NHS
East London
NHS Foundation Trust

Infection Prevention and Control Policy Manual

Version Number:	09
Ratified by:	Infection Prevention & Control Committee
Date Ratified:	April 2019
Name of Originator/Author:	Infection Prevention & Control Team
Name of responsible committee/individual:	Infection Prevention & Control Committee/Infection Prevention & Control Team
Circulated to:	Infection Prevention & Control Committee Quality Committee
Implementation Date:	April 2019
Last Review Date:	April 2019
Next review date:	April 2021

Services	Applicable To
Trust Wide	✓
Mental Health and LD	✓
Community Health Services	✓

Version	Date	Author	Status	Comment
05	03-12-2012	SE	Final	OH Pathway added to policy
06	19-08-2012	CS	Final	Review of current policy in line with National Guidance
07	19-10-2018	RB	Final	Review of current policy in line with National Guidance
08	28-12-2018	RB	Final	Format changes
09	08-04-2019	RB	Final	Review of current policy in line with national guidance on portable fans

Table of Contents

List of Appendices

1. Executive Summary

East London NHS Foundation Trust is committed to the prevention and control of healthcare associated infection and the provision of a safe clean environment for care.

The principles of infection prevention and control laid out in The Health and Social Care Act Code of Practice for the Prevention and Control of infection (2015) and Standards for Better Health are embedded within the ethos of the Trust Infection Prevention and Control Policies.

The term Health Care Associated Infection (HCAI) referred to in this policy encompasses any infection by any infectious agent acquired as a consequence of a person's treatment by the NHS or which is acquired by a health care worker in the course of their NHS duties.

The general principles of infection prevention and control are applied during working practices, which protect other patients and staff from infection.

This policy is based on evidence based guidelines from Department of Health and Social Care, best practice evidence in "the Health Act 2009" "Standards for Better Health", Epic 3 guidelines and NICE Guidelines.

The policy will be easily accessible to staff, patients and the public on the Trust intranet.

Information from this policy is included in induction training (Health Act 2006, Health and Social Care Act and related guidance 2015).

Compliance with clinical and environmental practices will be audited and the results of which will be reported to the Trust Board.

2. Roles and Responsibilities

Party/Person	Key Responsibilities
Chief Executive Officer (CEO)	• Has overall accountability for the Trust policies
The Director of Infection Prevention and Control (IPC)	• To provide assurance to the board that IPC systems are in place that IPC risks are managed effectively for staff, patients and visitors across the Trust. • To ensure that any shortfalls in policy implementation are addressed.
IPC Doctor/ Microbiologist	• To provide expert IPC advice as required
Infection Prevention & Control Team (IPCT)	• Act as role model for best IPC practice • Update this policy as required and immediately • following any update on national guidance • Provide IPC training for all relevant staff where required • Provide any IPC additional advice if and when required • Act as an expert resource and support for all staff.
Borough Lead Nurses/Service Leads/ Modern Matrons/Team/Ward Managers	• Act as a role model • To ensure the implementation of this policy • Provide sufficient time for staff to attend IPC training/ link practitioner meetings and sufficient time to undertake IPC audits where required • Act upon Infection Control advice and disseminate information accordingly to teams • Ensure that staff are aware of the requirement to participate in quarterly IPC audits
Infection Prevention & Control Link Practitioner (IPCLP)	• Act as role model for best IPC practice • Support the IPCT to deliver the IPC agenda • Attend IPC link practitioner meetings where appropriate across the Trust • Advise and support staff, service users, carer's visitors of any IPC requirements relating to this policy • Assist in creating an environment that is IPC safe for the patient, staff and visitors using IPC
Site Managers/Supervisors (where applicable)	• To support the IPC team and provide feedback of any IPC incidences that occur across sites/health centres • Participate in the quarterly IPC audits where applicable • Report any related IPC facilities issues to the estates and facilities department promptly
All staff (including bank,/agency or contracted staff)	• Must demonstrate adherence to all sections included in this policy at all times • Complete IPC e-learning for Level 1 (non-clinical) and Level 2 (clinical) as outlined by the Trust Learning and Development teaching matrix

3. Accountability

The Director of Infection Prevention and Control (DIPC) has overall responsibility for the Infection Prevention and Control team within the organisation. The Deputy Director of Infection Prevention and Control has the strategic and operational responsibility of the implementation of IPC policies, challenging inappropriate infection prevention and control practices, undertaking the impact assessment of new and revised policies, together with recommendations for change, integrating infection prevention and control together with clinical governance and patient safety agenda and the production of the an Trust annual Infection Prevention and Control report.

The Trust board receives regular reports on indicators of compliance with the Health and Social Care Act and The infection prevention and control annual work programme and reports from the quarterly Infection prevention and control Committee

The infection prevention and control committee is chaired by the Director of Infection Prevention and Control and is accountable to the Quality Committee.

4. Standard Precautions

4.1 Introduction

Standard precautions are a set of principles to support safe practice, protecting both patients and healthcare workers from micro-organisms that may cause infection. Standard precautions include a group of infection prevention practices that apply to all patients/ service users, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered.

Standard Precautions are designed to prevent cross transmission from recognised and unrecognised sources of infection. Standard Precautions are based on the principle that all blood, body fluids, secretions, excretions (except sweat), broken skin, and mucous membranes are treated as if infectious.

Standard precautions underpin safe practice, offering protection to both staff and patients from healthcare related infections. Since examination and medical history alone cannot reliably identify all infections, standard precautions represent a standard of care to be used routinely regardless of perceived or known infection risk factors.

Standard infection prevention and control precautions include:

- Effective hand hygiene
- Use of personal protective equipment
- Safe aseptic non-touch technique
- Safe handling and disposal of sharps
- Management of spillages of blood and body fluids
- Safe handling and disposal of clinical waste
- Decontamination of re-usable medical equipment

4.2 Why are standard precautions Necessary?

They are necessary to ensure the safety of patients/clients, health/social care workers and those who visit the care environment.

4.3 When should standard precautions be applied?

Standard Precautions should be applied at all times where care is being provided and must underpin all health and social care activities. The application of standard precautions is determined by:

- The level of interaction between the health/social care worker and the patient/client
- The anticipated level of exposure to blood or other body fluids

5. Hand Hygiene

5.1 Introduction

Hand hygiene is the single most effective measure in the prevention of the spread of infection. Hand hygiene has been shown to play a very important role in the prevention of healthcare associated infections HCAI's (Pratt et al. 2014). With the rising problem of HCAI's it is critical that all health care workers (HCW) understand the importance of good hand hygiene and undertake effective hand hygiene decontamination consistently.

This policy must be read in conjunction with the East London Foundation Trust Dress code Policy. The purpose of the policy is to minimise the incidences of cross-infection between patients; to minimise the risk of cross infection to all staff and to ensure effective hand decontamination reduces infection rates and to promote 100% compliance of hand hygiene within the Trust.

5.2 Definitions and Terms

Bare Below the Elbow (BBE)	Hands and arms up to the elbow/mid forearm are free from clothing and jewellery (bracelets, stoned ring, watches) nail varnish and acrylic nails (NICE 2012)

Direct Clinical Contact	Direct contact with a service user, this includes face to face consultation. Hands on or face-to-face contact with patients. Any physical aspect of the healthcare of a patient, including treatments, self-care and administration of medication. (NICE 2012)

Hand Hygiene	Generic term that covers the process of removing or destroying loosely attached 'transient' micro-organisms from the surface of the hands, the practice of physically decontaminating the hands using the most appropriate method and product as determined by assessment of risk. Hands are contaminated with both transient and resident flora.

Resident Flora	Micro-organisms that live on the skin and provide a protective function. In the vast majority of instances these flora do not cause cross-infection.

Transient Flora	Micro-organisms that are not resident on the skin but are acquired by day-today activity including direct contact with service users, contaminated equipment and environmental surfaces. It is these micro-organisms that our hands come into contact with during the course of daily living. Transient flora are readily removed by the mechanical action of washing, rinsing and drying hands using soap and water and use of alcohol gel hand rub.

Healthcare Associated Infection (HCAI)	A term that applies to infections that develops as a direct result of medical or surgical treatment or contact with a healthcare setting. They can occur in hospitals and health and social care settings in the community.

Healthcare Worker	Any person whose duties concern the provision of treatment, accommodation or related services to patients and who has access to patients or the patient environment during the course of their work.

5.3 Hand Hygiene Techniques

Failure to adhere to the Hand Hygiene Policy may compromise patient safety. Effective hand decontamination, including after wearing gloves, results in significant reductions in the carriage of potential pathogens on the hands and decreases the incidence of preventable healthcare associated infections (NICE 2014).

Hand washing techniques are often inadequate, as areas of the hands are often missed. All areas of the hands and wrist must be decontaminated before and after all patient contact. Hand washing should be performed using: liquid soap; warm running water; friction; and thorough drying with disposable paper towels.

All staff must decontaminate their hands following the WHO 5 Moments of hand hygiene:

- Before Patient Contact
- Before an aseptic task
- After exposure body fluid exposure risk
- After patient contact
- After contact with patient surroundings

The WHO 5 moments of hand washing are illustrated in *Appendix 1.*

Hand decontamination is also necessary prior to surgery or other highly invasive procedures. In these cases this process is achieved by using an antiseptic hand cleansing preparation, for example a Chlorhexidine (Hibiscrub) based solution. This level of hand decontamination is unlikely to be necessary in a community / mental health settings.

For aseptic techniques, where an invasive procedure is being undertaken such as a wound dressing, hands should be decontaminated by washing with soap and water, and staff should follow Aseptic Non Touch Technique (ANTT).

Hand Washing Techniques	
ACTION	**RATIONALE**
Hand washing must be carried out when hands are physically dirty. A thorough systematic method of hand washing is required in order to remove transient micro –organisms and dirt from all parts of the hand. *Appendix 3*. Particular attention must be paid to the fingernails and thumbs as these areas are often missed. *Appendix 2*	To avoid contamination the patient with microbes that may be on your hands.

Thorough drying with a soft absorbent disposable paper towel.	In order to remove moisture from the skin and prevent irritation.
Hand sanitiser is an efficient and effective chemical method of destroying micro-organisms. It is suitable for use when hands are visibly clean and should be provided at the point of use. Effective use of sanitiser is dependant upon application to all surfaces of the hands, including fingertips and thumbs.	70% isopropyl alcohol kills most germs. NB. Alcohol sanitiser has a limited effect against clostridium difficile and small round structured viruses e.g. norovirus. In these circumstances soap and water must be used.
To ensure that all surfaces of the hand are adequately decontaminated regardless of whether soap and water or alcohol sanitisers are being used it is helpful to use a standardised technique. See *appendix 3*	To ensure that hands are adequately decontaminated thereby preventing transmission of microbes.
The procedure for alcohol hand rub is the same as when performing hand wash. When decontaminating hands using an alcohol hand rub, hands should be free from dirt and organic material. The hand rub solution must come into contact with all the surfaces of the hand. The hands must be rubbed together vigorously, paying particular attention to the tips of fingers, the thumbs and the areas between the fingers, until the solution has evaporated and the hands are dry.	Contact time must at least be 30 seconds for hand rub to be effective.
Apply hand cream regularly to keep skin in good condition. Staff should use hand cream from a wall mounted dispenser or their own hand cream. Staff should not use communal tubs or pots of hand cream.	Hand cream keeps your hands in good condition reducing the risk of drying cracking and dermatitis; this reduces the risk acquiring an infection due to poor skin integrity. Bacterial counts increase when skin is damaged. Staff are known to reduce the frequency of hand washing when hands are sore and chapped. The creams are more effective if left in contact with skin for a longer period of time.
Cover any damaged skin on hands with waterproof, impermeable dressings	Loss of skin integrity increases risk when staff are exposed to blood borne viruses (BBVs) during skin contact with blood and body fluids. Impermeable dressings reduce the risk when exposed to Blood Borne Viruses where skin integrity is compromised.
Always wear disposable gloves when contact with blood and body fluids is anticipated.	Reduces risk of exposure to blood borne pathogens.
Avoid wearing latex gloves.	Reduces risk of latex sensitivity.

Wash hands after gloves are removed.	Gloves do not always provide a complete impermeable barrier; on removing gloves hands can become contaminated (NICE14).
Soap dispensers should be wall mounted with disposable cartridges; bars of soap and refillable dispensers must not be used.	Do not use bars of soap as they provide medium on which bacteria thrive.
Dispensers should be cleaned daily as part of the cleaning schedule.	Reduces the risk of contamination.
A sink with elbow operated mixer or non-touch taps should be available in all clinical areas, off set plug hole and no overflow outlet. In line with HTM 00-10 Sanitary Assemblies. Where mixer taps are not available, thermostatic controls should be used.	Reduces risk of contamination, allows adjustment of water temperature for optimal washing. Reduces risk of scalding.
If only hand taps are available these can be turned off using paper towels.	To avoid cross contamination.
Soft paper towels from a wall mounted dispenser with good drying properties should be used.	Wet surfaces transfer microorganisms more effectively than dry ones. Paper towels rub away transient organisms from hands.
Foot operated pedal bins should be used to dispose of paper towels.	Hands will be re-contaminated by lifting the lid of the bin manually.
Staff Health	
If a particular soap or hand hygiene product (including alcohol hand gel/rub) causes skin irritation, expert advice should be sought	Prolonged damage to skin can increase the risk of the hands of staff becoming colonised with microorganisms. Appropriate products should be used to resolve such issues.

5.4 Bare Below The Elbow

Bare Below the Elbows is a Department of Health-led initiative to improve the effectiveness of hand hygiene and reduce the risk of infection to our patients. In line with the Department of Health Guidelines & ELFT Hand Hygiene Policy, all staff having direct contact with patients or in a patient environment are required to be 'bare below the elbow'.

Follow the Bare below the Elbow Flow Chart see *Appendix 9*

Hands can only be decontaminated effectively by ensuring that the correct technique is used therefore it is imperative that staff comply with 'Bare Below the Elbow' to facilitate this.

Bare Below The Elbow	
STANDARD	**RATIONALE**
Keep finger nails short and clean.	Microbes can thrive beneath finger nails.
Do not wear false nails or nail polish.	False nails and nail polish discourage thorough hand washing. Micro-organisms thrive in nail glue and in cracked nail polish.
Do not wear wrist watches, bracelets and rings with stones and ridges. One plain band is permitted.	High numbers of bacteria can be found on skin under rings, wrist watches and bracelets. Wearing these discourages effective hand washing.
Sleeves must be short or rolled up to facilitate effective hand decontamination.	Hand decontamination cannot effectively take place, putting patients at risk.
Any breached skin - cuts, dermatitis or abrasions - must be covered with a waterproof dressing.	To reduce the risk of cross contamination.

5.5 Allergies

Skin allergies can develop; therefore any member of staff who suspects they have an allergy or signs of irritation must report it to the Occupational Health Department for an assessment.

5.6 Patient Homes and Community/Domestic Environment

When working in areas where hand washing facilities are unavailable or inadequate, individual practitioners should carry their own liquid soap and disposable hand-towels. Alternatively isopropyl alcohol based hand gel/rubs and/or wipes should be used, until skin is completely dry.

When visiting patients with diarrhoea at home, whether the cause is known or not, staff should use soap and water to wash hands thoroughly. If the washing of hands is felt to be unsatisfactory due to the environment, staff can apply hand sanitiser as a secondary measure, providing hands appear socially clean. A detergent hand wipe may need to be used first.

Patients, relatives, formal and informal carers should be encouraged and supported regarding the importance of hand hygiene. The WHO 5 moments of hand hygiene should be performed to ensure best practice. See *appendix 1.*

Visitors must also be encouraged to decontaminate their hands on entry and exit to the ward and following any direct assistance given to patients.

5.7 In-Patient Hand Hygiene

Patient hand hygiene must be promoted to assist in reducing the spread of infection. These patients who are able can be directed to hand washing facilities, or be supplied with hand wipes if unable to access them. Confused or incontinent patients may require frequent assistance from staff to support them with hand hygiene.

5.8 Glove Use

The use of gloves should be in line with ELFT- Personal Protective Equipment and Standard Precautions section of this policy Manual. The use of gloves is not a substitute for hand hygiene and appropriate guidance in their use should be observed. Hands should be decontaminated after the removal of gloves (NICE 2014).

5.9 Training

Hand Hygiene training is included in the IPC induction and rolling mandatory programme either online or face to face training Records of all infection prevention & control training are stored with the Learning & Development Department in the training database. This database is regularly reviewed. Disciplinary actions may ensue against a member of staff who persists in not attending the training.

6. Personal Protective Equipment (PPE)

6.1 Introduction

The aim of personal protective equipment (PPE) is to prevent the transmission of blood borne viruses and other pathogens and offers protection to Health Care Workers (HCW) and patients.

Personal Protective Equipment (PPE) is defined by the National Institute for Health and Care Excellence (NICE) (2012) as "equipment that is intended to be worn or held by a person to protect them from risks to their health and safety while at work. Examples include gloves, aprons, and eye and face protection".

The selection of PPE must be based on an assessment of the risk of transmission of microorganisms to the patient, carer and healthcare worker (HCW).

Healthcare workers (HCW) who come into contact with blood and body fluids may be at risk of acquiring blood borne viral infections such as Hepatitis B, C and Human Immunodeficiency Virus (HIV).

The purpose of the PPE policy is to prevent the transmission of micro-organisms and in doing so reduce the risk of infection to patients, visitors and staff. It is also to ensure that HCW's that come into contact with blood and body fluids understand the importance and rationale for using PPE. All staff must be aware of the procedures for using PPE.

