance with relevant national guidelines (e.g. Decontamination Standards for Flexible Endoscopes)
- A means of formally recording all incidents through Risk Event Forms

5.13 A flow chart of accountability and responsibility within Directorates can be seen in appendix 1.

6. Definitions of Cleaning, Disinfection and Sterilisation

6.1 Decontamination

A general term used to describe the destruction or removal of microbial contamination to render an item or the environment safe. The term decontamination includes sterilisation, disinfection and cleaning.

6.2 **Cleaning**

A process that removes dirt, dust, large numbers of micro-organisms and the organic matter, such as blood or faeces that protects them. Cleaning is a pre requisite to disinfection or sterilisation.

6.3 **Disinfection**

This is a process of removing or killing most, but not all viable organisms. The aim of disinfection is to reduce the number of micro-organisms to a level at which they are not harmful. Spores are not destroyed.

6.4 **Sterilisation**

This is a process of removing or killing all viable organisms including spores. Dead microorganisms and toxins (pyrogens) may remain. Prions will not be effectively destroyed by this process.

7. **Levels of Decontamination**

7.1 The level of decontamination required is dependent on a variety of factors as outlined in Appendix 5.

7.2 The choice of decontamination method should be related to the infection risk associated with the intended use of the equipment (Appendix 5). Other factors to be taken into consideration when choosing a method of decontamination include the nature of the contamination, the time required for processing, the heat, pressure, moisture and chemical tolerance of the object, the availability of the processing equipment and the quality and risks associated with the decontamination method

8. **Cleaning**

8.1 Cleaning removes grease, soil and approximately 80% of micro-organisms (Ayliffe et al, 2000). It is an important method of decontamination and may be safely used to decontaminate low risk items of equipment such as those coming onto contact with intact skin (e.g. washbowls, trollies and sphygmomanometer cuffs). Medium risk items (e.g. those in contact with mucous membranes or contaminated with blood and body fluids) and high risk items (coming into contact with a break in the skin or entering a sterile body area) must be cleaned thoroughly prior to disinfection or sterilization.

8.2 **General Principles** of cleaning

- Use automated cleaning methods where possible
- Use a designated sink for cleaning (not a hand wash basin)
- Wear protective clothing as appropriate (see Standard Infection Prevention and Control Precautions Policy and Cleaning Policy)
- Use disposable cloths and discard after use
- Use neutral detergent and warm water (maximum 42-43C) for general cleaning
- Rinse thoroughly to remove detergent residue
- Dry thoroughly after cleaning (using disposable towels where appropriate)
- Decontaminate cleaning equipment after use and change cleaning brushes at least daily
- Store cleaning equipment clean and dry

8.3 Domestic Cleaning

- The aim of environmental cleaning is to remove visible dirt, dust and organic matter
- Equipment for domestic cleaning is colour coded in accordance with national guidance as outlined in the revised NHS Healthcare Cleaning Manual.
- Domestic cleaning equipment must be stored clean and dry
- Cleaning equipment such as cloths and mop heads must be changed at least daily.
- Domestic cleaning agents or detergent should be used
- Always work from clean areas to dirty

8.4 High Cleaning

- Do not attempt to clean above a height that you can comfortably reach while standing on the floor
- High cleaning should be arranged with the Estates Department

8.5 Terminal Cleaning

- Terminal cleaning involves very thorough cleaning and disinfection of an area, and will include changing of curtains
- Terminal cleaning is carried out after discharge of a patient who has been identified, or is strongly suspected of being infected / colonised with certain infectious organisms (e.g. Meticillin resistant staphylococcus aureus or Clostridium difficile). This may be applied to a bed area in a bay, a whole bay or a side room
- Terminal cleaning is also carried out throughout a whole ward / department at the end of an outbreak of infection. In some circumstances hydrogen peroxide mist may be used in conjunction with terminal cleaning

8.6 Deep Cleaning

- Periodic thorough cleaning of an environment, including fixed and loose equipment using a combination of hydrogen peroxide mist , steam cleaning and domestic cleaning practices
- It is recommended that proactive deep cleaning takes place annually
- Under certain circumstances, deep cleaning may also be advised by the infection prevention team reactively (e.g. following identification of a number of patients with C. difficile linked by a particular clinical area

8.7 Steam Cleaning

- A dry steam system that can instantly clean and dry surfaces without leaving any unhygienic residue.
- Each ward is provided with a steam cleaner that both nursing and domestic staff can use. Steam cleaning enables the Trust to achieve higher standards of cleanliness and hygiene.