6.2 Definitions and Terms

Blood and Body Fluids	Includes amongst others, sputum, urine, vomit, faeces, wound drainage and saliva.

Healthcare Worker (HCW)	Any person whose duties concern the provision of treatment, accommodation or related services to patients and who has access to patients or the patient environment during the course of their work.

6.3 Procedure for the Use of Personal Protective Equipment

PPE use is an element of standard precautions and is essential in reducing the risk of the spread of infection.

6.3.1 Risk Assessment

The selection of personal protective equipment must be based on an assessment of the:

- Risk of transmission of microorganisms to the patient or HCW;
- Risk of contamination to the HCW's clothing and skin by patients' blood or body fluids, secretions or excretions,
- Suitability of the equipment for the proposed task. (NICE 2012, Epic 3).

(See *Appendix 10* for an example of a risk assessment.)

6.3.2 Resources Needed

All Healthcare facilities and bases must have the following available:

- Powder free disposable gloves (vinyl, nitrile) which conform to European Standards (CE).
- Disposable plastic aprons
- Sharps containers and clinical waste bags if applicable
- Domestic waste bags
- Cleaning, disinfectant agents and spillage kits
- Protective eye wear, glasses and /or face visors
- Fluid and splash resistant face masks

6.3.3 Gloves

The aim of wearing gloves:

- To reduce the risk of contamination of healthcare workers hands with blood and other body fluids
- Gloves do not provide complete protection against hand hygiene, therefore it is essential that hand decontamination occurs after gloves are removed.

Gloves used for direct patient care:

- Must conform to current EU legislation (CE marked as medical gloves for single use)
- Should be appropriate for the task.

Sterile gloves are normally worn when carrying out aseptic (non-touch) procedures where touching 'critical parts' cannot be avoided. Refer to the Aseptic Non-Touch Technique (ANTT) section of the IPC Policy Manual for details.

Non-sterile gloves should be worn in all other situations, primarily when there is a risk of exposure to body fluids. This should be established through a process of risk assessment.

See *Appendix 12* for personal protective equipment glove types. See *Appendix 11* for the order for putting on and removing gloves.

Glove types

Gloves used in healthcare are made of a number of different materials. However, it should be emphasised that only nitrile gloves should be worn when there is a risk of exposure to blood.

Gloves must be worn

- For invasive procedures
- For contact with sterile sites and non-intact skin or mucous membranes (sterile gloves)
- For activities assessed as carrying a risk of exposure to blood, body fluids, secretions, excretions, sharp or contaminated instruments
- If the HCW has non intact skin (cover with waterproof plaster)
- When decontaminating equipment and handling chemicals.

See *Appendix 13* for the World Health Organisation (WHO) Glove Pyramid aid to decision making on when to wear (and not to wear) gloves.

WHO Summary of the indications for gloving and glove removal:

Gloves On	Before a sterile procedure When anticipating contact with blood or another body fluid, regardless of the existence of sterile conditions and including contact with non-intact skin and mucus membrane. Contact with a patient (and his/her immediate surroundings) during contact precautions.

Gloves Off	As soon as gloves are damaged (or non-integrity suspected) When contact with blood, another body fluid, non-intact skin and mucus membrane has occurred and has ended. When contact with a single patient and his/her surroundings, or a contaminated body site on a patient has ended. When there is an indication for hand hygiene.

When using gloves remember:

- Disposable gloves are for single use only.
- Put on immediately before patient contact, a procedure or treatment.
- Remove immediately after use and discard as clinical waste
- After removing gloves decontaminate hands by washing with soap and water or using alcohol gel.
- Wearing gloves should never be considered as a substitute for hand hygiene.
- Change gloves between caring for different patients
- Change gloves between different care or treatment activities for the same patient.

Powdered gloves

As powdered gloves are now recognised to be associated with occupational asthma, cause granuloma formation following surgery and can interfere with wound healing and promote bacterial growth all gloves used in ELFT should be powder free.

Reusable gloves

Heavy duty 'domestic' reusable gloves are normally much more suitable for cleaning purposes. These should be used for environmental cleaning. In spite of being reusable, these gloves should be replaced as soon as they develop any tears or punctures or sooner, according to manufacture recommendations.

6.4 Medical Devices

Single use examination gloves are classed as a medical device. The Medical Devices Directive (93/42/EEC) is designed to regulate the safety and marketing of medical devices throughout the European Union (EU). The CE mark demonstrates compliance with this legislation. NHS purchasers and users are required to report any adverse incidents relating to medical devices to the Medical Devices Agency (MDA). Staff in ELFT should report this via the Datix reporting system.

6.5 Procurement

All orders for non-sterile examination gloves. All gloves should:

- Conform to European Standard EN 455.
- Be CE marked as medical gloves for single use.
- Be low in extractable latex proteins <50 µg/g) and residual chemicals.
- Be Powder free.

6.6 Storage

Most gloves have a shelf life of 3-5 years; however, incorrect storage may lead to rapid degradation of rubber and synthetics. Details on all gloves purchased should show the expiry date and stock rotation should be maintained.

Gloves should be stored away from heat, direct sunlight, dust, sources of ozone e.g., x-ray machines, and excessive humidity. Gloves should not be used if the expiry date is exceeded as this will compromise quality, effectiveness and performance. Gloves should be stored where the temperature does not exceed 400 - 500 C.

6.7 Aprons

Disposable plastic aprons should be worn to protect clothing from possible contamination with blood, body fluids, secretions or excretions with the exception of sweat.

Hands should be decontaminated prior to putting on aprons. They must be single use, removed after the task has been completed and disposed of as clinical waste.

Disposable plastic aprons are worn in the following circumstances:

- When there is a risk of contamination with blood or body fluids
- For direct contact with a patient when providing personal or clinical care
- During invasive procedures and minor surgery
- For cleaning activities
- Whenever gloves are worn

One disposable apron should not come into contact with more than one patient.

Micro- organisms will survive for a sufficient time to allow cross infection to occur if the apron is worn caring for more than one patient.

The apron must be disposed of prior to leaving the clinical area or the patient's home.

Full body fluid repellent gowns must be worn where there is a risk of extensive splashing of blood, body fluids, secretions or excretions.

See *Appendix 11* for the procedure for putting on and removing an apron.

6.8 Face and Eye Protection

Facial protection may be required if there is a high risk of splashing with blood or body fluids, for example when cleaning contaminated equipment or treating patients with an upper respiratory condition. The eyes, nose and the mouth should be protected using one of the options below:

- A surgical mask with disposable/reusable goggles
- A combined disposable mask with visor

- A full-face disposable/reusable visor.

A risk assessment should determine the most appropriate item of facial protection or a combination of these required. See *Appendix 11* for the procedure for putting on and removing face and eye protection and when to use a face mask or respirator.

6.9 Masks and Respirators

When looking after a patient with untreated pulmonary tuberculosis or a 'new' respiratory virus considered to be a significant public health risk, a particulate filter mask or respirator will need to be worn, especially if an aerosol generating procedure is to be carried out.

This is unlikely to be required in ELFT, however, see *Appendix 14 and 15* for additional guidance and consult the Infection Prevention and Control Team for further advice when required. **(When this is indicated the Trust will follow national guidance issued by Public Health England.)**

6.10 Splash and Fluid Resistant Masks

Splash and fluid resistant masks must be worn:

- During procedures likely to cause splashing of body substances into the mouth or nose of the HCW
- Following risk assessment when caring for patients with a suspected or confirmed respiratory virus. See *Appendix 10*

If the mask becomes contaminated with body fluids then it must be changed immediately. Masks should be handled as little as possible, and be handled by their strings.

6.11 Respiratory Hygiene/Cough Etiquette

Educate staff patients and visitors on the importance of basic cough hygiene measures to contain respiratory secretions to prevent droplet transmission of respiratory pathogens, especially during seasonal outbreaks of viral respiratory tract infections. This includes the provision of tissues and hand hygiene facilities.

7. Aseptic Non Touch Technique (ANTT)

7.1 Introduction

ANTT is a technique to prevent micro-organisms from being introduced to sterile/susceptible body sites during any invasive procedure, e.g. wound care or when handling or manipulating devices: urinary catheters, peripheral and central venous cannula.

ANTT aims to prevent the contamination of wounds and other susceptible sites, by ensuring that only uncontaminated equipment, referred to as 'key parts' come into contact with susceptible or sterile body sites during clinical procedures.

The aim of ANTT is asepsis, not sterility. Asepsis is supported by standard precautions the necessary infection control measures to prevent pathogenic micro-organisms on hands, surfaces or equipment from being introduced to susceptible sites during clinical practice.

ANTT should be undertaken when performing any aseptic procedure i.e. cannulation, venipuncture, IV medication, wound care, urinary catheterisation and central and peripheral line management. See *appendices 4 - 8*

7.2 Definitions and Terms

Decontamination	A process which removes or destroys contamination so that infectious agents cannot reach a susceptible site in sufficient quantities to initiate infection response. Differing levels of decontamination are used depending on the device and the procedure The levels of decontamination are: cleaning, cleaning followed by disinfection and cleaning followed by sterilization.

Aseptic Technique	Method by which precautions are taken during invasive clinical procedures to prevent the transfer of potentially pathogenic organisms: from the healthcare worker, procedure equipment or the immediate environment to the patient. An aseptic technique must be used during any procedure, which breaches the body's natural defences.

Aseptic Field	(Traditionally termed 'sterile field'). A designated aseptic working space that contains and protects the procedure equipment.

Aseptic Non Touch Technique (ANTT)	A specific type of aseptic technique with a unique Theoretical and Clinical Practice Framework based upon the original concept of Key-Part and Key-Site Protection (Rowley 2001).

Surgical or Sterile Aseptic Technique	Aims to eliminate micro-organisms from a body site, equipment or the environment, and is only achievable in a specialised area such as an operating theatre or treatment area which has strict environmental controls.

Key-Site	Can be a wound, insertion and access sites for a medical device.

Key-Part	The critical part of procedural equipment that comes into contact with the patient a Key-Site or other procedural equipment i.e. liquid infusion during the procedure.

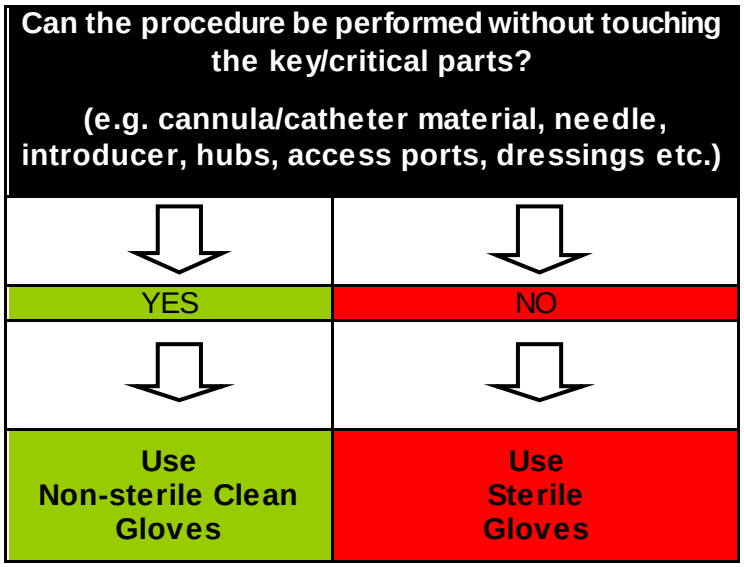
General Aseptic Field	Is used to promote asepsis rather than ensure it; this may be through the use of a clean tray or trolley Equipment asepsis is maintained by protecting Key-Parts individually with micro critical aseptic fields.

Micro critical aseptic field (MCAF)	A small critical aseptic field used to protect a specific Key-Part, e.g. a syringe cap or needle cover, other examples may include 'backing' to dressings.

Healthcare associated infection (HCAI)	Any infection acquired by a person as a consequence of healthcare interventions regardless of where care is delivered

7.3 Principles of ANTT

The following principles must be observed when a clinical procedure requiring ANTT is performed:
Always **decontaminate hands**
Never contaminate **'key parts'** or **sites**
Touch non **'key parts'** with confidence
Take appropriate infection prevention and control precautions
The flowchart below should be used in deciding whether to use sterile or non-sterile clean gloves in performing aseptic procedure.



7.3.1 Never Contaminate 'Key Parts' and Touch 'Non Key Parts' with Confidence

A core component of ANTT is maintaining asepsis during invasive procedures. Key parts are those parts of equipment that if contaminated by infectious material increase the risk of infection, not touching them either directly or indirectly is perhaps the single most important component of achieving asepsis.

7.3.2 Maintain an Aseptic Field at all Times

Determine the need for **Standard-ANTT:** required when the procedure is technically simple, short in duration, involve a minimal number of Key-Parts and Key-Sites or **Surgical-ANTT** required when procedures are technically complex, and involve an extended procedure time, involve large open Key-Sites and large or numerous Key-Parts. (Surgical-ANTT is unlikely to be used in community/ mental health settings).

A clean working environment and an aseptic field are essential precautions for all clinical procedures.

When carrying out procedures in a patient's home adaptations and creativity are often required to ensure the procedure performed following the principles of ANTT and the equipment remains sterile or clean.

For the majority of aseptic procedures carried out across ELFT, the clinician is maintaining the asepsis of only one or two small key-parts. This can be achieved effectively by a non-touch method and a basic aseptic field such as a well cleaned plastic tray

Plastic (treatment) trays used during ANTT must be thoroughly cleaned before and after use. If the plastic tray is visibly clean and dust free it can be disinfected using an alcohol wipe. If the tray is dirty, or has been stored in an area where dust can collect e.g. patient's home or the boot of a car, it must be cleaned first with soap & water or a detergent wipe, dried and then it can be disinfected with an alcohol wipe or a wipe that cleans and disinfects (e.g. Clinell Universal Wipes)

In between uses, unless it becomes visibly soiled, the tray can be disinfected with an alcohol wipe.

7.3.3 Ensure Only Sterile Items Come into Contact with Susceptible Sites

This can be achieved by ensuring the following during each procedure requiring ANTT:

- Use Standard Precautions
- Use single use items wherever possible and dispose of immediately after use
- Decontaminate re-usable items according to local policy and manufacturer's instructions
- Store sterile equipment in clean, dry conditions, off of the floor and away from potential damage
- Dispose of waste as per local policy
- Minimise interventions e.g. handling of urinary catheters
- Where relevant, sterile fluids should be used for all wound cleaning. In the case of chronic wounds being cared for in the community, it is acceptable to use tap water for cleaning (this is deemed as non-contaminated), as long as the receptacle being used to store the fluid is clean e.g. lined buckets for leg ulcers
- For pictorial guidance on ANTT procedure please see here. (http://antt.org/ANTT_Site/ANTT-Approach.html)

7.4 Training

Only staff that have been assessed as competent should perform an aseptic technique. It is the responsibility of the health care worker to maintain this competency, accessing further training if required.

It is the responsibility of the Service manager to ensure that all staff undertaking any clinical procedure where an aseptic technique is required are adequately trained in the correct application of the technique.

8. Safe Use and Disposal of Sharps

8.1 Introduction

Needle stick and sharp injuries account for 400,000 injuries to NHS staff each year. Many go unreported. Contaminated needles can transmit more than 20 blood-borne pathogens, including hepatitis B, hepatitis C and human immunodeficiency virus (HIV). Injuries from contaminated sharps pose a significant risk to the physical and mental wellbeing of healthcare workers (HCW's). It costs the NHS time and resources, and has the potential to result in costly litigation.

8.2 Definition and Terms

Medical Sharps Injury	An object or instrument necessary for the exercise of specific health care activities which is able to cut, prick or cause injury. This includes equipment such as needles and scalpels. Injuries presenting a higher risk are sharps that are contaminated with blood, where there is the potential of transmitting infectious pathogens such as hepatitis B or C and HIV. Most sharps injuries can be prevented. Injury can occur with a wide range of items, but those with a higher risk of injury include: • Hollow bore hypodermic needles • IV cannulae • Winged steel needles (butterfly) • Phlebotomy needles

Sharps Incident	A sharps incident is defined as an injury where a needle or other sharps contaminated with blood or other high risk body fluid penetrates percutaneous (through the skin). This includes cuts, pinches, scratches, nicks, bites and needles which break the skin.

8.3 The Law and Sharps Injuries

There are a number of existing and new laws that require employers to protect HCW's from sharps injuries. A European directive was implemented in the United Kingdom (UK) in May 2013. It requires all member states, to introduce further protection for HCW's exposed to the risk of sharps injuries. The overarching law is the Health and Safety at Work Act 1974. The act requires employers to provide a safe working environment in relation to sharps injuries, together with safe equipment, training, and information and instructions on safe systems of work.

8.4 Five Steps to Risk Assessment and Sharps Injuries

Step 1: Identify The Hazards

Organisations must familiarise themselves with the requirements of the directive, regulations, good practice and any supplementary information to support risk assessment to minimise sharps injuries.

In most hospital and health care environments there will be varying degrees of exposure to blood-borne viruses (BBVs). The main BBVs of concern are hepatitis B and C and HIV.

While the risks of contracting a BBV are variable, the anxiety of having to go through blood tests and possible treatment can cause the worker a great deal of stress.

Step 2: Decide Who Might Be Harmed and How

The directive and existing regulations cover all workers that are under the managerial authority and supervision of health care employer/ organisations. This extends not only to staff that are directly employed, but also some self-employed workers. This might be agency and bank nurses, any workers employed by ELFT contracted to provide services for health care organisations such as cleaners and other ancillary staff. The agreement also covers any students while they are under the supervision of any health care provider.

There are many types of health care and hospital work that can expose individuals to the risk of sharps injuries. They include:

- Clinical work - clinical procedures such as phlebotomy, cannulation, vaccination, acupuncture and surgical procedures
- Ancillary services – cleaning, portering, hospital laundry and sterile supplies
- Diagnostic and laboratory work
- Mortuary work

Step 3: Evaluate the Risk and Decide on Precautions

The law requires employers to do everything reasonably practicable to protect people from harm. The easiest way to start step three is to compare what you are doing now with the requirements of the directive and good practice.
To help prioritise actions the steering group (health and safety) must review written arrangements and policies, identify what hazardous sharps equipment is being used and what presents the highest risk. The group should consider whether the hazard can be removed altogether, and if not how the risks can be controlled so that harm is minimised.

Elimination of Hazard
Complete removal of a hazard from the workplace is the most effective way to control hazards; this approach should be used whenever possible. Examples include:
- Removing sharps and needles when possible e.g. using needleless intravenous systems/ needle free connectors
- Eliminating all unnecessary injections
- Eliminating unnecessary sharps such as towel clips

Engineering Controls
These are used to isolate or remove a hazard from a workplace. Examples include:
- Adequate numbers of easily accessible sharps disposal containers
- Environmental factors including good lighting and adequate space to carry out the procedure
- Use of safety-engineered devices for all procedures (devices with needles that retract, sheath or blunt immediately after use)

Administrative Controls
These are policies and practices that aim to limit exposure to the hazard. Examples include:
- Health and safety responsibilities of all staff are clear, well-co-ordinated and adequately resourced
- NSI's to be addressed at all health and safety, Divisional Subgroups and at the IPC committees
- Removal of all unsafe devices

- Consistent information and training that includes: safe systems of work; correct use and disposal of sharps; the use of safety-engineered medical devices incorporating sharps protection mechanisms; measures to be taken in the event of a sharps injury; and how to use personal protective equipment provided
- Complete a Datix in the event of a NSI, undertake an investigation, give feedback to staff and share lessons learnt

Work Practice Controls - General Principles for Safe Handling and Disposal of Sharps
These controls aim to change the behaviour of workers to reduce exposure to occupational hazards. Examples include:

- Do not recap or re-sheath needles
- Ensure that needles are not protruding from the box
- Apply safe assembly of sharps containers (Appendix 11)
- Place sharps containers at waist level and within arms' reach
- Establish means for the safe handling and disposal of sharps devices before the beginning of the procedure
- When disposing of sharps do not insert fingers/hands into the box
- Ensure that all clinical sharps are single use only
- Keep handling of sharps to a minimum Do not pass sharps from hand to hand
- Discard sharps directly into sharps container immediately after use and at the point of use
- Take the box to the sharp, and not the sharp to the box
- Obtain assistance if patient/service user has identified needs
- It is the individuals responsibility to dispose of the sharps – "You use it You dispose of it"
- Place sharps container wherever sharps are handled, in a safe position off the floor away from patient/service user access. Do not place sharps containers on the floor when in public places i.e. clinics, treatment rooms, GP surgeries, patients' homes or the community care environment
- Close the aperture to the sharps container when carrying or if left unsupervised to prevent spillage. Carry the sharps bin by the handle and away from the body
- Patients should be advised on temporary locking and safe storage
- Do not put sharps containers in waste bags
- All bins must conform to UN3291 and BS 7320

Community Sharps Disposal

- If a sharps container is to be placed in an individual patient's home the practitioner must ensure safe storage
- Where a single sharp is used in a patient's residence, the HCW must dispose of the sharp in an approved container, and transported to the closest point of safe collection (i.e. a Health Centre). Sharps bins in staff cars must be kept out of public sight and compliant with Safe Management of Healthcare Waste (HTM 01-07)
- Sharps must only be disposed of into sharps bins and must never be disposed of in containers used for storage of other waste

Personal Protective Equipment (PPE)
PPE provides protection for staff and patients or hazard. Used properly it can prevent exposure to blood splashes, but will not prevent NSI's. Examples of PPE include:

- Eye goggles
- Masks
- Gloves

Step 4: Record Your Findings

The findings of the risk assessment should be documented and form part of the action plan to reduce the risks of injury. The action plans should be time sensitive. The results of the risk assessment should be shared with all workers identified as being at risk.

Step 5: Review Your Assessment and Update if Necessary

Audits are undertaken by the IPC team to review the effectiveness of the risk assessment and control measures in place to minimise sharps injuries. Occupational Health monitor all NSI's across the Trust.

8.5 Selection of Safety-Engineered Devices in ELFT

Safety-engineered devices are also known generically as safer needle devices or safety devices. These devices have a built-in safety feature to reduce the risk of a sharps injury before, during or after use. Devices can be passive or active. For example, passive devices have an automatic safety mechanism that is activated after use, such as when a cannula is withdrawn from a patient's vein. An active device needs to be manually activated by the member of staff. In ELFT safer needles are available for ordering through the procurement department *Appendix 20*

8.6 Note

There may be areas in the Trust that clinical practice is not conducive to using safer devices such as areas like Tuberculosis service. In this event an agreed that safer devices will not be used in a risk assessment must be undertaken, the rationale explained and recorded.

See the intranet for contact details for occupational health department. Further details can be found on trust Occupational health intranet page here
http://elftintranet/sites/common/Private/Contentobject_View.aspx?id=31278&dm_t=0,0,0,0,0

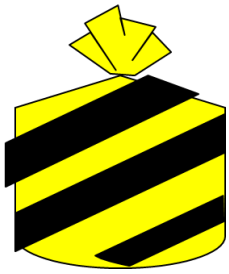
9. Safe Handling and Disposal of Clinical Waste

9.1 Introduction

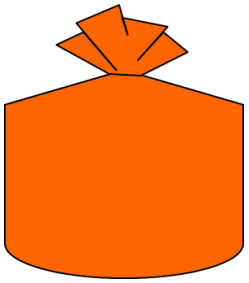
Health care waste is produced on ward, clinics or in a person's own home where healthcare is provided. It is the responsibility of the person generating the waste to carryout waste risk assessment. This assessment must be done on a patient-specific basis. This should be classified as infectious waste and should be packaged and disposed appropriately.

The following clinical waste streams are used across ELFT:

Offensive Waste:



Infectious Waste:



Offensive Waste	Includes nappies, incontinence pads, and bandages not contaminated with any known infections.

Infectious Waste	Includes bandages, swabs, and incontinence pads arises from a patient known or suspected to have an infection, whether the infectious agent is known or not and where the waste may contain the pathogen; or where an infection is not known or suspected, but a potential risk of infection is considered to exist. All contaminated waste must be disposed of in infectious waste bags as appropriate. Refer to ELFT Waste Policy here

9.2 Management of Clinical Waste in Community/Domestic Settings

It is the responsibility of the healthcare worker to provide information about where and the number to contact for clinical waste set up and collection. The healthcare worker should make sure that waste is discarded in the correct manner during home visits and also set up waste collection if the patient is not in a position to do this by themselves. It is advice to contact the Trust Waste Lead here for further information.

10. Collection and Management of Microbiological Specimens

10.1 Introduction

Diagnostic tests are essential for the management of patients with infection. Accurate and rapid identification of significant micro-organisms is vital for guiding optimal anti-microbial therapy, and improving outcome from infectious disease.

The results are crucial for identification of appropriate therapy, application of isolation protocols, and indication for choice of wound dressing, and guidance in appropriate decontamination.

The results have a considerable impact on patient care, they must be collected at the appropriate time, using the correct collection technique and patient identification and transported in a timely manner.

All specimens are potentially infectious and should be handled with the utmost care. Identification labelling, i.e., danger of infection is not routinely required, as all specimens are handled as high risk of infection by laboratory personnel.

10.2 Definitions and Terms

Microbiology	Study of bacteria, protozoa parasites, viruses and fungi.

Microbiology	Study of bacteria, protozoa parasites, viruses and fungi.

Specimen Material	Sample of tissue or bodily fluid collected by healthcare staff when laboratory investigation is required to aid diagnosis.

10.3 Procedure for Collection of Specimens

Wash hands with soap and water or use gel if hands are visibly clean before and after collection In line with standard precautions, appropriate personal protective equipment i.e. non-sterile gloves, aprons and, where splashing is possible or expected, goggles or visor; should be worn when collecting or handling specimens.

10.3.1 Preparation

Before undertaking collection consideration should be given to if the tests are appropriate to patient's clinical presentation.

Consent Clinical staff must ensure that all tests are fully explained to the patient/service user so that they are able to give fully informed consent. Valid consent must be obtained before starting treatment or physical investigation. Refer to ELFT Consent Policy.

10.3.2 Collection

Specimens should be collected before the start of antibiotic treatment however essential treatment should not be delayed.

When collecting certain specimens, e.g. catheter urine, an appropriate aseptic non-touch technique should be used. All pathological specimens must be treated as potentially infectious and local written laboratory protocols should be followed for the safe handling and transportation of specimens.

Specimens should be collected in sterile containers (with the exception of faeces and sputum) that are no more than three quarters full, and have close fitting lids to avoid contamination and spillage.

Collection should be co-ordinated in conjunction with transportation to ensure specimen is promptly dispatched to the laboratory.

Guidance for specific collection methodology may be located in **The Royal Marsden Manual** here

10.3.3 Documentation

All specimens must be clearly labelled to identify their source. (Unlabelled specimens will not be processed).

Do not pre-label specimen containers, as this increases the risk of errors therefore label the specimen as close to the time when the sample is taken.

- A laboratory request form with the following information must accompany the specimen. This aids interpretation of results and reduces the risk of errors:
- Patient's name, date of birth NHS number ward/department number.
- Type of specimen and site of collection.
- Date and time collected.
- Diagnosis with relevant history and reason for request include: any travel history if presenting with vomiting and diarrhoea, rash pyrexia and the presence of invasive device
- The name of professional requesting the investigation: urgent telephone as conveyance of the result may be required.
- Other relevant details may include Antibiotic Therapy: foreign travel, immunosuppression, occupation, which will determine additional investigations.

10.3.4 Storage and Specimens Awaiting Collection

Specimens should be as fresh as possible for optimal isolation of microbes therefore should be sent to the laboratory without delay (**ideally urine and sputum specimens should be examined within 2 hours of collection, and stool samples within 12 hours). See Appendix 16 for further details**

Where this is not possible *with the exception of blood culture and any specimens collected for Neisseria Gonorrhoeae* specimens, must be stored within a designated specimen fridge (but only for a **maximum of 24 hours**, at 4-8°C).

Specimens should be contained within a double sided self-sealing bag to prevent contamination of the fridge.

Designated specimen fridge: ***Under no circumstances should the ward drug or food fridge be used to store specimens:***

- Specimen fridges should be maintained at 4-8^{o}C kept locked and away from public access (minimum and maximum temperature to be checked and recorded daily).

The specimen refrigerator is cleaned on a weekly basis, defrosted regularly, and cleaned and disinfected after any spillage or leakage.

10.3.5 Transportation

All staff has an obligation to protect themselves and others, e.g. the public, from inadvertent contamination from hazardous substances Health and Safety at Work Act (1974). Therefore staff must be aware of how to deal safely with clinical specimens and how to avoid/deal with spillage or leakage of body fluids.

All specimens should be placed in a double-sided sealed plastic pouch, and must be collected by porter / transport staff in a secure, robust, leak proof container with a biohazard label. These containers must be cleaned and disinfected weekly and after any visible spillage.

All clinical staff transporting specimens from a patient's own home to healthcare premises, clinic or health centre must be provided with a secure, robust, leak proof container identified by the biohazard label Class 6.2 infectious substances and UN3373 code.

This container must be identified with a contact telephone number in case the box is lost.

Clinical staff must not transport specimens unless such a container is used. Specimens should not be transported in pockets or by hand to minimise risk in case of leakage or breakage.

Containers designated for the transport of clinical specimens must never be used for the transportation of any other items.

10.3.6 Leaked Specimens

Accidental spillage or leakage should be cleaned immediately in accordance with the management of spillage section of the IPC policy. Broken specimens should be discarded.

Any incident during transportation that may affect the quality of the specimen or the safety of personnel must be reported via Datix.

All vehicles transporting specimens should contain spillage kits and instructions for use.

Transportation of specimens by vehicle is usually by a courier service or Trust transport to the appropriate laboratory.

10.3.7 Out of Hours Specimens

Please consult local operational procedures.

11. Decontamination

11.1 Introduction

Decontamination is a term used to describe a range of processes, including cleaning, disinfection and/or sterilisation.

Inadequate decontamination has been responsible for outbreaks of infection in healthcare establishments, and can result in the transmission of a range of micro-organisms from blood-borne viruses such as HIV or hepatitis B, to fungal and common bacterial infections. This section of the IPC policy describes the decontamination procedures that must be followed to minimise these risks.

All medical devices and equipment may become contaminated with micro-organisms and present a risk to patients, and those subsequently handling or using them. Safe and effective decontamination of all re-usable equipment between uses is therefore an essential part of routine infection control practice.

11.2 Definitions and Terms

Cleaning	Cleaning is a process that physically removes contaminants, e.g. dust, dirt, grease and body fluids using general-purpose neutral detergent.
Decontamination	A combination of processes which may include cleaning, disinfection and sterilisation, dependent on the device, to ensure a re-usable device is safe for further use.
Disinfection	Disinfection is a process which reduces the number of micro-organisms to a level at which they are not harmful. It will not, however, destroy all bacterial spores.
EBME Equipment	Electro Biomedical Device that requires maintenance and servicing.
Medical Device	Any instrument, apparatus, appliance, material or other article whether used alone or in combination, to be used by human beings for the purpose of: Diagnosis, prevention, monitoring, treatment or alleviation of disease.
Medical Equipment	Term often interchangeable with Medical Device: Any item, used in the course of the working day, when delivering clinical care or treatment. This can range from a fairly complex device such as a defibrillator or ECG machine (electro cardiogram) to basic items such as a bed, bath hoist or therapists' devices.
Reusable	The practice where a medical device is used repeatedly that requires decontamination after each use.

Single Patient Use	The practice where a medical device is used several times over the course of a treatment episode by one patient only and then disposed of e.g. nebulisers, oxygen masks and tubing.

Single Use	The practice where a medical device is used once and then disposed of e.g. needles, syringes and disposable thermometers.

Sterilisation	Sterilisation is a process that destroys all micro-organisms, including bacterial spores. This is normally achieved through a combination of pressurised steam at high temperature.

11.3 Decontamination

This section provides guidance on the decontamination of medical devices and other patient care equipment. It is the responsibility of all staff who use or are involved in the care of patients using medical devices to comply with this guidance and the Trust's Medical Devices and decontamination policy. Please look on Trust Intranet for this policy.

All devices must be decontaminated according to the manufacturers" guidance if this is not possible please contact the Medical Devices Lead. Devices should be built into a regular cleaning schedule following manufacturer's recommendations for cleaning.

Decontamination of the environment will depend on assessment of the clinical activities undertaken within the area. Environmental cleaning schedules should be posted in all areas.

Medical devices and equipment can be divided into 3 categories:

(i) Those that are used only once and are then disposed of: single use:

(i) Those that are used for a single patient only during a course of their treatment or an episode of care and are then disposed of: single patient use

(ii) Those that are used repeatedly and on different patients but are decontaminated between each use: Re-usable

11.4 The Levels of Decontamination

Depending on the risk the item poses in transmitting micro-organisms. Devices can be categorised into one of three levels of risk: High, Medium & Low. There are also 3 levels of decontamination:

- Cleaning
- Disinfection
- Sterilisation

The table below summarises the level of decontamination required for each category of risk:

Risk Rating	Application of Item	Recommended Level of Decontamination
HIGH	• Penetrates skin or mucous membranes • In contact with 'broken' skin or mucous membranes • In contact with 'intact' mucous membrane (vagina) • Enters sterile body areas	CLEANING FOLLOWED BY STERILISATION (Not routinely used across ELFT services)
MEDIUM	• In contact with intact skin or mucous membranes (except vagina) • Contaminated with blood or body fluid • Used on a patient with known carrier status with an alert organism or with any active infection.	CLEANING FOLLOWED BY DISINFECTION
LOW	• In contact with intact skin • Not in direct contact with patient skin	CLEANING ONLY

In Mental Health and community settings, all high risk and medium risk medical devices will be single use only items. All re-useable medical devices/ equipment must only apply to the Low Risk category and although not exhaustive many of these are listed in *Appendix 23*

11.4.1 Cleaning

Cleaning is a process that physically removes contaminants, e.g. dust, dirt, grease and body fluids detergent.

Cleaning is important for two reasons as: a method of decontaminating low risk items and as an essential pre-requisite to any disinfection or sterilisation process. Organic matter must first be removed in order for heat or chemicals to be able to penetrate and therefore disinfect or sterilise effectively.

Detergent is essential for breaking down grease and dirt. It therefore improves the ability of water to remove soiling. Approximately 80% of micro-organisms will be removed by thorough cleaning. Careful drying is also essential to prevent any remaining bacteria from multiplying. Protective clothing must be worn for all cleaning procedures, i.e. gloves and aprons as a minimum, and where there is a significant risk of splashing, goggles/face visors must be worn. *Appendix 23* provides further information on cleaning and products.

11.4.2 Disinfection

Disinfection is a process which reduces the number of micro-organisms to a level at which they are not harmful. It will not, however, destroy all bacterial spores. Disinfection can be achieved either by heat or by chemical means. Heat disinfection is preferable, as this is a more reliable method.