8.8 Hydrogen Peroxide Mist (HPM) Decontamination Technology

- Also known as 'fogging' or 'hydrogen peroxide vapour'
- Ideally suited for use in healthcare facilities due to its rapid, flexible and 'residue-free' nature

- HPM has extensive, proven biological efficacy against a wide range of environmentally associated pathogens. This procedure must only be carried out by trained domestic staff
- HPM decontamination can be applied safely even where expensive electronic equipment is situated
- HPM decontamination has proven material compatibility so all equipment can be safely decontaminated in situ with no detrimental effect on performance or aesthetics. This is critical during the "deep clean" process where these areas have traditionally been hard to reach or where the decontaminants are incompatible with sensitive electronics, particularly chlorine-based products (including bleach)
- This process is also used following discharge of patients identified as being *C. difficile* positive

8.9 Specialist Equipment/Instruments

- Surgical instruments should not be cleaned manually, they should be returned to sterile services for decontamination. Where manual cleaning is unavoidable NHS Estates Protocol for the Local Decontamination of Surgical Instruments (March 2001) should be used (see Appendix 2).
- Specialist equipment must be cleaned in accordance with the manufacturer's instructions and be compatible with the Sterile Services Department's decontamination processes.
- Where written instructions are not available the Unit / Department Manager (or designated person) should contact the manufacturer for advice
- Where necessary local guidelines should be developed by the Unit / Department Manager and approved by the Infection Prevention and Control Group
- Where guidelines for decontamination have been required, or where the equipment decontamination process is complicated, the Unit / Department Manager must ensure that all staff undertaking the decontamination process have been trained, either by a competent member of staff, or by a representative from the manufacturing company. A record of training must be kept in the department.
- Ensure that cleaning agents used are compatible with the equipment [MDA SN2001(28)] Failure to follow the manufacturer's instructions may invalidate any warranty or service agreement

9. Disinfection

- 9.1 Disinfection is used as part of the decontamination process for moderate risk items. Disinfection methods include thermal and chemical processes. Moist heat may be used for items such as crockery, linen and bedpans. Specific chemical disinfectants can be used to decontaminate heat sensitive equipment and the environment. . Disinfectants are not cleaning agents as they are generally inactivated by organic material, therefore all items must be cleaned thoroughly prior to disinfection.

9.2 Chemical disinfectants are toxic substances, and the user must comply with the Control of Substances Hazardous to Health (COSHH) Regulations 2002. Misuse and overuse of chemical disinfectants may result in damage to the user, service user or equipment and may also result in the development of antimicrobial resistance.

9.3 **General principles**

- Do not use disinfection as a substitute for sterilisation
- Only use chemical disinfectants if absolutely necessary
- Choose an appropriate disinfectant, compatible with the surface being disinfected
- Read the relevant COSHH assessment sheet before using any chemical disinfectant
- Wear protective clothing (and respirators if required)
- Ensure adequate ventilation
- Check the expiry date of the disinfectant
- Ensure that the correct dilution is used (check manufacturer's instructions)
- Never dilute a disinfectant by guesswork
- Never use two disinfectants together
- Do not add anything to a disinfectant (including detergent) as this may result in a dangerous chemical reaction
- Clean equipment / surfaces thoroughly before disinfection
- Ensure sufficient contact time between disinfectant and equipment being decontaminated
- Rinse thoroughly after disinfection (if alcohol is used to disinfect then rinsing is not required)
- Discard disinfectant solution after use
- Do not 'top up' solutions of disinfectant
- Ensure that containers used for disinfection are stored clean, dry and inverted between uses

9.4 **Environment**

- In order to minimise healthcare associated infection (HCAI) disinfectant solutions are used daily for environmental cleanliness.
- Surfaces that are clean and dry will not support the growth of most bacteria (Wilson, 1995)
- Disinfection of the environment, especially frequently touched surfaces may be required more frequently in outbreak situations
- Blood and body fluid spills should be dealt with as outlined in Section 16 of this policy

9.5 **Specialist Equipment**

- Ensure the decontamination procedure complies with national guidance and that the disinfection process is compatible with the equipment [MDA SN2001(28)]
- If written instructions are not available, contact the manufacturer for advice and a list of compatible disinfectants
- Where necessary local guidelines should be written and approved by the Infection Prevention and Control Group
- Failure to use the correct disinfection process may result in damage to the equipment and invalidate any service agreement or warranty

9.6 Tracking


In order to comply with CFPP01-01 and CFPP01-06 all instruments and endoscopes disinfected or sterilized with the intent that they be used for invasive procedures, must be traceable (Please refer to local policy).