In order to achieve heat disinfection, the item must be heated to 81ºC for at least 1 minute, 71ºC for at least 3 minutes, or 65ºC for at least 10 minutes. Where heat disinfection is used, the process must be regularly monitored to ensure that the correct parameters of temperature and time are being met.

Where heat is not appropriate, the use of chemical disinfectants will be required.

The following points should be remembered when using chemical disinfectants.

- The item must be cleaned before disinfection
- Manufacturer's instructions and any additional guidance provided by the ELFT Infection Prevention and Control Team should be followed in the first instance
- Choose the appropriate disinfectant relevant for the device
- Ensure correct concentration and exposure time

Appendix 23 **provides further information on disinfectant products.**

11.4.3 Sterilisation

Sterilisation is a process that destroys all micro-organisms, including bacterial spores. This is normally achieved through a combination of pressurised steam and high temperature, for example 134°C for 3 minutes.

Choosing the appropriate method is central to ensuring correct decontamination of medical devices. The manufacturer of a medical device / equipment is required to provide advice on how that item should be decontaminated. Their guidance and that of any Medical Device Alert relating to risks associated with decontamination must always be followed. *Appendix 23* provides examples of required methods of decontamination for reusable medical devices.

11.5 Decontamination of Equipment Prior to Service or Repair

Anyone who inspects, services, repairs or transports medical, dental or laboratory equipment, either on hospital premises or elsewhere, has a right to expect that medical devices and other equipment have been appropriately treated so as to remove or minimise the risk of infection or other hazards.

Appropriate documentation must be provided to indicate the contamination status of the item

In order to ensure safe systems of work for the protection of all staff, including those not employed in the NHS, documentation is required declaring the contamination status of equipment.

If items are dispatched to suppliers, or presented for service or inspection on hospital premises without a declaration of contamination status *(Appendix 24)* and without prior agreement, suppliers may refuse to handle such items until they have been decontaminated and a declaration provided.

11.6 Management of Electro-Convulsive (ECT) Equipment

ECT should be performed in a dedicated area, to ensure that the environment is maintained to reduce the risk of cross infection. A written cleaning schedule should be devised for cleaning clinical equipment specifying the persons responsible for cleaning, the frequency of cleaning, the methods to be used, and the expected outcomes.

Manufacturer's guidelines for management of inter surgical respiratory systems should be strictly adhered to. All items where possible should be single use. If single use systems are used, these must be disposed of as clinical waste between each patient treatment. For respiratory systems that are recommended by the manufacturer for use for a group of patients, a new single use bacterial filter, single use catheter mount, and single use mask must be used for each patient. Packaging must not be removed until the point of use. The total system must be disposed of at the end of each session as clinical waste. The manufacturer's protocol for the re-use of these systems should be displayed.

11.7 Decontamination of the Environment (Environmental Cleanliness)

The healthcare environment must be visibly clean, free from dust and soilage and acceptable to patients, their visitors and staff.

All healthcare workers need to be aware of their individual responsibility for maintaining a safe care environment for patients and staff. Every healthcare worker needs to be clear about their specific responsibilities for cleaning equipment and clinical areas (especially those areas in close proximity to patients). They must be educated about the importance of ensuring that the hospital environment is clean and that opportunities for microbial contamination are minimised.

The clinical environment is cleanliness is monitored by the facilities in line with the NHS National Standards for Cleanliness. There is an annual PLACE inspection and relevant action plans developed from that.

In order for the environment to be kept clean areas must be kept tidy and free of clutter. A cleaning schedule should be available on the ward with daily and weekly cleaning tasks. Periodic schedules are also required. Items in this schedule need to be planned with the input of ward staff.

Cleaning of the environment is covered in depth in the Trust policy for Cleaning (Please see Trust net for further details). A schedule should also be available for the regular cleaning of equipment with clear guidance on responsibilities.

11.8 Decontamination and Care of Macerators/Bed Pan Washers

Bedpan washers disinfectors should have daily records of temperature cycles and be on a planned maintenance programme in accordance with manufacturers" instructions. This should be arranged through the Estates and Facilities Team and maintained according to HTM 01 -01 with weekly, quarterly and annual checks by a competent person in place.

- Macerators and bedpan washers not in use are a potential Legionella risk.
- Macerators that are not used on a regular basis must be put through a cycle daily.

12. Isolation Nursing

12.1 Introduction

The aim of any form of isolation is to prevent the spread of pathogenic organisms and to protect both service users and staff from cross infection. Standard precautions must be observed at all times with all patients, including those in isolation.

When a service user is found or suspected to be suffering from an infection, it is necessary to consider the mode of transmission and to initiate appropriate measures to ensure that other service users, staff and visitors do not acquire an infection.

The need for isolation must be explained to the service user/s and relatives and confidentiality must be maintained.

12.2 Definition and Terms

Direct Contact	The physical transfer from body surface to body surface between an infected or colonised person and a susceptible host. This can be between Service user/s or from staff to Service user/s when performing Service user/s care activities.

Indirect Contact	Involves the susceptible host having contact with an intermediate object, such as contaminated instruments or the environment. Droplets are generated from the source service user/s through coughing, sneezing, talking or singing. Transmission occurs when droplets containing microorganisms generated from the infected person are propelled a short distance through the air and deposited on the host's conjunctivae, nasal mucosa or mouth.

Airborne Transmission	Occurs by dissemination of either aerosol (small particle residue of evaporated droplets containing micro-organisms that remain suspended in the air for long periods of time).

Source Isolation	Used for patients who are infected with, or are colonized by, infectious agents that require additional precautions over and above the standard precautions used with every patient in order to minimise the risk of transmission of that agent to other vulnerable persons, whether patients or staff.

Protective Isolation	Precautions may be required if a service used is severely immunocompromised to provide protection from micro-organisms harboured in the environment or by other service users, staff or visitors.

Cohort Isolation	Grouping of infectious patients and nursing them within an area of a hospital ward.

12.3 Patient Placement

12.3.1 Single Room

The most effective form of isolation is a single room with en-suite facilities. Appropriate signage should be placed on the door to indicate protocols and behaviours required in the isolation room. In areas where overt signage will cause distress to the service user alternative methods should be found to convey information to relevant personnel including domestic staff. These could be information on the office whiteboard and also in the cleaners' room.

Ensure that doors are kept closed at all times. If the door is to be kept open, a risk assessment must be undertaken and documented.

Where the doors are closed frequent checks to the service user must be undertaken by staff to ensure that both the physical and psychological needs are being considered at all times.

Variables to consider are:

- Site of micro-organism
- Capacity of the micro-organism to cause serious harm
- Transmissibility of the disease/micro-organism
- Immune status and vulnerability of other patients in bay
- Capacity and mental state of the affected patient.
- Optimal bed spacing

12.3.2 Cohort Isolation

In the event of Outbreaks and periods of increased incidence e.g. Meticillin Resistant Staphylococcus Aureus (MRSA), or other multi-resistant organism infections or diarrhoeal outbreaks including Clostridium difficile (C. diff) and Norovirus it may be preferable to temporarily designate a ward area to accommodate patients with same organism, or displaying similar signs or symptoms.

Cohorted patients should be cared for by designated staff. Consideration should be given to utilising a bay for cohort nursing if no single rooms available, bays should have doors that can be closed to provide physical separation from other patients.

12.3.3 Isolation within a Bay (Non-Cohort)

This is an option of last resort if efforts have been made to locate a single room with adjacent wards. This option may be considered for certain microorganisms (diseases) that are spread by direct contact and not associated with high levels of antibiotic resistance. There must be prior discussion with the IPCT. Stringent standard precautions would apply.

12.3.4 Negative Pressure Ventilation

Currently this facility is not available for ELFT inpatients; arrangements will be made to transfer to an Acute Trust, through Clinician to Clinician referral, with support of IPCT.

12.4 Isolation Procedure

The decision to isolate a patient should be based on the infection risk, and taken preferably after discussion with the Infection prevention and control Team.

A risk analysis approach should be carried out. An assessment must be made of the physical and psychological safety of patients prior to placement in isolation. For patients who may be at risk in isolation due to their mental health state, and where isolation is a high priority to prevent an outbreak of an infectious disease, additional supervision will be needed. All cases will need to be assessed individually and discussed with the Infection Prevention & Control team.

Most service user/s requiring isolation may be cared for in single rooms on the ward; however there may be cases when the service user/s may require specialist treatment at a general hospital. In all cases the Infection prevention and control team will advise. The isolation room must have its own en-suite toilet facilities or a designated toilet close to the room and a clinical waste bin.

12.4.1 Care of Infected Service User

Isolation of service user/s is a potentially distressing/ frightening experience and all attempts must be made to minimise this. An assessment must be made of the physical and psychological safety of Service user/s prior to placement in isolation. A Service user/ will require a single room with own toilet if they:

- Have severe or uncontrollable diarrhoea;
- Are suffering from, or suspected to be suffering from, an airborne infection (e.g. Tuberculosis, chickenpox
- Are more susceptible to infection e.g. requires protective isolation;
- Ensure patient is aware of need for isolation and responsibilities. If the patient does not speak English or has difficulty understanding what they are being told, then appropriate translation services should be used.

12.4.2 Use of Bath/Shower Facilities

There is no restriction on the Service user/s having a bath, but if he/she has an infection they should use it after other Service user/s. The bath must always be correctly cleaned after use so as not to become a source of cross infection.

12.5 Daily Isolation Cleaning Procedure (Side Room or Bed Space)

- Some infections can survive indefinitely in the environment. To prevent further spread, complete thorough environmental cleaning on a daily basis.
- Give special attention to ensuring that the environment is maintained in a clean state and is in line with good housekeeping practices. Be explicit about who is responsible for each aspect of cleaning and when/how often it must be done.
- The domestic should check with the nurse in charge that it is appropriate to enter the room or bed space to do the clean.
- Assemble all the appropriate cleaning materials that are to be used for the task; this includes a 1,000ppm hypochlorite solution. You must ensure that you have all the appropriate equipment and materials before entering the area to be cleaned; this includes the correct colour coded cloths, wipes, gloves and bag. Collect and put on a disposable apron and gloves (and other protective clothing as indicated).
- Pick up any items of rubbish on the floor and put into a yellow clinical waste bag. Empty the room bin and replace the waste bag.
- Increase the cleaning of horizontal surfaces to twice daily with chlorine containing cleaning agents such as Chor-clean (A 1,000ppm hypochlorite solution)

- All structural surfaces must be damp dusted, using Chlor-clean starting with the door handles. Particular attention must be paid to all patient contact areas such as table, lockers, chairs, door handles, taps, walking aids etc.
- Wash all furnishings starting with the locker and finishing at the waste bin. Follow this up by drying all surfaces with the disposable cloths. If organic matter/dirt is present then use detergent and water first followed by Chlor-clean.
- Clean the toilets and bathroom areas thoroughly with Chlor-clean after each use, paying attention to all dispensers around the sink. The equipment for this task should be kept separate from rest of the cleaning equipment.
- Damp mop the floor (colour coded mop and bucket), working from the furthest point towards the door, using Chlor-clean.
- Check all cleaning procedures have been completed and that all disposables are topped up and replenished.
- Place all disposable cloths into a yellow clinical waste bag.
- Leave the area/room taking all equipment, cleaning materials, and clinical waste sacks.
- Empty all buckets into the butler sink in the cleaners" room. Thoroughly clean and dry all equipment. Mop heads should be dedicated for that bed area/ side room.
- Bags for mop heads to be taken to the laundry.
- Remove disposable gloves and aprons and discard as clinical waste.
- Wash and dry hands thoroughly.

12.6 Waste Bins

There should be an infectious waste (orange colour) bin inside the room.

12.7 Terminal Cleaning Procedure for Side Room or Bed Space

- In addition to the steps highlighted during a daily isolation cleaning procedure:
- Isolation precautions will be terminated on the advice of the Infection Prevention & Control team when it is clear that the patient is no longer infectious to others or if he/she has been discharged or transferred to another hospital.
- Nursing staffs are responsible for ensuring that all reusable equipment has been decontaminated in line with decontamination guidelines and bed linen disposed of prior to terminal cleaning by domestic staff of the environment.
- The room or ward should be terminally cleaned with Chlor-clean and curtains changed.
- All surfaces and walls to hand height should be washed thoroughly with Chlor-clean.
- Launder all bed linen and cubicle curtains.
- Inspect pillows and mattress internally and externally. If internally damaged/ contaminated discard and replace. Wipe the covers of bed mattresses and pillows with CHLOR-CLEAN and dry thoroughly.
- Terminal cleaning of the patients rooms must also be carried out at the discharge of the patient / before admitting another patient.

12.8 Patient Movement

Transfer and movement of patients should be kept to a minimum, to reduce the risk of infection spreading and should only be undertaken for clinical reasons.

If a transfer is necessary the receiving area must be informed, so effective IPC measures can be put in place, consult with IPCT for advice.

Hand Hygiene, PPE procedures should be closely followed when transferring the patient. Equipment used to transfer the patient i.e. trolleys, should be decontaminated after use.

13. Diarrhoea and Vomiting

13.1 Introduction

This policy describes the procedures to be followed to control and minimise the spread of gastrointestinal infections including Norovirus.

Gastroenteritis is a transient disorder due to enteric infection with viruses, bacteria or parasites (NICE 2014).

- Viruses include- Norovirus, Rotavirus, Adenovirus
- Bacteria include- Campylobacter, Escherichia coli, Salmonella (non-typhoidal), Shigella, Yersinia enterocolitica (rare)

In some cases the symptoms are caused by the toxins produced by the bacteria rather than the bacteria itself.

Viral gastroenteritis is highly infectious and it is easily transmitted from person to person by direct contact, consuming contaminated food or water or by contact with contaminated surfaces or objects.

Spread from person to person is by the faecal –oral route and by vomiting which leads to widespread aerosol dissemination of viral particles, causing contamination of the environment.

Viral gastroenteritis

- Generally characterised by vomiting- often projectile. This vomiting may not be preceded by any other symptoms and is therefore difficult isolate in anticipation of occurrence.
- Norovirus and Rotavirus are the most common cause of outbreaks of gastroenteritis in healthcare settings.

Norovirus

Norovirus is highly is characterised by acute onset of non-bloody, watery diarrhoea with or without vomiting, but if present is often projectile. Other symptoms may include:

- Abdominal cramps, myalgia, headache, malaise and low grade fever.
- The incubation period is usually 24-48 hours.
- Norovirus is highly transmissible requiring the ingestion of as few as 10-100 viral particles to cause illness.

Mode of transmission

- Can be via the faecal –oral route or ingested via inhalation of aerosolised contaminated food & water. The viruses particles may settle in the environment via any of these routes and be spread from person to person by hands that are contaminated from the environment (The virus can survive on any surface for at least a week, and in a refrigerator on food for up to 10 days; freezing indefinitely).
- Norovirus can enter a healthcare environment by an infectious (symptomatic or recovering) patient/visitor or member of staff.

13.2 Definitions and Terms

Contact Precautions	Hand hygiene with soap and water before and after patient contact and wear gloves and apron for contact with patient or their nearby surroundings.
Cohort	Refers to the grouping of patients with the same clinical diagnosis, suspected symptoms or clinical risk category in relation to known or suspected transmissible infection.
Diarrhoea	3 or more episodes of loose stool a day, for less than 14 days, and stool takes the shape of a container (Bristol Stool chart type 5-7) (PHE 2015).
Outbreak	Localised group infected with the same disease in the same space at the same time. – two or more epidemiologically linked cases of a similar disease.
Personal Protective Equipment (PPE)	Refers primarily to disposable gloves, aprons, masks, eye protection and other face protection to protect the user from contamination form pathogens that could subsequently be transferred to other people, from patient/resident to practitioner or vice versa.
Period of Increased Incidence	Clusters of yet undiagnosed diarrhoea and or vomiting.
Source Isolation	Placing a patient considered to be infectious in a single room to prevent transmission to other patients.
Standard Precautions	A set of activities which must be used for all patients cared for within all healthcare settings. They are designed to prevent the transmission of microorganisms between patients. They include; hand hygiene, personal protective equipment, sharps management, management of waste, and decontamination of equipment.

13.3 Management of Patients with Gastroenteritis/Norovirus Infection

13.3.1 Single/Sporadic Cases of Diarrhoea and Vomiting

Patients admitted from the community with symptoms suggestive of viral gastroenteritis (including Norovirus) or who develop diarrhoea/vomiting which is unrelated to their treatment should be reported to the Infection Prevention & Control Team and have the following infection prevention & control measures implemented:

If an outbreak is suspected the procedure in the Outbreak Management section of the IPC manual must be followed.