9.7 Antiseptics

- Antiseptics are disinfectants that are suitable for use on skin and tissues e.g. Chlorhexidine, Povidone Iodine Triclosan and alcohol
- Antiseptics are used to clean wounds and to reduce skin flora prior to surgery or insertion of an invasive medical device
- Antiseptics generally have a significantly weaker action than disinfectants used in the decontamination of instruments and equipment.
- Do not use antiseptic hand washing solutions such as 'Hibiscrub' or 'Betadine' for environmental cleaning or the cleaning of instruments. Use neutral detergent or detergent wipes

10. Equipment for Maintenance, Repair, Loan or Disposal

- All re-usable medical devices and equipment to be inspected, serviced, repaired, returned to the lending organisation or equipment library, or to be disposed of, should undergo decontamination. This is necessary to ensure that they are in a condition that makes them safe to be handled by all personnel who may come into contact with them during transit and subsequent handling
- Processes to ensure that equipment and medical devices are safe to handle can include cleaning, cleaning followed by disinfection and cleaning followed by sterilisation
- Decontamination should always be carried out in accordance with the equipment manufacturer's instructions
- Equipment that is deemed safe to handle must be accompanied by a decontamination label or a Decontamination certificate to highlight its clean status (see below). The labels can be obtained from the Bio Medical Engineering (BME) department or the Medical Equipment Library. And decontamination certificate can be obtained from the Sterile Services department

Mid Essex Hospital Services 
NHS Trust

DECONTAMINATION STATUS

**IMPORTANT - HAS THIS EQUIPMENT BEEN
CONTAMINATED BY BLOOD, ANY BODY FLUID
OR EXCRETA? YES NO**

HAS IT BEEN CLEANED. YES NO

Signature.....
Name (print).....
Ward/Department..... Date.....

(This label must be completed prior to equipment being accepted by BME)
SESH 3162

11. Sterilisation

11.1 All instruments that penetrate skin or mucous membranes or are used in sterile body cavities must be sterilised prior to use. Sterilisation of reusable items of equipment must be carried out in the Hospital Sterile Services Department (HSSD). Local processing of instruments must be avoided.

11.2 Return of used instruments to Sterile Services

- Remove all sharps
- It is not necessary to clean items before return to Sterile Services, however containers should be emptied of blood or body fluids
- Place used instruments in Sterile Services bag
- Do not overfill the bag
- Store in a dirty area such as the dirty utility room whilst awaiting collection. Ensure that the public do not have access to this area
- High-risk labels are not required
- Sterile Services must be informed in advance if instruments are to be used, or have been used, on a service user who is known, suspected or at risk of having Creutzfeldt Jakob Disease (CJD). Please contact a member of the Infection Prevention and Control Team if advice is required

12. Storage of Sterile Equipment

12.1 Any sterile equipment (including that returned from Sterile Services) must be stored: in a secure location away from public access in a clean dry area, (i.e. where risk of contamination with dust is minimal and there is no risk of contamination with moisture and /or body fluids) and above floor level

13. Decontamination Methods

13.1 Appendix 3 shows an A-Z list of items of equipment and appropriate decontamination methods. This is intended as additional information, and is not a comprehensive list. Please read the cleaning, disinfection and sterilization section in this policy before using this list. Items that require sterilisation by autoclaving should be returned to Sterile Services for processing.

14. Single use items

14.1 Single use items may be divided into two groups:

- Single-use : Single-use items should be used once only and discarded
- Single patient use: Single patient use items may be reused for the same service user after appropriate decontamination

14.2 Standards for use for single use items

- Devices designated for single-use must not be reused under any circumstances
- The reuse of single-use devices can affect their safety, performance and effectiveness, exposing patients and staff to unnecessary risk

- Reprocessing single use devices may affect the capabilities and/or the materials from which the device is made
- Single-use devices are not be designed to allow thorough decontamination and, re sterilisation processes

14.3 **Single patient use items**

- Devices designated single patient use should be used for one patient only
- The device may be used for the duration or number of times specified by the manufacturer
- Single patient use items must be decontaminated after each use according to manufacturer's instructions.

14.4 **Legal Issues**

- Under the Health Care Act, 2008 Trusts are legally required to appropriately decontaminate any item that passes from one individual to another
- The organisation would be liable under criminal law (Provision and Use of Work Equipment 1998) and civil law under the Tort of Negligence if damage or injury is caused by the reuse of single-use items

15. **Instructions on packaging of equipment**

- 15.1 Appendix 4 illustrates the symbols used on medical devices and their packaging. Staff must be aware of the meaning of the symbols.

16. **Management of Blood, Bodily Fluids and Other Spillage**

- 16.1 It is the responsibility of department/ward/unit staff to ensure that blood and body fluid spillage in their area is cleaned up promptly, safely and appropriately. It is the responsibility of the member of staff reporting the spillage to ensure that the health and safety of others is maintained until the spillage is removed, i.e. place wet floor/spillage sign at the site of the spillage.
- 16.3 All blood and blood stained body fluids must be considered a potential infection hazard. Treatment of blood and body fluid spills with a chlorine releasing disinfectant prior to removal does not render the spillage 'safe' as the disinfectant is inactivated by organic matter and the disinfectant may not penetrate the spillage fully. Furthermore, the disinfectant itself can be hazardous to health and its use should be controlled. The main hazard of a spillage is to the individual clearing it up. Therefore, it is more important that the individual dealing with the spillage has received the appropriate education and training in this area.
- 16.4 Appropriate protective clothing must be worn whenever dealing with blood or body fluid spills e.g. disposable gloves and apron, and that the spillage is removed as soon as possible rather than relying on the nebulous activity of a disinfectant.

16.5 Minor blood splashes on floors, walls and other surfaces

Clean immediately with hot water and detergent, using a disposable cloth or mop as appropriate.

16.6 Moderate or large blood and other body fluid spillage on floors and other surfaces

The spillage can be absorbed with paper towels or similar material. Dispose of paper towels into the orange bag waste stream clinical waste bag/bin. Continue with cleaning in line with Trust Cleaning Policy (09033)

16.7 Spillage on carpet

Carpets must not be used in clinical areas where there is a risk of blood spillage.

However, if spillage has occurred on a carpeted area it should be cleaned with a carpet shampooer/extractor as soon as possible. Staff will need to ascertain whether this is the responsibility of the clinical staff or of the cleaning contractor.

17. Decontamination Evidence Trail

17.1 Following decontamination of reusable medical equipment, staff must ensure that the correct tracking system is used to ensure that anyone reviewing the process are able to confirm the correct system has been used.

18. Cleaning Folder

18.1 A cleaning folder has been developed and implemented whereby all cleaning information and records relating to a ward/department are centrally located, clearly identifying cleaning responsibilities for domestic, nursing and estates

18.2 The cleaning folder should be easily accessible to all staff working in a ward/department, e.g. nurse's station.

18.3 Results from cleaning audits and subsequent action plans are recorded in the cleaning folder to monitor progress and highlight any outstanding issues. This is the responsibility of the nursing teams.

18.4 The checklists used within the cleaning folder are those developed within the Cleaning and Decontamination policies which are also included within the folder.

19. Training and Education

19.1 All staff will attend appropriate decontamination training as part of induction and mandatory review while employed by the Trust.

19.2 An individual's responsibility relating to decontamination will be outlined in their job description and discussed at appraisal.

19.3 In Sterile Services an initial 3 months intensive Training programme is undertaken and continues 'on the job' for a further 9 months - in total 12 months training, then ongoing as necessary.

19.4 Sterile Services also offer any member of staff the opportunity to spend time in the department to increase their knowledge of decontamination of equipment.

20. Auditing

The following audits are undertaken to monitor compliance with this policy.

20.1 High Impact Intervention (No. 8)

20.1.1 High Impact Intervention (No. 8) is a care bundle to improve the cleaning and decontamination of clinical equipment.

The aim is to:

- improve the decontamination of near-patient equipment
- help reduce the risk of healthcare-associated infection (HCAI)
- embed the importance of cleaning into the everyday work routine of the ward
- improve patient confidence

20.1.2 This High Impact Intervention will help trusts to achieve compliance under criterion 2 of the Code of Practice by providing a focus for activity and a method for measuring the implementation of policies and procedures for reducing reservoirs of infection. As such, it complements the auditing framework set out in the 2007 National Specifications for Cleanliness and provides nurses with an easy-to-use protocol for assessing cleanliness, as outlined in standard 3 of the Royal College of Nursing's *Infection prevention and control: Minimum standards*.

20.1.3 The results from these audits are presented in the monthly Director of Infection Prevention and Control (DIPC) report and scrutinised at Directorate Clinical Governance meetings and by the Infection Prevention and Control Group

20.2 **Executive Director Audits:** Environmental audits of each ward are undertaken by Executive Directors, Clinical Directors and Heads of Nursing. These audits include a wide range of cleanliness issues within the ward premises and also patient equipment. Results of the audits are presented in the DIPC report and scrutinised at Infection Prevention and Control Group

20.3 **Infection Prevention Annual Audit Programme:** This is presented in the Annual Infection Prevention Programme. **OHS Specification for Cleanliness Audits, April 2007 (49 elements):** The Trust operates a robust monitoring system based on the National Standards of Cleanliness. All areas are monitored by Domestic Team Leaders and Ward Sisters/Departmental Managers in accordance with the national auditing tool and an action plan is produced to correct any areas falling below the required standard of cleanliness. Below is a table explaining the targets and Trust thresholds. If an area falls below the threshold then this will be re-audited as required until it reaches the threshold target.