13.3.2 Management of Patients with Loose Stool/diarrhoea/vomiting in an Impatient Setting

- Immediate isolation in a single room with an en-suite bathroom. Patients who do not have access to en-suite facilities must have a dedicated toilet for their use.
- Patients who are moved from a bay to a side room for isolation must have their previous bed space cleaned with Chlorine Releasing Agent and the curtains changed prior to occupation by the next patient. The associated bathroom/toilet will also require deep cleaning if the patient used the toilet whilst symptomatic. Those patients who have been exposed but who are asymptomatic should not be transferred without consultation with the Infection Prevention & Control IPC team.
- Isolation signage and PPE should be immediately available outside the room (in physical health inpatient wards)
- Room doors should be closed unless risk assessment indicates that other risks negate this. If this is the case then a risk assessment must be done.
- Sample/s of stool/s and/or vomit/s should be sent for Virology and Microbiology.
- Staff must wear appropriate PPE; aprons and gloves for any direct contact with the patient or when exposure to body fluids is anticipated. All staff entering the patient's room must wash their hands with soap and water prior to leaving. This must be done following removal of protective clothing. The use of alcohol hand disinfectant alone is not advised for inactivating Norovirus as this is ineffective
- Strict hand hygiene must be observed
- Decontamination of the environment or equipment- should be undertaken with a freshly prepared Chlorine based disinfectant (1000ppm available chlorine).
- A Bristol stool chart must be implemented and updated following every bowel action or any episodes of vomiting. Stool charts must also recorded daily if a patient does not have their bowels open. – see Appendix 20
- Commence the patient on a fluid balance chart and at least twice daily observations or as their clinical condition indicates.
- Review of medication by the clinical team, especially the use of laxatives.
- Any spillage of vomit/faeces must be cleared up with paper towels, disposed of in clinical waste and the area cleaned with a Chlorine releasing agent (1000ppm available chlorine).- Refer to Management of Body Fluid Spillage section of IPC manual.
- The room (and any associated patient equipment e.g. commode) must be cleaned thoroughly after use and on a daily basis using Chlorine Releasing Agent. Remove all food and non- essential possessions for the affected patient's room to facilitate cleaning.
- Linen should be placed as per policy in an inner biodegradable bag and then double bagged.
- All waste should be placed in a clinical waste bag.
- Contact the Infection Prevention & Control Team for further advice.

- All patients with symptoms should remain isolated until asymptomatic for 48 hours.
- Following patient discharge, the patient's room and bathroom must be thoroughly cleaned with Chlorine Releasing Agent (1000ppm available chlorine) and the curtains changed (in required), prior to reoccupation.

13.3.3 Outpatient Settings

If the patient is known to have symptoms of diarrhoea and vomiting, where possible they should be discouraged from attending a health Centre/surgery or Outpatient Clinic. If this is unavoidable then an appointment should be made late in the day to minimise the risk of potential risk of cross infection to other patients and staff.

Decontamination and Cleaning- If a patient has attended the clinic and has known symptoms of viral gastroenteritis the environment and any reusable equipment should be cleaned with a detergent followed by a Chlorine Releasing Agent (1000ppm available chlorine) or a combined detergent/disinfectant product diluted to 1000 ppm available chlorine.

Staff visiting a patient with known diarrhoea in their home should if possible make this the last visit of the day. Appropriate PPE and conscientious hand washing is essential in this scenario.

13.4 Period of Increased Incidence (PII)

A 'period of increased incidence' can be used for clusters of as yet undiagnosed vomiting and/or diarrhoea (PHE 2012).

13.5 Norovirus

An outbreak of Norovirus is defined as an occurrence of two or more similar illnesses resulting from common exposure that is either suspected or laboratory confirmed to be caused by Norovirus.

Case definition of Norovirus - A patient or staff who within a 24 hour period has 3 or more episodes of non-bloody diarrhoea (does not include loose stools induced by laxatives or enemas), AND/OR 2 or more episodes of vomiting without any obvious cause for symptoms. (HPS 2013)

Management of increased number of patient cases;

- Two or more cases of unexplained diarrhoea and/or vomiting.
- Periods of increased incidence.

Careful clinical assessment of the causes of vomiting and diarrhoea is important as even when an outbreak is suspected there will be patients who have underlying pathologies.

Infection prevention & control measures (as point 13) should be implemented immediately and the local infection control team informed. Medical and nursing staff should also consider Clostridium difficile in all cases and refer to Clostridium difficile section of the IPC Policy.

Senior nursing and medical staff in conjunction with the IPC Team should make the decision based on the information available as to whether Norovirus is the likely cause of the diarrhoea and vomiting.

- Affected patients must be cared for using isolation (single room or cohort), using standard infection prevention & control precautions- **Refer Isolation section of IPC manual**
- In areas where symptomatic and non- symptomatic patients can be physically and safely separated, it may not be necessary for full closure of the ward/area.
- Where single rooms are unavailable and cohorting is necessary, PPE should be worn and changed in between caring for each patient and hands decontaminated with soap and water. PPE should be removed and hands decontaminated prior to leaving the cohort area or single room.
- A line listing tracker form- See Outbreak Management section of IPC policy manual *Appendix 26* – should be complied and updated daily stating symptoms, time and date. This should include patients, visitors and staff. This is required by the IPC Team to be used as part of the risk assessment in managing the patients.
- When new cases occur the IPC Team should be informed immediately so that an updated risk assessment can be undertaken as this may indicate the need to progress to full closure of the unit.

13.5.1 Closure or Restricted Access to Area – Management

- In some cases an outbreak will be declared and full or part closure of the ward/unit may be necessary. – refer to Outbreak Management section of IPC policy manual
- The definition of 'closure/restricted access' refers to the restriction of incoming and outgoing personnel, patients, equipment and materials to an unavoidable minimum. All non-essential personnel including visitors should be discouraged from entering a closed area.
- During an outbreak the affected area will be closed to admissions and transfers until 72 hours after the last episode of Norovirus – associated vomiting and diarrhoea.
- The decision to admit patients to an area that is closed during an outbreak or a period of increased incidence must not be undertaken without discussion between the clinical team and the ICT/Microbiologist & on call manager/Senior Duty nurse.
- During a Norovirus outbreak a patient may still be discharged to their own home, irrespective of the stage of the patients Norovirus illness.
- Discharge to nursing/residential homes and other hospitals or community- based institutions should be delayed until the patient has been asymptomatic for at least 48 hours. Urgent transfers require an individual risk assessment and input from the ICT.
- Notices to limit staff and visitor traffic to the affected area should be placed at the entrance to the unit. – Refer to Outbreak Management section of IPC policy manual.

13.5.2 Clinical Treatment of Norovirus

- Dehydration- It is important to correct and avoid further dehydration through standard oral rehydration regimes. Intravenous rehydration therapy should only be used where oral rehydration is not appropriate.
- Anti-emetic- These are useful but not recommended routinely. Side effects may be contraindicated with some groups of patients such as the elderly and children.
- Anti- diarrheal medication- these are generally not recommended but can be used if needed.
- There is a risk of compromising IPC measures through masking the infectivity of patients when both antiemetic and anti-diarrhoeal drugs are used.

13.5.3 Preventing Spread to Other Areas

- Clinical visiting staff such as Physiotherapists, Occupational Therapists and phlebotomists should still continue to service the area, however the affected area should be the last to be visited. Only essential procedures should be carried for symptomatic patients.
- Staff working in affected areas should not work in other areas unless deemed unavoidable by risk assessment for the necessary care for patients.
- Staff working in affected areas must not work in unaffected areas for 48 hours - (This includes bank and agency staff).
- Symptomatic patients should not be sent to other departments for investigation or treatment unless unavoidable. These should be postponed until the patient is no longer symptomatic and the outbreak has been declared over.
- If this is not possible due to clinical need a risk assessment should be completed and arrangements should be made so the patient spends limited time in the receiving department, no contact with other service users and decontamination of the area must be carried out afterwards with a Chlorine Releasing agent - 1000 ppm.

A patients treatment must not be compromised whist the area is restricted due to viral gastroenteritis, (including Norovirus).

13.5.4 Environment & Equipment

- Use single use equipment wherever possible. Follow guidance below for decontamination of reusable equipment.
- Any open food should be discarded.
- Staff should not consume food or drink in the clinical area. Any exposed food or drink is likely to be contaminated.

13.5.5 Decontamination of the Area and Equipment

- Additional cleaning should be arranged with the local cleaning team for a Chlorine Releasing Agent to be used. (1000ppm).
- Reusable equipment should be cleaned with a detergent followed by a Chlorine Releasing Agent (1000ppm available chlorine) or a combined detergent/disinfectant product diluted to 1000 ppm available chlorine.

13.5.6 Management of Body Fluid Spills

- Refer to Management of Blood and Body Fluids Spillage section of IPC policy manual
- Wear personal protective equipment; gloves, apron (goggles and mask if there is significant risk of splashing).

13.5.7 Laundry

- All laundry during an outbreak/PII should be considered contaminated. It should be discarded directly into alginate bags and the subsequently bagged as hazardous waste.

13.5.8 Terminal Cleaning

Norovirus has the ability to remain viable in the environment for up to 12 days and it is therefore imperative that the environment following an outbreak or PII is decontaminated effectively.- follow local cleaning guidelines- Chlorine Releasing Agent- 1000ppm

13.6 Protocol for Staff with gastrointestinal Illness

The following protocol applies to all staff but particularly to members of staff who have direct patient contact and/or are designated food handlers:

- Any member of staff who has diarrhoea (Three or more loose stools in 24 hour period) and/or vomiting (more than 2 occasions), which cannot be related to other factors e.g. alcohol excess, normal bowel pattern, pregnancy etc. should report their illness to their manager or person in charge of the service.
- If a staff member becomes ill on duty they must be sent off duty immediately and must remain off duty until they have been 48 hours symptom free for from both diarrhoea and vomiting.

13.6.1 Stool Samples from Members of Staff – Occupational Health/Staff Screening

In some circumstances it is important that a stool sample from a member of staff is obtained, to determine the cause of symptoms. Staff should contact Occupational Health for further advice.

14. Management of Clostridium Difficile Infection

14.1 Introduction

Clostridium Difficile is the major cause of antibiotic-associated diarrhoea and colitis - a healthcare associated intestinal infection that mostly affects elderly patients with other underlying diseases.

Its usual habitat is the large intestine, where there is very little oxygen. It can be found in low numbers in a small proportion (less than 5%) of the healthy adult population. It is usually kept in check by the flora of the intestine (colonisation resistance)

C.difficile is able to multiply in the intestine and produces two toxins (A & B) that damage he cells lining the intestine. The result is diarrhoea. Because it develops in this way, the patients who are most at risk of infection with *C.difficile* are those who have been treated with road-spectrum antibiotics (those that affect a wide range of bacteria, including intestinal bacteria).

Clinical Features

C. Difficile can cause diarrhoea, ranging from a mild disturbance to a very severe illness with ulceration and bleeding from the colon (colitis) and, at worst, perforation of the intestine leading to peritonitis. It can be fatal.

Most of those affected are elderly patients with serious underlying illnesses. Most infections occur in hospitals (including community hospitals), nursing homes etc., but it can also occur in primary care settings.

14.2 Transmission

Although some people can be healthy carriers of C.difficile, in most cases the disease develops after cross-infection from another patient, either through direct patient-to-patient contact, via healthcare staff, or via a contaminated environment.

A patient who has C.difficile diarrhoea (CDAD) excretes large numbers of the spores in their liquid faeces. These can contaminate the general environment around the patient's bed including surfaces, keypads, and equipment), the toilet areas, sluices, commodes, bedpan washers etc. They can survive for a long time and be a source of hand-to-mouth infection for others. If these others have also been given antibiotics, they are at risk of C. difficile disease.

14.3 Prevention

Five main factors have been identified as being necessary to reduce the incidence of CDAD (according to: *Saving Lives: reducing infection, delivering clean and safe care High Impact Intervention No 7 Care bundle to reduce the risk from Clostridium difficile).*

14.4 Prudent Antibiotic Prescribing

Prescribe antibiotics according to national guidance* and local policy; minimise use of broad-spectrum antimicrobials. Review antimicrobial medication daily. Include stop dates in antimicrobial prescriptions.

14.5 Correct Hand Hygiene

Wash hands with soap and water before and after each contact with suspected infected patients. The use of alcohol gel/rub is not recommended when caring for patients with C.difficile.

14.6 Environmental Decontamination

Implement enhanced cleaning in areas with CDAD patients. Use chlorine-based disinfectants (Chlor Clean) to reduce environmental contamination with Clostridium difficile spores. Ensure deep clean and decontamination of rooms after discharge of CDAD patients.

14.7 Personal Protective Equipment (PPE)

Always use disposable gloves and aprons when handling body fluids and when caring for patients with diarrhoea.

14.8 Isolation/Cohort Nursing

Always use a single room. Cohort care for CDAD patients should be used if a single room is not available. Please discuss with the Infection Prevention and Control team.

14.9 Diagnosis

If you suspect infection, there is a simple diagnostic test that can be done on a sample of diarrhoeal faeces to see if C.difficile toxins are present.

Stool samples should be taken and sent to the microbiology laboratory for C.*difficile* toxin testing. Please refer to Specimen collection of the IPC policy manual.

In outbreaks, or for surveillance of the different strains circulating in the population, C.difficile can be cultured from faeces and the isolates sent for typing.

14.10 Management of Patients with Diarrhoea

- Clostridium Difficile infections are rare in mental Health. Service users who are clinically unwell should be transferred on discussion with the medics to acute general hospital. All patients with diarrhoea should be treated as potentially infectious in all inpatient wards
- Inform the Nurse in Charge and the duty doctor of patients with diarrhoea
- Review the use of laxatives - are these the cause of the diarrhoea and is their use necessary? Patients suspected of having C difficile should not have anti-diarrhoeal prescribed. Department of Health; state that the use of antimotility agents in symptomatic antimicrobial-associated diarrhoeas is contra-indicated.
- Two stool samples should be obtained one sent for Microscopy, sensitivity and culture, C.difficile and the second Virology
- Contact the Infection prevention and control Team
- Infection prevention and control team must be contacted immediately if result positive or reason for suspicion.

Out of Hours

- The doctor should contact the on call microbiologist at the local service hospital via the hospital switchboard
- Patient should be safely transferred to a single room with own toilet and wash facilities.
- If they have been moved their area should be deep cleaned.
- Movement should be reduced as much as possible to reduce transmission.
- Cleaning Service Provider should be informed as soon as practicable as increased levels of cleaning might be required.
- Environments should be kept clean at all times. Where there are cases of C. difficile infection, a disinfectant containing chlorine (Chlor clean) should be used to reduce environmental contamination with the spores e.g. (Chlorclean).Equipment should not be shared.
- Patient should be nursed in Side room using enteric precautions.

14.11 Clinical Management

In mental Health inpatients a service user with suspected Clostridium *difficile* infection should be admitted to the acute hospital for management unless the service user is well or has minimal symptoms.

Advice should be taken from the microbiologist for the management.

- Treatment of a case of infection from *C.difficile* includes the stopping of any current course of antibiotics where possible, and replacing it with different antibiotics to which the bacteria are susceptible.
- Monitor fluid balance on a fluid balance chart and correct dehydration due to diarrhoea.
- Monitor diarrhoea using a stool chart.

Record TPR and BP and use National Early Warning System (NEWS) to identify deterioration. Report any signs of deteriorating condition and arrange transfer to hospital at first signs of deteriorating condition.

14.12 Transfer/Discharge of Patients Diarrhoea

Patients with C. *difficile* infection should not be transferred to other areas without discussion with the IPC Team. Patients can be discharged/transferred providing they have been 48-72 hours free of symptoms. (Discuss with the IPC Team any concerns). Visits to other departments should be kept to a minimum. Where visits are necessary, for investigation and treatment, prior arrangements should be made and the following principles adhered to:

- Infected patients should be seen at the end of the working session and only sent for when the department is ready to deal with them. Patients should not be left in waiting areas with other patients.
- Ensure the wheelchair is thoroughly cleaned after use.
- If transport involved give infectious condition information at the time of booking and additional precaution advice

15. Outbreak Management of Communicable Infections

15.1 Introduction

Effective collaborative arrangements need to be in place to manage outbreaks of communicable diseases such as Norovirus or *Clostridium Difficile*. It is our duty in East London Foundation Trust to promote and safeguard the interests and well-being of our staff and service users

Outbreaks/suspected outbreaks must be reported immediately to the Infection Prevention & Control Team (IPCT) and locality senior clinical personnel.

Public Health England (PHE) are informed in any outbreak situation. Accurate records detailing chronology of events must be maintained.

A post outbreak review should be held to understand and disseminate lessons learned during the outbreak.

The initial investigation to clarify the nature of the outbreak should commence within 24 hours. Outbreak audits should be conducted and a final report should be compiled within 6 weeks of Outbreak.

15.2 Definitions and Terms

A communicable disease outbreak is defined as:

- An incident in which two or more people experiencing a similar illness are linked in time or place
- A greater than expected rate of infection compared with the usual background rate for the place and time where the outbreak has occurred
- A single case for certain rare diseases such as Diphtheria, Botulism, Rabies, Viral Haemorrhagic Fever or Polio
- A suspected, anticipated or actual event involving microbial or chemical contamination of food or water.

15.3 Roles and Responsibilities during Outbreak Management

Duties	Key Responsibilities
Chief Executive Office (CEO)	• The CEO has overall responsibility to ensure that this section of outbreak policy is implemented.
Director Infection Prevention and Control (DIPC)/Deputy Director Infection Prevention and Control (DDIPC)	• To determine, in consultation with Public Health England (PHE), the status of the outbreak/incident and therefore whether to institute the policy and convene an Outbreak Control Team (OCT). • To decide on chair of OCT meetings. • To direct and co-ordinate the management of the outbreak/incident in conjunction with Consultant in Communicable Disease Control (CCDC). • To co-ordinate effective

	communications within the Trust and with the Trust press office if required. • To co-ordinate the written final report on the outbreak / incident and ensure that the response to the outbreak / incident is audited.
Employees	• Must be able to recognise a potential outbreak. • Be aware of the reporting mechanism in the event of a potential outbreak and take action. • Implement appropriate infection control measures as advised by the Infection Control Team (ICT)/Outbreak Team. • Ensure that they know how to access the outbreak management policy on Trustnet • To maintain communication with patients/ service users and visitors to the area affected. • To maintain communication with other employees such as contractors, sub-contractors & volunteers.
Service Leads	• Must be aware of the reporting mechanism in the event of a potential outbreak and escalate. • Must take remedial action and seek expert advice. • Assess need for additional resources (staff and equipment). • Ensure that they know how to access the outbreak management policy on Trustnet.
Service Managers	• To implement recommendations as agreed by the OCT/IPCT or PHE if required. • To ensure that relevant information/data is collected and documented. • To monitor the recommendations implemented. • To ensure effective communication within your area[s].
Public Health England (PHE)	• Chair OCT meetings if requested by the DIPC. • In conjunction with the DIPC, co-ordinate the management of the outbreak/incident. • To take the lead in epidemiological investigation and provide public health medical advice to the team as required. • To arrange, in conjunction with relevant

	others, the appropriate identification and follow-up of contacts. • To ensure that information about the outbreak/incident is communicated to those who need to know, including other members of the Health Protection Team (HPT).
Infection Control Doctor / Consultant Microbiologist / Virologist	• To support appropriate laboratory investigation of the outbreak/incident and communication of the results. • To provide specialist advice on the microbiological aspects of the outbreak/incident. • To liaise with Consultant Microbiologists/Virologists in other laboratories, including reference laboratories, that are involved in the investigation.
Infection Prevention & Control Nurse (IPCN)	• To provide specialist infection control advice on, and input to, management of the outbreak/incident. • In conjunction with the service leads, ensure that all appropriate infection control actions are taken. • To liaise with other relevant ELFT staff (e.g. DIPC / Occupational Health (OH) who have responsibility for staff health • To facilitate communication about the incident/outbreak, through relevant ELFT staff, with other health organisations/partners such as Clinical Commissioning Groups (CCG).
Occupational Health (OH) Service Physician or Representative	• To ensure that relevant information/data on employees are collected and documented. • To implement recommendations as agreed by OCT/DIPC/IPCT/PHE. • To monitor the recommendations implemented.
Clerical and Administrative Support	• To take minutes of each meeting of the OCT and to produce a timely written record of the meeting. To be involved in other administrative and clerical functions as appropriate to the incident/outbreak.
Communication Department	• To advise and assist in the preparation of communications for the media. • To update ELFT staff as needed regarding outbreak status. • To communicate with the media if directed by the OCT.

	• To liaise closely with Press/Public Relations Officers of partner organisations as appropriate to ensure that all information is agreed and consistent.
Others to be invited dependent on outbreak circumstances: - Estates and Facilities Manager - Environmental Health Officer - Pharmaceutical Manager - Medical Director - Occupational Health	

15.4 Outbreak Management Procedures

The plan is to be activated in the event of a significant outbreak or incident, considering the following factors. As a guide, the calling of an OCT will be considered when one or more of these conditions apply.

- The disease / incident poses a risk to health of patients/service users, staff, visitors
- All unexpected cases appear in more than one location
- The disease or incident is unusual
- The disease poses an immediate health hazard to the population
- There are a significant number of cases
- The disease is important, in terms of its severity and/or its capacity to spread
- The DIPC, after discussion with the ICT, OH (if employee related) and the CCDC will take responsibility for initiating the use of the outbreak plan and convening the OCT.

For outbreak management tracker forms and terms of reference for outbreak meeting. See *Appendix 26, 27, 29,30, 31, 32, 33.*

15.4.1 Activating the Procedure

Once an outbreak/incident has been declared the DIPC, in consultation with the PHE, will convene an Outbreak Control Team (OCT). A draft agenda, which can be adapted for the first meeting, is shown in Appendix B. Outbreaks can vary in size and severity. Public Health England Communicable Disease Outbreak Management (2014) acknowledges an OCT may be a formal meeting of all partners or a discussion between two or more stakeholders. However all discussions should be appropriately recorded.

15.4.2 Movement of Staff or Patients

Visiting may need to be restricted. No movement of staff or patients from the outbreak ward is allowed until the outbreak is over, except for discharge home. Nursing staff (permanent, students and agency) should remain permanently attached to the ward if at all possible. Extra domestic cleaning support may be needed. Appropriate signage should be placed at the entrance to the unit (*downloadable from Trustnet*).

East London
NHS Foundation Trust

15.4.3 Ward Closure

If there are many infections and carriers of an epidemic strain in the ward and measures have failed to control an epidemic, it may be necessary to close a ward to admissions. The OCT may advise ward closure but the decision will be approved by the DIPC.

15.4.4 Hand Hygiene

Stringent hand hygiene measures will always apply. Visitors should be guided to decontaminate their hands on entry and exit to an affected unit. Service users should also be guided to decontaminate their hands.

Note: In the presence of diarrhoeal disease alcohol products should not be used.

15.4.5 Decontamination

Domestic Services should be immediately informed when an outbreak situation is declared so that additional cleaning measures can be implemented as guided by the IPCT, the Trust, Contactors cleaning guidelines and also in accordance with national guidelines.

15.4.6 End of Outbreak

The OCT will decide when the outbreak is over and will make a statement to this effect. Unit reopening will take place with the agreement of the IPCT when appropriate unit cleaning has taken place.

16. Screening and the Management of Methicillin Staphylococcus Aureus

16.1 Introduction

The purpose of the policy is to provide recommendations for practice to reduce the risk of acquiring MRSA in the hospital and community or developing MRSA infections. This section of the policy intended to provide guidance for all health care workers within East London NHS Foundation Trust on the measures required to control and prevent Healthcare Associated Infections and the measures required in relation to patients presenting with Methicillin Resistant Staphylococcus *aureus* (MRSA).

Staphylococcus aureus is a common germ that is found on the skin and in the nostrils of about a third of healthy people. MRSA stands for Methicillin-resistant *Staphylococcus aureus*. MRSA is a variety of *S. aureus* that has developed resistance to Methicillin (a type of penicillin) and some other antibiotics that are used to treat infections.

MRSA can cause infection, particularly when there is an opportunity for the bacteria to enter the body, for example accidental cuts and grazes or deliberate wounds/invasive procedures performed in healthcare. It may spread further into the body and cause serious disease such as bloodstream infections (bacteraemia).

16.2 Definitions and Terms

MRSA Bacteraemia	When an infection spreads further into the body and MRSA/S. aureus is present in the blood. This can occur either from the patient's/client's own resident MRSA (if they are an asymptomatic carrier), from a local infection or by cross-infection from another person.

MRSA	Colonisation is when a person carries S. aureus (including MRSA) on areas of their body such as the nose and the skin, and occasionally in folds such as the axilla (armpit) or groin.

Routes of Spread – Direct Contact	Hands provide the most common form of contact between people and their potential contamination with MRSA. This emphasises the need to maintain good hand hygiene before and after all patient contact. Contaminated equipment can be another route of spread therefore all equipment should be routinely and effectively decontaminated between patients.

16.3 Basic Principles of Prevention and Management

These standards are consistent with standard infection prevention and control precautions:

Alert organism surveillance on MRSA cases is performed by the Infection prevention and control

team and fed back to clinical areas. MRSA bacteraemia surveillance is performed and data sent to the Department of Health mandatory surveillance unit. This would be done by the hospital/laboratory which process the sample.

- Correctly perform hand hygiene before and after every patient contact as per Trust hand hygiene policy.
- Wearing disposable gloves and plastic aprons for contact with all body fluids, lesions and contaminated materials.
- Appropriate isolation of patients with, or suspected of having, a communicable infection.
- Adherence to the ELFT Antibiotic Guidelines.
- High standards of aseptic technique.
- High standards of ward cleaning.
- Careful handling of used linen and its transport in sealed bags of the appropriate colour. (See the Laundry policy).
- Segregation of all waste, careful handling of clinical waste and its transport in a sealed bag of appropriate strength and colour.
- Avoiding overcrowding of patients.
- Reviewing the need for and minimizing where possible intra and inter ward transfers of patients.
- Maintaining adequate and appropriately skilled nursing and other staff levels.
- Regular monitoring of compliance with the infection prevention and control policies through effective audits.

16.4 Risk Assessment

MRSA infection is rare in Mental Health and therefore each patient/case should be risk assessed individually.

See risk assessment table below:

RISK	LOCATION	SCREENING FREQUENCY	ISOLATION NURSING	NOTES
HIGH RISK	East Ham Care Centre Archer Unit	All patients on admission	Side Room	The patient may come out of the room for meals, therapy and socializing based on risk assessment.
MODERATE RISK	Mother and Baby Unit	As required	On risk assessment	Babies who previously had MRSA positive results and transfers from other hospital or Mum who is MRSA positive.
LOW RISK	All other Mental Health Inpatient Wards	At risk patients	Not required	Service users with: • Chronic Wounds • Admitted directly from acute hospital with a surgical wound • Intravenous Drug • User self-harms

16.5 MRSA Admission Screening

16.5.1 Admissions Screening Criteria

In East Ham Care Centre and Archer Unit all patients should have screening on admission. The screen must be taken by the nurse in-charge of the ward admitting the patient within 24hours of admission. This is monitored on a weekly basis by the IPC team to provide support and guidance where needed.

Mental Health service users may have other clinical conditions that may put them at risk of MRSA infection and they should be screened for that reason:

- Those who are admitted to mental health units from acute hospitals following surgical procedures
- Intravenous drug users

- self-harmers
- People with chronic wounds (e.g. leg ulcers, or with indwelling devices such as urinary catheters)

16.5.2 Screening Sites

- Nose
- Throat
- Groin
- Wounds (this would include any skin lesions e.g. eczema, psoriasis)
- IV lines (if present)
- Catheter Stream Urine (if catheter present)
- Sputum (if being produced)

See *Appendix 34* for further pictorial guide on MRSA specimen collection.

16.5.3 How to Screen

All identified service users will only be screened, by having a nasal and groin swab specimen. If service users have indwelling devices or chronic wounds identified as risk factors these will require a separate swab from these sites.

The following procedure should be followed:

- Swabs with transport medium should be used for MRSA screens
- The tip of the swab should be moistened with sterile saline or the medium from the swab.
- Wash hands.
- Explain the procedure to the patient.
- Record the patient's details on the transportation tube.
- Place the swab on the area to be swabbed and gently wipe. In the nose ensure it is placed inside the tip of each nostril ensuring it comes into contact with the nasal mucosa.
- Place the swab in the tube and close.
- Place with completed path lab form in a sealed specimen bag.
- Send as for other specimens to the pathology laboratory for MRSA SCREEN.

16.6 Action to be Taken on the Identification of a Case of MRSA

16.6.1 Mental Health Inpatients

- Standard precautions should be followed, but isolation in the majority of cases would not be required.
- The use of contact precautions will be sufficient in most instances. Where service users are nursed in shared bays risk assessment should be carried out.
- Cover lesions from which MRSA has been isolated with an impermeable dressing.
- Decolonisation protocol should be for 7 days.
- The other patients on the ward do not need to be routinely screened.

16.6.2 Physical Health Wards (East Ham Care Centre & Archer Unit)

- Basic control measure should be followed.
- The index case should be isolated on contact precautions and nursed in a single room
- The patient should be started on decolonisation protocol (see below) and screened weekly.

- Screening of other patients on the unit is not necessary unless advised by the infection prevention and control team.
- If a patient has had a recent positive swab in the last 6 months and has not any subsequent negative screens they should be started on MRSA protocol following the admission screen
- There is no requirement to wait for a result from the admission screening swabs prior to starting protocol.

Decolonisation Protocol	
The following should be used for 5 days only	
Mupirocin 2% nasally three times a day	Mupirocin Nasal Ointment should be applied to the anterior nares two to three times a day as follows: A small amount of the ointment about the size of a match head is placed on the little finger and applied to the inside of each nostril. The nostrils are closed by pressing the sides of the nose together; this will spread the ointment throughout the nares.
4% Chlorhexidine to be used as daily soap (applied neat to the body)	Chlorhexidine should be used undiluted as a liquid soap. Apply it directly to wet skin with hands or a cloth. Leave it in contact with skin for at least a minute Apply Chlorhexidine all over the body. Pay particular attention to the areas around the nose (nostrils), between legs (genitals and anus), under arms and feet. After the first application repeat the steps outlined above this time using Chlorhexidine as a shampoo to wash hair. Hair should be rinsed well afterwards. Whenever possible hair should be washed on two occasions during a week. Wash off the Chlorhexidine in a bath or by showering. Dry with a clean towel afterwards and put on clean clothes.

If patients develop any reactions or dry skin that is controlled by the use emollients, then the infection prevention and control team should be contacted for advice to discuss alternative treatment options.

16.7 Re-Screening for MRSA

- Decolonisation should only be used for five days
- Stop for two days
- Rescreen on the 7th Day
- The requirement for further treatment will be assessed if remains positive by the infection prevention and control team and microbiology.

16.8 Carriage in Patients' Throats

Carriage in patients' throat can be difficult to eradicate. If the organism is doing the patient no harm and the patient's clinical management is not affected by the carriage of the organism, it may not be necessary to look at eradication.

If eradication is indicated the National Guidelines suggest that systemic treatment is nearly always required. We advise our patients to gargle with Corsodyl® (contains 1% chlorhexidine) mouth wash, three times a day for the duration of protocol.

16.9 Treatment of MRSA Blood Infections

All cases MUST be discussed with the microbiologists.

16.10 Bed Management/Admission

MRSA is not a reason to exclude a person from a shared-living environment, as the standard precautions employed within the home/unit will protect other patients/clients.

When a patient/client has been identified as colonised or infected with MRSA, the infection prevention and control team must be contacted for further advice.

16.11 Cleaning

All cleaning is carried out by the domestic staff and details are available in the environment and isolation Room section of this policy

The implications of MRSA colonisation, infection and treatment, should be carefully explained to the patient, and their relatives, by the named nurse for that patient or, the infection prevention and control nurse.

Patients confirmed to be colonised with MRSA are able to attend therapy groups and socialise, providing any wounds infected are covered and the patient does not remove the dressing and scratch the wound.

In most instances, these patients are able to move freely in public areas and go for walks outside. If there are concerns about the restrictions necessary or particular cases, please contact the infection prevention and control nurse.

16.12 Washing or Bathing Patients Known to be Infected with MRSA

When assisting to wash or bathe a patient known to have an infection with MRSA, staff should wear a disposable clean plastic apron to protect their uniform from contamination. This reduces the opportunity of cross infection to other patients.

Following use, the bath must be disinfected and a disposable cloth prior to use by another patient.

16.13 Staff Screening

Staff are not routinely screened for MRSA. If an outbreak of MRSA develops on a ward or unit, the decision to screen staff will be made in consultation with the infection prevention and control team.

16.14 Management of MRSA Positive Healthcare Workers

On identification of a MRSA positive health care worker (HCW) the IPC nurse will liaise with the Occupational health department. Occupational health will be responsible for the follow up of the member of staff, this will assist in maintaining the HCW"s confidentiality.

16.15 Transfer of Patients Colonised or Infected with MRSA

If the patient is to be transferred to another hospital, care home, or has an appointment in a unit within the acute hospital (e.g. X-Ray, Outpatient Department etc.), the receiving hospital/home must be informed of the patient/service user's MRSA status, if known. Lesions should be covered if possible with an impermeable dressing.

16.16 Transfer of Residents by Ambulance

The fact that a resident has MRSA must never delay or prevent clinical attention, such as investigations, or treatment.

Patients/ Service users with MRSA do not present a hazard to ambulance staff or their families if a known MRSA positive resident has to travel by ambulance, the ambulance trust should be informed in advance.

16.17 MRSA in the Community

Staff caring for people in the community must always practice contact precautions. There is no need to isolate or barrier nurse MRSA positive patients within the community. Staff must seek advice from the Infection prevention and Control team in cases where patient has signs and symptoms of infection, such as wound discharge, discharge from indwelling devices, etc.

17. Management of Tuberculosis Infections

17.1 Introduction

Tuberculosis (TB) is an infectious disease caused by the Mycobacterium Tubercle Bacilli. It usually presents as a respiratory disease affecting lungs, larynx, pleura or Mediastinal lymph nodes. It can also affect bones and joints, organs, the gastrointestinal and renal tracts, central nervous system or disseminated through the blood stream. Cases of pulmonary TB with sputum smear positive for acid-fast bacilli are considered infectious to others. TB is a major public health problem in London, accounting for 45% of all cases reported in England.

All patients on admission to East London NHS Foundation Trust should have a physical health check which includes assessment of risk factors for infection. If TB is suspected the patient should be referred urgently to the local TB team and appropriate infection prevention and control precautions should be put in place.

Patients for whom TB is being suspected should be isolated in a single room with en-suite toilet to minimise contact with others, door should remained closed for the duration of infectivity in mental health units, provided that there are no immunocompromised patients (e.g. HIV positive) in the area..

Resistance to TB drug treatment can develop, and in some cases multi-drug resistance (MDR TB) develops if patients are not compliant with medication. All patients with TB should have risk assessments for drug resistance and for HIV There is some evidence that patients with mental health problems are at greater risk of developing MDR TB (Story et al 2007). Refer to points 12.4 and 12.4.1 for a list of risk factors for MDR TB.

Suspected or confirmed MDR TB cases will need to be transferred to a specialist centre with negative pressure facilities for management

TB is a notifiable disease and the clinician in charge of the patient is responsible for notification to the local Health Protection Unit (HPU) under The Health Protection (Notifications) Regulations 2010. Suspected or confirmed TB cases, as mentioned above need to be referred urgently to the TB team and the infection prevention and control team needs to be informed.