Functional Areas	NCS Frequency of Audit	NCS Target	Trust Threshold for Re-audit	Frequency of Re-audit
Very High (i.e. Theatres, A&E)	Weekly	98%	90%	Daily
High (i.e. Wards)	Monthly	95%	85%	Weekly
Significant (i.e. Clinics)	Quarterly	85%	75%	Weekly
Low (i.e. Offices)	Bi-Annual	75%	70%	Fortnightly

The Facilities Monitoring Team continually overseeing the monitoring process of the domestic cleaning service. The cleaning audit results are presented within the Monthly Chief Executive Cleaning report and Quarterly Trust Board Cleaning report which is scrutinised by the Infection Prevention and Control Group.

21. Breaches in decontamination procedures

- 21.1 Breaches in decontamination of medical devices will be datixed.
- 21.2 Where a breach involves an invasive medical device that has been used on a second patient without appropriate decontamination, this will be regarded as a serious untoward incident.

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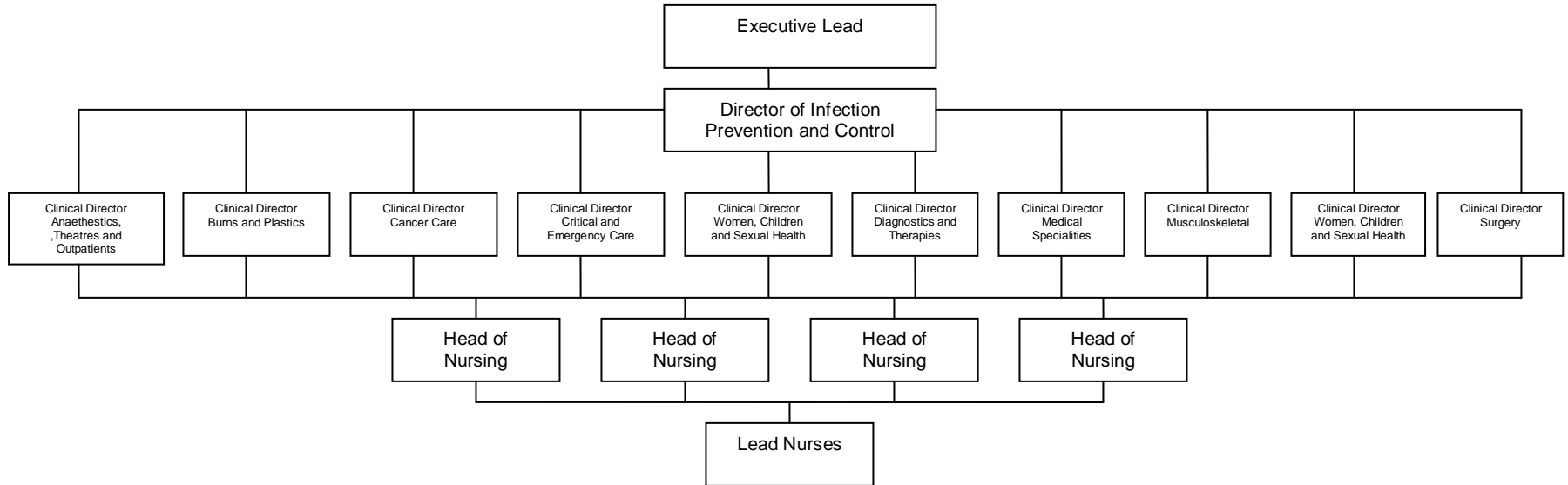
Robinson et al. A systematic review of effectiveness of disinfectants on skin preparation and dressings in patients receiving epidural analgesia *Acute Pain* Volume 7, Issue 4, December 2005, Pages 177-183

Great Ormond Street for Children: Antiseptic skin preparation - first line use of 2% Chlorhexidine/ 70% isopropyl alcohol for all age groups

http://www.ich.ucl.ac.uk/clinical_information/clinical_guidelines/cpg_guideline_00185.

Accessed 10 March 2010

Accountability and Responsibility for Decontamination within Directorates



NHS Estates Summary of Protocol for the Decontamination of Surgical Instruments where Undertaken Locally

Immersion Method - Procedure for Manual Cleaning

To minimise the risk to personnel undertaking manual cleaning splashing and the creation of aerosols must be avoided at all times.