If patients are later found to be negative the TB team will de-notified them. Risk assessment regarding significant exposures and possible contact tracing will be done by Public Health England local Health Protection Team in conjunction with the TB team and the Infection Prevention and control team. Contact tracing will be carried out by the TB Nurse Specialist following outcome of the risk assessment. Staff cases should be referred to Occupational Health.

People who have active infectious (open) pulmonary or laryngeal TB expel small respiratory droplets when coughing and sneezing. These small droplet nuclei are carried by air currents and can be inhaled by susceptible people.

17.2 Infectious TB

TB symptoms include:

- Malaise, weight loss, fevers and night sweats.
- A persistent cough (>3 weeks) which could be initially dry and non-productive, but later can become productive.

- Haemoptysis (blood-stained sputum)
- Breathlessness occurs when a substantial part of the lung is affected.
- Pain and haemorrhage are less common.

17.3 Risk Factors for Developing MDR TB

- HIV positive people.
- Previous TB treatment especially if prolonged, incomplete or non-compliant. Treatment failure (patient remains smear positive and symptomatic after 4 months of compliant treatment).
- Contact with a known case of drug-resistant TB.
- Birth in a foreign country where there is a high incidence of TB.
- Age profile, with highest rates between 25-44 years and male gender.

17.3.1 Additional Risk Factors for Mental Health Patients

- Homeless people or living in hostels
- Substance misuse
- Contact with prison

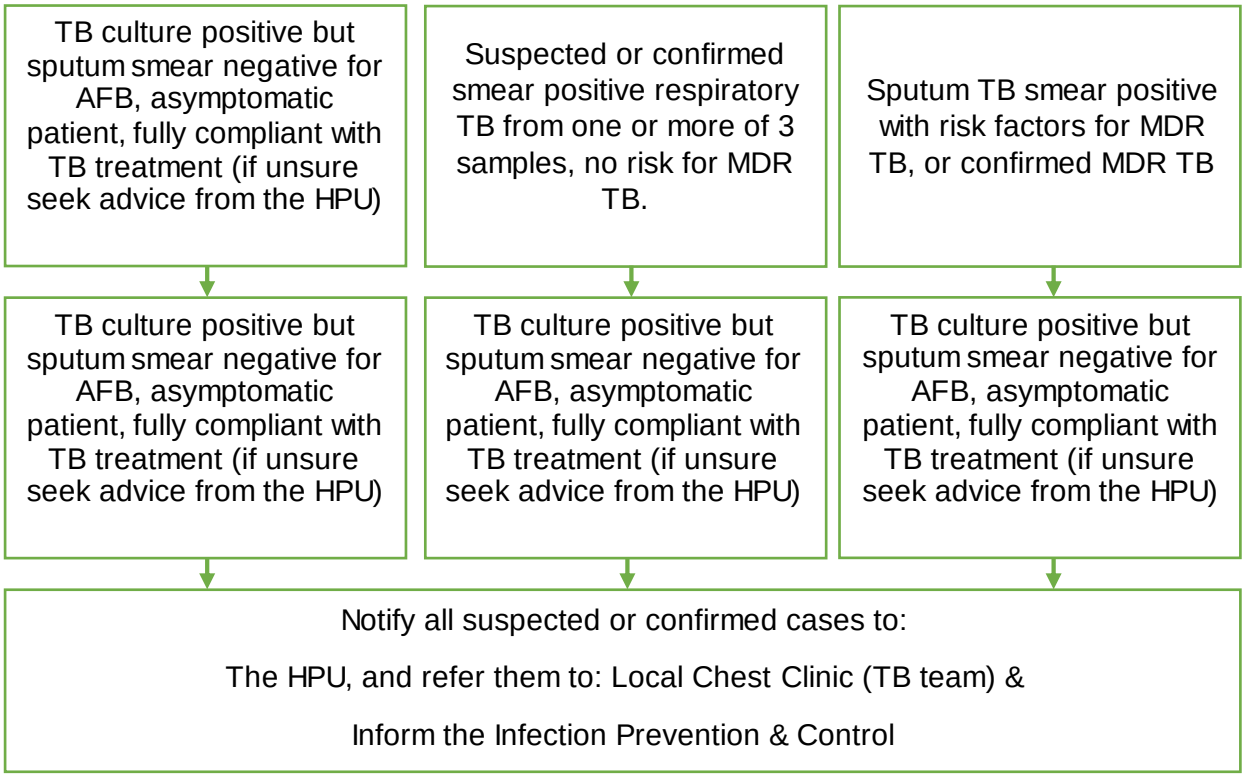
A link between mental health patients with additional risk factors above have been identified in an outbreak of drug resistant TB in London in a large study which highlighted there is a high prevalence of drug resistant infectious disease, non-compliance with treatment and follow up in this sub-group

Although drug resistance can prolong the period of infectiousness to others as well as compromising the effectiveness of treatment, MDR TB is not more infectious than drug sensitive TB.

17.4 Patient Isolation/Placement

On identification of any TB case a decision will be made about appropriate placement based on a risk assessment. If a patient is **suspected or confirmed** to be AFB sputum smear-positive (not MDR TB) from 1 or more of 3 samples, the patient must be isolated in a single room with en-suite facilities (e.g. toilet) and with the door closed on the ward provided that there are no patients who are immunosuppressed in the area. If these groups cannot be relocated then the infectious patient should be referred to a specialist centre with negative pressure isolation facilities. If the patient is suspected to have MDR-TB they will need to be transferred to an acute hospital with negative pressure isolation facilities.

17.5 Risk Management Flow Chart



17.6 Community Cases

Infectious cases should be advised to stay at home until they have received 2 weeks of continuous compliant anti TB drugs. They should be educated about the risks of spreading infection and advised about disposal of tissues and to cover the mouth when coughing and turn away from contacts. Patients should not make any new contacts until they are non-infectious to others. Advice and follow up will be provided by the local TB team caring for the patients.

17.7 Contact Tracing

The TB team and the local Public Health England Health Protection team will assist the local team in performing the risk assessment to identify individuals who might have had significant exposure.

Details of all patient contacts will be sent to the TB nurse at the local chest clinic as soon as notification is made.

For community cases a list of friends and work colleagues may need to be checked as well as family and staff contacts.

A separate list of staff contacts will be sent to Occupational Health teams who will follow up all staff contacts.

Patients who have been in contact with an infectious TB case will need to be informed and an entry made in their notes by the doctor and the patients" GP informed. Patients who have been identified as at risk will be informed and screened by the TB Nurse Specialist.

Management of non-compliant Patients advice needed from Public Health England.

Patients who are non-compliant with treatment for infectious TB are likely to fall into one of the following 3 categories.

Patients who have capacity to consent to treatment (as defined by the Mental health Capacity Act section 3) but who refuse to comply with treatment for whatever reason may need to have compulsory admission and detention to hospital to ensure that they are closely monitored under sections 37 and 38 of the Public Health Act. Compulsory medical examination can also be required under section 35 of that Act. Compulsory treatment is not allowed under the Public Health Act.

Patients who do not have capacity to consent to treatment as defined by the Mental Capacity Act, Section 3, can usually be treated, if necessary by admission to hospital under the common law doctrine of necessity e.g. that they lack capacity to consent and that it is in their best interests that treatment should be given. Any such treatment must be in conformity with the principles of the Mental Health Capacity Act and take account of the safeguards provided by that Act, such as the need to refer to an independent Mental Capacity Advocate in certain circumstances, or to consult with a Lasting Power of Attorney with health and welfare powers if one has been appointed.

Patients who refuse treatment for infectious TB due to mental disorder may in some cases be detained under the Mental Health Act 1983 though any such detention must be because the patient meets the criteria for detention under that Act and is being detained either for assessment under Section 3. The Mental Health Act does not provide a power for compulsory treatment of a physical condition. If the patient is incapable of consent to treatment for TB due to their mental disorder treatment can be provided according to 16.3 above.

18. Transmissible spongiform encephalopathy (TSE) Creutzfeld- Jacob Disease (CJD) and Variant CJD (vCJD)

18.1 Introduction

Transmissible Spongiform Encephalopathies (TSE"s), sometimes known as prion diseases, are fatal, degenerative brain diseases that occur in humans and certain other animal species.

18.2 Patient Classification

Patients are classified as follows:

- Symptomatic
- Symptomatic patients are classified according to verified WHO clinical and pathological criteria for:
- Sporadic CJD
- Iatrogenic (accidentally transmitted) TSE Genetic TSE (familial CJD, GSS and FFI)
- Variant CJD (vCJD)

18.3 Asymptomatic Patients at Risk of Familial Forms of CJD

- A patient should be considered to be at risk from familial forms of CJD linked to genetic mutations if they have or have had:
- Genetic testing that has indicated that they are at significant risk of developing CJD or other prion disease.
- A blood relative known to have a genetic mutation indicative of familial CJD. Two or more blood relatives affected by CJD or other prion disease.

18.4 Notification of CJD

All information on CJD and national guidance is available from Government website.gov.uk/government/publications/guidance-from-the-acdp-tse-risk-management-subgroup-formerly-tse-working-group.

All service users who have a possible diagnosis of a TSE (CJD or vCJD), or in whom TSE is consider amongst the differential diagnosis must be referred to the NCJDSU.

http://www.cjd.ed.ac.uk/surveillance.html

Notification to NCJDSU is the responsibility of the neurologist, neurosurgeon or other clinician responsible for the service user, but notifications are also made from other health professionals and via death certificates.

When notified, a neurologist from the NCJDSU will arrange to review the service user to assess likelihood of CJD and to collect samples and data.

The NCJDSU will then ask the referring team to inform the CCDC (Health Protection Agency) of all cases of possible, probable or definite CJD.

The guidance on CJD is updated at very regular basis. For information on infection prevention and control please refer to the link below:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/427854/Infection_controlv3.0.pdf

19. Management of patients with Carbapenemase-Producing Enterobacteriaceae infections

19.1 Introduction

Carbapenemase-Producing Enterobacteriaceae (CPE/CROs) Carbapenemase-producing Enterobacteriaceae (CPE) are a type of bacteria which has become resistant to carbapenems, a group of powerful antibiotics. This resistance is helped by enzymes called carbapenemases, which are made by some strains of the bacteria and allows them to destroy carbapenem antibiotics.

This means that the bacteria can cause infections that are resistant to carbapenem antibiotics and many other antibiotics. Carbapenem antibiotics are used to successfully treat certain complicated infections when other antibiotics have failed. This is similar to MRSA and other multi-drug resistant organisms. The spread of these resistant bacteria can cause problems to immunosuppressed/compromised patients in hospitals or other settings including the community, because there are so few antibiotics available to treat the infections they cause.

19.2 Risk Factors for Carbapenemase-Producing Enterobacteriaceae Infections

The persons at risk of acquiring CPE are individuals who have been an inpatient in a UK hospital known to have had problems with the spread of CPE or those who have been an inpatient in a hospital abroad. Patient's positive or carrier status is determined through laboratory testing and this must be communicated to all staff involved in their care to ensure cross infection. Patients within the Trust may be tested elsewhere and the results communicated to staff through the inter-healthcare transfer form and or verbally.

19.3 Management of Carbapenemase-Producing Enterobacteriaceae Infections

Carriers do not require treatment unless they have infection however, standard precautions must be applied always.

The risk of spread within mental health and community setting is low. People with positive carrier status do not generally need to be isolated although isolation may be necessary on risk assessment; in cases where the patient is at high risk of infecting others. For example patient has diarrhoea, discharging wound, long term ventilation, confusion/dementia, device(s) in situ such as tracheostomy tube or urinary catheter, undergoing invasive procedures, smearing or „dirty protests": contact Infection Control Infection prevention and control Nurse for advice. The risk assessment and advice given will be based on the PHE Non-Acute Toolkit:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/439801/CPE-Non-AcuteToolkit_CORE.pdf

To maintain a low level of risk, effective hygiene practices should be maintained by all service users and staff; particular attention should be paid by staff when assisting positive individuals with toileting, undertaking dressings, and managing or changing urinary catheters and other devices.

Positive individual should be encouraged or assisted to practice good hand hygiene after visiting the toilet and follow the guidance on management of diarrhoea and leaking wounds. This will allow staff to plan the care for that individual and those around them in a safe and effective manner.

If there is reason to suspect a patient to be a risk of infecting others then:

- Discuss management with Infection Prevention and Control team, GP/clinician in charge, for advice
- Consider the mental and physical health and wellbeing of the individual
- Consider if the individual requires one-to-one supervision
- Consider options to facilitate terminal cleaning and disinfection and minimise the risk of spread of infection where possible by:
- Giving individuals an end of list appointment
- Using mobile equipment away from others.

For any further advice, please contact the Infection Prevention and Control team as soon as possible. Please see *appendix 45*

Viral Haemorrhagic Fevers

20.1 Introduction

Viral haemorrhagic fever is a term used to describe a severe, multi-organ disease in which the overall vascular system is damaged and the body's ability to regulate itself is impaired. Disease is often accompanied by varying degrees of haemorrhage which can add greatly to the difficulties of patient management and be life-threatening for the patient.

Ebola is transmitted through direct contact with bodily fluids – such as blood, vomit or faeces – of an infected person while they are showing symptoms. The risk of Ebola being passed from an individual before they developed symptoms is extremely low.

It remains unlikely, but not impossible, that travellers infected in Guinea, Liberia, Sierra Leone or Nigeria could arrive in the UK while incubating the disease and develop symptoms after their return.

The UK has well-established and practiced infection control procedures for dealing with cases of imported infectious disease, and these will be strictly followed. Risks of patients presenting to Trust services remain low.

20.2 Key Ebola Symptoms

- Patient has fever >37.5 degrees
- Patient has returned from affected area (Guinea, Liberia, Sierra Leone) or within last 21 days or has cared for a person with Ebola or high risk of Ebola

OR

- the patient has a fever >37.5 degrees or history of fever in past 24 hours, AND has cared with someone with Ebola

Should a person present to any of our services with any of the above profiles, you need to immediately move the person to a side room to isolate them from others.

Then call the on-call microbiologist/ virologist/infection control doctor for your area:

Royal London Hospital	020 7377 7000
Homerton University Hospital	020 8510 5555
Newham University Hospital	020 7476 4000
Bedford Hospital	01234 355 122
Luton and Dunstable University Hospital	01582 491 166

Call the Infection Prevention and Control Team as soon as possible.

20.3 Standard Universal Precautions

Standard Universal Precautions should be in use by clinical staff in all their interactions with patients when carrying out procedures or interventions involving body fluids. See Appendix X for donning on and off PPE.

This includes good hand hygiene and appropriate use of gloves and aprons, waste management and the management of blood and body fluids reduce the risk of transmission of infection.

20.4 Walk-in Centre and health Centres

Individuals who telephone surgeries/walk-in centres and report that they are unwell and have visited an affected area in the past 21 days AND report a fever of >38°C or fever within the past 24 hours, should be advised NOT to visit the surgery or walk-in centre.

The call should be passed to the primary care clinician who is responsible for ensuring they are referred appropriately to the local acute trust for review. (Ask your manager who this is for your service.)

The primary care clinician should take a more detailed risk assessment and take further guidance in conjunction with local infection specialists (such as the on-call microbiologist, virologist or infectious disease physician).

20.5 What to do for a Patient who Presents in Person

Any patients that identify themselves to reception staff as being unwell and having visited an affected area in the past 21 days should not sit in the general waiting room once Ebola is considered a possibility.

These patients should be isolated in a side room where they should be assessed by the clinician and urgent clinical advice sought from the on -all microbiologist, virologist or infectious disease physician.

Side rooms should be cleared of removable items to reduce cleaning requirements later if the patient is diagnosed with Ebola.

Depending on the clinical condition of the patient, staff in contact with the patient should be wear appropriate Personal Protective Equipment (PPE). For example, hand hygiene, gloves, plastic apron, etc.

20.6 Transferring Patients to Hospital

In the event that the patient requires hospitalisation, the clinician should dial 999 for the ambulance service who will coordinate arrangements to transport the patient to hospital.

It is essential to alert the ambulance service to the possibility of Ebola, as they will need to put special precautions in place to ensure the vehicle and the PPE in use are appropriate to the condition of the patient.

It is important for primary care professionals to alert the hospital as to the arrival of the patient, the suspected diagnosis of Ebola, the method by which they will arrive and the importance of isolating the patient in a side room upon arrival.

20.7 Decontamination

In the event that the patient is risk assessed as a possible Ebola patient, the public health team will advise on room decontamination depending on the condition of the patient.

The room and its contents should remain out of use until infection control advice has been received.

20.8 Notification of Infectious Disease Requirements

If there any specific concerns in the primary care setting, your local Health Protection Team can be contacted to discuss any specific public health issues at the point of referral to hospital or if the patient has additional high risk factors.

20.9 Standard Precautions

All clinical areas should have the following available:

- Spillage kits for blood body fluids
- Non latex gloves
- Aprons
- Alcohol hand gel
- Clinical waste bags

21. Prevention and Management of Occupational Exposure to Blood Borne Virus

21.1 Introduction

This section of the IPC policy manual covers the protection of ELFT staff against occupationally acquiring a blood borne viral (BBV) infection and the action to be taken should an incident occur where transfer of a BBV could take place.

The greatest risk of transmission of BBV's from patient to healthcare worker (HCW) is usually from a 'sharps' injury including bites. There is also a lower risk from a splash to the eyes and mouth or skin. The risk to the HCW depends upon the prevalence of the virus in the population served, the infectious status of the patient, and the risk inherent in the procedure being carried out.