- Wear protective clothing.
- Fill the clean sink (not hand wash basin) with the appropriate amount of water and detergent.
- Dismantle or open the instrument.
- Fully immerse the instrument in the solution and keep under water during the cleaning process to prevent aerosols.
- Brush, wipe, agitate, irrigate, jet wash or hand spray the item to clean.
- Drain any excess detergent prior to rinsing in a second sink with clean water. (Jet guns may be used under the water surface but should only be connected to the **cold** water supply).
- Drain the item before drying using the preferred method.
- Complete any relevant documentation.

N.B.

- Dispose of cleaning materials safely in accordance with local policy.
- Replace obviously soiled or contaminated cleaning solution or the rinse water.

Non-immersion method - manual cleaning methods are required for certain equipment where items will become compromised by immersion in aqueous solutions, e.g. electrical/electronic equipment. In such cases clean items in accordance with manufacturer's instructions.

The complete version of this protocol can be found on:

www.decontamination.nhsestates.gov.uk

A-Z OF EQUIPMENT AND DECONTAMINATION METHODS

This is intended as additional information, it is not a comprehensive list. Please read the cleaning, disinfection and sterilization section in this policy before using this list. Items that require autoclaving should be returned to Sterile Services for processing.

Item	Decontamination Method	Frequency
Airways and Endotracheal tubes	Disposable.	Single use only
Airway Suctioning	Yankeur suckers are single use only. If the packet is opened to attach to the suction tube in preparation for emergency use the Yankeur sucker must be left covered.	Single use only
Ambu bag & face mask	Disposable.	Single use only
Auroscope	Clean handle with 70% alcohol wipe	After each use
Baby bottles and teats	<p>Use pre-sterilised feeds if possible.</p> <p>Single use, disposable teats and bottles</p> <p>Single patient use bottles are disinfected in Milton between feeds. Both the bottle and the Milton tank must be designated for individual patient use.</p> <p>Immerse in Sodium Hypochlorite 1% (Milton) 125ppm (0.0125%) available chlorine for 30 minutes. Discard the solution and make up a fresh solution every 24 hours</p>	<p>Single use only</p> <p>After each use.</p>
Baby weighing scales	Clean with Tristel	After each use
Baths	Clean with Tristel or a domestic cream cleanser.	After each use. It is the responsibility of staff to ensure that the bath is cleaned.
Bath hoists	Clean with Tristel	After each use

Bath mats (non slip)	Single use only	Discard after use
Bed frames and wheels	Clean with Tristel	As per ward cleaning schedule
Bedpans and urinals	Disinfect in washer-disinfector. If this is out of action, then use disposable and discard in orange bag waste stream	After each use
Birthing pool	Rinse to wash away most of organic matter and then wipe with Tristel with a disposable mop.	After each use
Blinds	Refer to manufacturers instructions.	At least every six months and in between If visibly soiled/contaminated
Bottles - Suction	Use disposable bottles/ liners. Reusable bottles should be cleaned and sent to HSDU.	After each use.
Bowls DO NOT put wash bowls in the bedpan washer / disinfector	Each patient to have their own wash bowl for the duration of their stay. Wash with detergent and water. Store dry and inverted Clean with Tristel. Store dry and inverted.	Dispose of bowl if visibly scratched. After each use (by same patient) In between patients
Brushes: Hair Nail Cleaning (instrument or endoscope) Lavatory	Individual patient use only. Disposable, use only for surgical scrubbing or if nails are heavily soiled. Disposable preferred. If reusable clean and autoclave. Rinse in flushing water Between patients wipe toilet seat with a detergent wipe.	Dispose of after use. Single use only After each use. Daily.
Carpets	Vacuum. Steam clean.	Daily. Periodically.

(Carpets should not be used in clinical areas).	Clean with detergent and hot water preferably using a carpet shampooer.	Following spillage.
Commodes	Thoroughly clean with Tristel. Steam clean	After each use. Put green tape round commodes when cleaned. Weekly (or monthly in areas where commodes infrequently used).
Cots/ bed warmer billibeds	Clean with Tristel After cleaning Billibeds, store in a plastic bag	Between patients
CTG Monitors.	Clean the outside of the monitors with a damp cloth moistened with Tristel The transducer heads should be cleaned with disinfectant wipes. Do not use alcohol wipes because it will damage the transducer. Frame of the trolley should be steam cleaned regularly.	Between patient use.
Curtains	Follow the curtain policy.	Routine change at least every six months and in between if visibly soiled/contaminated.
Delivery Beds	Clean bed fame, attachments and mattresses with Tristel	Put signed, dated green tape round bed when cleaned according to policy (10003)
Dressing trolleys	Clean with detergent wipe. Before use disinfect with 2% Chlorhexidine in 70% alcohol wipe (Sani-Cloth CHG 2%)	Daily and if contaminated with blood or body fluids. Before use.
Dynamap	Machine – wipe with detergent wipes Cuffs –single patient use cuffs - non disposable, wipe with 2%	Daily Discard when patient discharged

	Chlorhexidine in 70% alcohol wipe (Sani-Cloth CHG 2%)	After each use
Enteral feeding pumps	Clean with detergent wipes	After each use and if soiled
Face Masks (oxygen)	Disposable. Clean with detergent wipe whilst in use as required. Cover when not in use (in plastic bag)	Single patient use.
Furniture and fittings	Follow manufacturers instructions	As per ward cleaning schedule
Headphones (radio)	Change foam ear pieces and clean with detergent and water.	After each patient use
Hoists	Clean with Tristel	Daily and if visibly soiled/contaminated. Clean bath hoists after each use.
Hoist slings	Where possible use disposable slings or keep sling for individual service user use. Send to laundry in a purple bag or wash in ward/unit washing machine if available, following manufacturers instructions. Store in a plastic bag when not in use.	In between use on different patients or if soiled.
Instruments Surgical	Disposable. If reusable return to Sterile Services for cleaning and autoclaving. Delivery instruments (maternity) should be sprayed with enzyme spray prior to placing in red striped bag.	Dispose of after use After each use. After each use.
Intravenous injection trays	Clean with detergent wipe (if soiled) then disinfect with 2% Chlorhexidine in 70% alcohol wipe (Sani-Cloth CHG 2%)	Before <i>and</i> after each use
Intravenous device ports and hubs	Chlorhexidine 2.0% in 70% alcohol (Sani-Cloth CHG 2%)	Each time IV device is accessed
IV pumps	Clean with detergent wipes	After each use and if soiled
IV stands	Clean with detergent wipes	After each use and if soiled

	Steam clean	Periodically
Jugs Urine	Use sterile jugs supplied by supplies or disinfect in washer disinfectant. Maternity, urine measuring jugs, cleaned in the bed pan washer, inspect that it is clean and store upside down in designated area.	After each use
Laryngoscopes: Blades	Use disposable blades.	Discard after use
Handles	Disposable Non- disposable - return to Sterile services for cleaning and autoclaving	Discard after use After each use
Mattresses	Refer to mattress policy (10003)	
Medicine pots/cups	Disposable or wash in hot water and detergent and dry. Do not soak.	Single use or after each patient
Mops	Change mop head and launder. Clean handle with Tristel	Daily
Nebuliser machines Machine;	– wipe with detergent wipes	After use
Mask / tubing;	– Disposable - Single patient use wipe with detergent wipes	Discard after use As required
Nebuliser chamber;	- Disposable - Single patient use wash in warm water and detergent, rinse and leave to dry in a clean area	Discard after use After use
Razors	Disposable.	After use
Resusitaires/ portable Incubator	Clean using Tristel	Clean between each patient use.
Stethoscope	Clean with detergent and water or detergent wipes if soiled. Use 70% alcohol wipes (if visibly clean) between use.	Between each patient
Suction Equipment Machines:	Clean outside of machine with Tristel Single use disposable. Do not leave open	If in use: daily and if visibly soiled. If not in use: weekly.

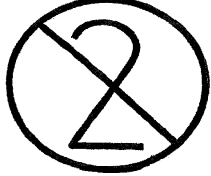



Catheters (suction)	catheters attached to tubing. Single use disposable	Dispose of after each use
Tubing (suction)	Change in accordance with manufacturer's instructions and if soiled/contaminated.	Dispose of after each use
Filters (suction)		As required
Thermometers	Use disposable thermometers or thermometers with disposable sleeves or covers.	Dispose of sleeves or covers after use.
Ultra sound portable unit in Maternity	Wipe outside of machine with detergent wipe Transducer head cleaned with Tristel	Between patient use
Urethral catheter bag tap	Chlorhexidine 2.0% in 70% alcohol (Sani-Cloth CHG 2%)	Before and after emptying urine bag
Ventou machine	Clean the outside of the machine with damp cloth moistened with Tristel	Between patient use
Vomit bowls	Disposable or clean in washer disinfectant	After each use
Weighing scales	Clean with Tristel	After each use
Wheelchairs	Detergent Wipes	See wheelchair policy







Appendix 4

Symbols used on Medical Devices and their packages

The Medical Devices Directives define the information that manufacturers are required to provide to users. Some of this information may be presented as symbols.

A number of the most commonly used symbols are reproduced below, together with an explanation as to their meaning.

Symbol	Meaning
	Single use only
	This item complies with the requirements of the directive/s relevant to that device. No additional controls needed to be marketed in the European Union.
	Date of manufacture e.g. June 1996.
	Attention. See instructions for use.
SN-ABC123	Serial number.

	<p>Batch code.</p>
	<p>Use by date; E.g. use by 30th June 1998.</p>
	<p>Sterile.</p>
	<p>Sterilised by radiation.</p>
	<p>Sterilised by heat.</p>
	<p>Sterilised by ethylene oxide.</p>

Definitions of levels of decontamination and risk

Table 1: Definition of levels of Decontamination

Method	Process
Cleaning	Physical removal of organic contamination (blood, faeces, etc.), soilage and significant number of micro-organisms by use of hot water and detergent.
Disinfection	A reduction in the number of micro-organisms to a level at which they are not harmful. Bacterial spores, however, are not usually destroyed. Disinfection may be achieved by the use of heat or chemical disinfectants.
Sterilisation	Total removal or destruction of all micro-organisms, including bacterial spores. Sterilisation may be achieved by the use of steam under pressure or dry heat.

Table 2: Categories of risk relating to decontamination of equipment

Category	Indication	Examples	Level of Decontamination	Method
High Risk	Items that penetrate skin or mucous membranes, or enter sterile body areas	Surgical instruments, needles, *Vaginal speculum.	Sterilise	Autoclave and use sterile Single use - disposable
Medium Risk	Items that have contact with mucous membranes or are contaminated with microbes that are easily transmitted	Bedpans. Endo-scopes	Disinfect or sterilise	Autoclave or disinfect by heat (80°C – 1min) Chemical disinfection may be appropriate for certain heat labile items, e.g. endoscopes.
Low Risk	Items used on intact skin	Washbowls mattresses	Clean	Wash with warm water and detergent and dry thoroughly or use detergent wipes

*Vaginal speculae must be sterilised after use but do not need to be sterile at point of use, unless used during a sterile procedure

Ward Equipment Cleaning Checklist

This is a generic checklist which can be adapted to meet the needs of the clinical area

Details of instrument cleaning method is in the decontamination policy or by contacting Infection Prevention.

Ward

Week Beginning

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Name							
Resus Trolley							
Bedside Monitors							
Suction Apparatus							
Oxygen Cylinders & Stands							
Sphygmomanometers and P Oximeters (or <u>Dynamap</u>)							
Scales							
Thermometers							
IV Pumps							
Enteral Feeding Pumps							
Near Patient Testing Equipment							
Ventilators							
Drip Stands & Supports							
ECG Machines							
Dressing Trolleys							
Drug Fridge							
Linen Skip							
Zimmer Frames							
Store Cupboards							
Drug Trolley							
Notes Trolley							
Patient Wash Bowls							
Lockers on Discharge							
Hoists							
Raised Toilet Seats							
Commodes							
Bedpans							
Mattresses on Discharge							
Dani-Centre (gloves etc)							
Babies Cribs							
Babies Highchairs							
Prams							
Signed (signatory can be any member of the ward staff on duty)							

Sister's Signature

Date

Ward Cleaning Expectations

Ward Area	Expectations
Sluice	A generally clean and tidy sluice. No sterile items stored. All bedpans and bowls clean and stored inverted. Spillage pack available. Bedpan washer working effectively.
Clean Utility/Treatment	Generally clean and tidy. No contaminated or unnecessary items stored. Items that could be contaminated during treatments covered. Sterile items off the floor.
Ward Areas	Generally clean and tidy. No dust on horizontal surfaces. Curtains clean. No extraneous item out of the bed area. Floors clean and dust free. Good supply of liquid soap, alcohol hand rub and paper towels.
Toilets	Generally clean and tidy. No extraneous items. Good supply of liquid soap and paper towels. No sterile items in the room.
Bathrooms	Generally clean and tidy. No extraneous items. Good supply of liquid soap and paper towels. No sterile items in the room.
Bed Areas	Bed clean and dust free. Under the bed dust free. Catheter bags, wound drains etc kept off the floor. Good supply of alcohol hand rub. Bedside cabinets and table clean and dust free. Patientline equipment dust free.
Corridors	Clean and tidy. No unnecessary equipment or items in the corridors.
Nurses Station	Generally clean and tidy. All surfaces dust free. Telephone and computer keyboards and monitor clean and dust free. Notes trolley clean and dust free.
Kitchen	Generally clean and tidy. All food and kitchen items put away after use. No drying of tea towels. Refrigerator clean and not containing unlabelled or out of date food. Refrigerator seals clean. Refrigerator temperature between 3-8 degrees