21.2 Definitions and Terms

Body Fluid Splash/Contamination Injury	Accidental exposure to blood or other body fluids. Exposure to blood borne pathogens may occur in case of: – contact with blood or body fluids with a non-intact skin or with mucous membranes ; – percutaneous injury with needles or sharp instruments contaminated with blood or body fluids.
Blood Borne Viruses (BBV)	Hepatitis B (HBV) and Hepatitis C (HCV) are viral infections that attack the liver and can lead to serious liver disease. Human Immunodeficiency Virus (HIV) is viral infection that attacks the body's natural defence mechanisms (your immunity to disease). They are present in blood and other body fluids.
COSHH Substances	These are substances and preparations that are covered by the Control of Substances Hazardous to Health Regulations 2002 that have the potential to cause harm if they are inhaled, ingested or come into contact with or absorbed through the skin. They include chemicals such as cleaning materials and biological agents such as viruses.
Exposure Prone Procedure (EPP)	Exposure Prone Procedures occur mainly in surgical procedures They are procedures where there is a risk that injury to the HCW could result in that person's blood contaminating a patients open tissues. They include procedures where the workers gloved hands maybe in contact with sharp instruments inside a patient's open body cavity.
Sharps Injury	The definition of a sharp includes items such as needles, sharp-edged instruments, broken glassware, scalpel, stitch cutter" any other item that may be contaminated with blood or body fluids and may cause laceration or puncture

	wounds. This also includes human bites and scratches that break the skin and may be contaminated with a patient's blood or body fluids.

21.3 Body Fluid Splash/Contamination Injury

The three types of exposure in healthcare settings where there is known to be significant risks are:

- Percutaneous injury (eg from needles, instruments, human bites)
- Exposure of broken skin (eg abrasions, cuts, active eczema)
- Exposure of mucous membranes, including the eye, mouth and gums

Body fluids etc. which should be handled with the same precautions as blood:

- Cerebrospinal fluid
- Peritoneal fluid
- Pleural fluid
- Pericardial fluid Synovial fluid
- Amniotic fluid
- Semen
- Vaginal secretions
- Breast milk
- Any other body fluid containing visible blood, including saliva in association with dentistry
- Unfixed tissues and organs

21.4 Human Immunodeficiency Virus (HIV)

HIV has been isolated from blood, semen, vaginal secretions, saliva, tears, urine, breast milk, and cerebrospinal, synovial and amniotic fluids. However only blood, blood products, semen, vaginal secretions, donor organs and tissues and breast milk have been implicated in the transmission of infection. There is good evidence from studies of household contacts of infected people that HIV is not spread by close social contact even when this is prolonged, as in a family setting. A small number of cases of "household" transmission of HIV have occurred, but transmission is most likely to have occurred through exposure to infected blood or blood contaminated body fluids.

Although HIV transmission may occur in health care settings, most HIV transmission occurs:

- By unprotected penetrative sexual intercourse with an infected person (between men or between man and woman).
- By inoculation of infected blood. At present in the UK this results mainly from drug misusers sharing blood contaminated injecting equipment.
- From an infected mother to her baby before or during birth or through breast-feeding.
- There is at present no vaccine to prevent HIV infection.

21.5 Hepatitis B Virus (HBV)

Hepatitis B virus surface antigen (HBsAg) may be found in blood and virtually all body fluids of patients with acute hepatitis B and carriers of the virus. However, blood, semen and vaginal fluids are mainly implicated in the spread of HBV infection.

Transmission usually occurs:

- By unprotected sexual intercourse.
- By injecting drug misusers sharing blood contaminated injecting equipment.
- Perinatally - from an infected mother to her baby.

The most important measure whereby HCWs can be protected against HBV is by immunisation, which provides protection in up to 90% of recipients. Immunisation is not a substitute for good infection prevention and control practice since it provides no protection against infection with other BBVs.

21.6 Hepatitis C Virus (HCV)

HCV is the main cause of what was previously known as non-A non-B hepatitis. HCV is most frequently acquired by direct blood-to-blood contact and the commonest mode of transmission in the UK is the sharing of blood contaminated injecting equipment by injecting drug misusers. Both sexual and perinatal transmission can occur but in general these are less efficient modes of transmission.

Note: There is at present no vaccine to prevent HCV infection.

21.7 Hepatitis D Virus (HDV)

HDV causes infection only in those who have active HBV infection. HDV infection can occur either as co-infection with HBV or as super infection of an HBV carrier. Since HDV depends on an HBV-infected host for replication, prevention of HBV infection by immunisation will also prevent HDV infection.

21.8 Risks of Transmission of Blood Borne Viruses

The risk of transmission of BBVs is greater from patient to HCW than from HCW to patient. In the health care setting transmission most commonly occurs after percutaneous exposure to a patient's blood by "sharps" or "needle stick" injury.

The risk of transmission to a HCW from an infected patient following such an injury has been shown to be around 1 in 3 when a source patient is infected with HBV and is `e' antigen positive, around 1 in 30 when the patient is infected with HCV and around 1 in 300 when the patient is infected with HIV.

The appropriate use of post exposure prophylaxis further reduces that risk.

21.9 Precautions against Exposure to Blood Borne Viruses

21.9.1 Assessment of Risk

Healthcare staff carrying out clinical procedures should at all times observe East London NHS Foundation Trust policies, which include relevant COSHH regulations. It is the responsibility of each team to discuss the hazards involved in their current methods of working and ways of reducing these hazards. This process should include a consideration of the risks to others involved by such activities as the disposal of sharps, bodies, body fluids,

contaminated disposable items and the maintenance of equipment and medication under control and restraint situations.

Ward managers receive reports of serious untoward incidents within their area; it is their responsibility to follow these up and ensure risks identified and actions put in place through a root cause analysis approach. Ward managers should also ensure appropriate follow up procedures have been followed.

The appropriate level of precautions to be taken for any procedure should be determined according to the extent of possible exposure to blood and not because of knowledge or speculation about the infectious status of the patient.

Employers have the responsibility to ensure training is available for all staff. All staff have the responsibility to ensure they are updated and appropriately trained for a task.

21.9.2 General Measures to Reduce the Occupational Risk

Research shows that over 70% of sharps injuries occur after the sharp item has been used. Therefore planning the use and disposal of such equipment is imperative. All staff must have the knowledge and resources to handle and dispose of sharps in order to prevent inoculation injury to themselves and others.

All HCWs should be informed and educated about the possible risks from occupational exposure and should be aware of the importance of seeking urgent advice following any needle stick injury or other possible exposure.

Training should ensure that all staff know how and to whom to report, and that confidentiality is guaranteed.

Although the risk of acquiring a BBV through occupational exposure is low, the consequences are serious. Occupational exposure to known or suspected BBV infected material is always stressful and for some, extremely so.

For the management of sharps injuries see *appendix 17 - 19*

21.10 Gloves and Venepuncture

Gloves cannot prevent percutaneous injury but may reduce the risk of acquiring a BBV infection. Although punctured gloves allow blood to contaminate the hand, the wiping effect can reduce the volume of blood to which the worker's hand is exposed and in turn the volume inoculated in the event of percutaneous injury.

21.11 Safe Handling and Disposal of Sharps

Please refer to the safe use and disposal of sharps section of the IPC policy manual.

21.12 The Occupational Health Service

The occupational health ‘sharpsline’ provides the recipient with a confidential point of contact.

The ‘sharpsline’ will assist with the initial risk assessment and complete a sharps exposure form. This is designed to capture the employees Hepatitis B status, risk of exposure to BBV, confirmation that employee blood has been taken for serum save and to capture any treatment administered in A&E if the employee was sign posted for immediate treatment.

A&E may offer Post Exposure Prophylactic treatments if the exposure is deemed to be high risk.

If the source patient bloods were taken, occupational health will obtain these results from either the manager or the designated laboratory/donor medical team to advise the employee.

The employee will be advised of any follow-up requirements at occupational health and an appointment arranged at the first available occupational health clinic.

Further information on the Trust's Occupational Health Service can be found here.

22. Ectoparasite Infections

22.1 Introduction

An ectoparasite is an organism that lives on or in the skin of its host and derives sustenance from the host. The term also includes organisms that live on the host only long enough to obtain a blood meal, as well as those that burrow into the superficial layers of the skin and remain there for weeks to months or even years if left unattended. There are many species of ectoparasites.

The more common ectoparasites dealt with on a daily basis are: head lice, body lice, pubic lice and the scabies mites.

Lice live on the skin or inner layers of clothing. Once parted from their host, they soon die, although the nits or eggs may remain viable for long periods. Transmission is by contact either with the hair (head or pubic lice) or clothing (body lice) of the host.

22.2 Definitions and Terms

Head Lice (Pedicilus Humanus Capitas)	The head louse is a wingless, parasitic insect which spends it whole life cycle on human hair. Infection with head lice is most common in children aged 6-11 years but it can affect anyone. Head lice are a common, highly contagious infection that often occurs in nurseries, day care centres, and schools. Lice are very small insects that feed on human blood. The female louse attaches her eggs (nits) to the base of the hair near the scalp, and the nits hatch 7–10 days later. While the adult louse cannot survive for more than 2 days off the human head, a nit can stay alive for up to 10 days off the body (for example, on clothes, hairbrushes, or carpets). Lice are spread from child to child by close head-to-head contact and by sharing belongings that are infested with lice. Sign and symptoms, Transmission, Treatment and Management (*Appendix 35*)

Clothing/Body Lice (Pediculus Humanus)	Infestation with body lice is seen primarily where there is overcrowding and poor sanitation. In the UK pediculosis corporis is a condition almost entirely restricted to street dwellers and vagrants who are not able to change their clothes regularly; their bedding can also become infested. The body louse lays its eggs and resides in the seams of the clothing rather than on the skin of its host. The body louse leaves the clothing only to obtain a blood meal from its host. Nits present in the clothing are viable for up to one month. When mature lice have no access to the body they die of starvation in 5 days at low temperatures and more quickly at high temperatures. Adult lice live 13-30 days. Sign and symptoms, Transmission, Treatment and Management (*Appendix 36*)

Crab Pubic Louse (Pthinus Pubis)	The crab louse acquired its common name because it strongly resembles a miniature crab. P.pubis is the most sedentary human louse and dies quickly when separated from its host. It lays several eggs on a single hair. The egg takes 6-8 days to incubate and the life cycle from egg to egg is about 3 weeks. Sign and symptoms, Transmission, Treatment and Management (*Appendix 37*)

Scabies (Sarcoptes Scabie Var Hominis)	Scabies is a condition caused by infestation of the skin by sarcoptes scabies. The main symptoms of the disease are due to an allergic reaction to the presence of mites and their products in the skin. Symptoms develop in response to certain water soluble glycopeptide allergens leaching out of the faeces of mite, which are glued to the floor of the tunnels the mite makes in the skin. Scabies is a common public health problem in poor communities and is widespread in many developing countries. Sign and symptoms, Transmission, Treatment and Management (*Appendix 38, 39*)

- For management of Bedbugs in-inpatient wards refer to *Appendix 40*
- For management of Bedbugs in domestic/community settings refer to *Appendix 41*
- For management of Fleas in domestic/community settings refer to *Appendix 42*

22.3 Treatment Failures

- Treatment failures can result from:
- Inadequate application of scabicide;
- Infected, crusted, or keratotic lesions with insufficient penetration of scabicide;
- Re-infestation from untreated contacts;
- Resistance of mites to scabicide.

Pruritus and rash can continue for 1-4 weeks after treatment and should not be considered evidence of treatment failure until one month after last treatment. To ameliorate these signs and symptoms, some dermatologists use 1% hydrocortisone cream or triamcinolone cream (0.1%-0.025%) applied to the most intense rash sites after the first scabicide treatment. Oral antihistamines are also used to alleviate the hypersensitivity response.

22.4 Recommendations/Advice for Staff and Visitors

Seek guidance from Infection Prevention & Control Nurse (IPC) Nurse or Public Health England (PHE), if there is the likelihood of more than one case of Scabies i.e. an outbreak. Expert advice (Infection Control Doctor) should be sought for the treatment of crusted scabies as in some rare cases systemic treatments may be necessary.

- Staff infected outside the care environment should be excluded from work until 24 hours after completion of the treatment.
- Staff infected by service users they are caring for may return to work after treatment but should not work elsewhere until 24 hours after treatment.

- Visitors should be discouraged from close contact with the service user/client until 24 hours after completion of treatment.
- Service users should not visit Day Units, Lunch Clubs, Occupational Therapy units etc. until treatment is completed.
- If an admission to hospital is required, the person in charge of the ward must be informed of the diagnosis and treatments already given.

23. Management of Blood and Bodily Fluid Spillages

23.1 Introduction

Spillages of bloody and bodily fluids can occur within any setting. It is the responsibility of clinical staff to decontaminate a blood or body fluid spill so it may be safely cleaned.

All staff have the responsibility to ensure that spillages are made safe as soon as possible when they happen.

23.2 Dealing with Spillages

- When dealing with spillages the recommended steps suggested must be followed.
- Before decontaminating a spillage appropriate PPE must be worn (Gloves, apron, face visor or googles). Please refer to PPE section of the IPC policy manual for further details.
- Use recommended spillage kits and products (see table below).
- Clean area where spillage has occurred with disinfectant wipe.
- Where an area is grossly contaminated the area should be contained as far as possible and Facilities helpdesk contacted to arrange a 'terminal clean' (This will be dependent on the site location).

23.3 Management of Spillages

Disinfection of	Required Concentration of Chlorine	Additional Requirements	Other Instructions
Blood Spills	10,000 PPM Chlorine/Chlorine Clean	Wear appropriate protective clothing when dealing with all blood spillages. For wet blood spillages, sprinkle chlorine clean granules evenly on the spillages and leave for 3 minutes. For dried blood spillages, cover the area with paper towels and apply chlorine clean solution (10,000ppm) and allow to soak for 3 minutes. Remove residual waste and place it in an orange waste disposal bag. Clean area thoroughly with neutral general purpose detergent and warm water. Follow hand hygiene precautions.	Follow manufacturer instructions.
General Environment, Faeces, Vomit and other fluids	10,000 PPM Chlorine/Chlorine Clean	Wear appropriate protective clothing when dealing with all body fluid spillages. Use chlorine clean solution (10,000ppm) to disinfect the area. Remove residual waste and place it in an orange waste disposal bag. Follow hand hygiene precautions.	Follow manufacturer instructions.

Urine Spills	10,000 PPM Chlorine/Chlorine Clean	Wear appropriate clothing when dealing with all urine spillages. Soak up the spill with disposable paper towels. **Do not apply chlorine clean solution directly to urine**, as this can release toxic chlorine levels. Clean the area with chlorine clean and place all residual waste in an orange waste disposal bag. Follow hand hygiene precautions.	Follow manufacturer instructions.

24. Notifications of Infectious Diseases (NOIDS)

24.1 Introduction

The statutory notification of infectious diseases is a crucial health protection measure.

The prime purpose of notification is:

- Early detection of possible outbreaks and epidemics.
- To enable the prompt investigation, risk assessment and response to cases of infectious disease and contamination that present a significant risk to human health.
- Health protection legislation in England was updated in 2010. This new legislation adopts an all hazards approach with the aim of to prevent the national and international spread of infectious diseases and contamination.
- The revised measures are contained within the amended Public Health Control of Disease Act (1984) and it's accompanying Regulations.
- The new Regulations for clinical notifications came into force on 6 April 2010, and those relating to laboratory notifications started on 1 October 2010.

24.2 Definitions and Terms

A 'Notifiable Infectious Disease'	Any of those listed under the Public Health (Control of Diseases) Act 1984 and Public Health (Infectious Diseases) Regulations 1988.

RMP	Registered Medical Practitioner.

Public Health England (PHE)	Exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

24.3 Notification Procedure for Notifiable Diseases

The Registered Medical Practitioner (RMP) attending a patient **must** notify the Local Authority in which the patient resides or is detained when they have "reasonable grounds for suspecting" that the patient has:

- a Notifiable disease as listed in Schedule 1 (page 2) of the Notification Regulations; **or**
- an infection ***not*** included in Schedule 1 which in the view of the RMP presents, or could present, significant harm to human health e.g. emerging or new infections; **or**
- is contaminated, such as with chemicals or radiation, in a manner which, in the view of the RMP presents, or could present, significant harm to human health; **or**
- Died with, but not necessarily because of, a Notifiable disease, or other infectious disease or contamination that presents or could present, or that presented or could have presented significant harm to human health.
- **Note** RMP should ***not*** wait for laboratory confirmation or results of other investigations in order to notify a case.
- Notification should be recorded in the case notes.

- Good practice would be to advise the patient that a Notification has been sent. They can be advised that it will be treated in confidence, although they may be subsequently contacted by a member of the public health team.
- The RMP should be aware that clinical laboratories are obliged to send reports on positive findings of human pathogens to the HPA.

24.3.1 The Notification Process

1. Patient seen by RMP.
2. RMP suspects or diagnoses a notifiable disease.
3. RMP should fill out a notification certificate immediately (this can be found on this link here) and should not wait for laboratory confirmation of the suspected infection or contamination before notification.
4. For **urgent** cases the RMP must notify the Proper Officer within 24 hours and verbal reports must be followed by a written notification with **three days**.
5. For **non-urgent** cases a written notification with **three days**

24.4 Notifiable Diseases and Reporting Criteria

Disease	Whether Likely to be Routine or Urgent
Acute encephalitis	Routine
Acute meningitis	Urgent if suspected bacterial infection, otherwise routine
Acute poliomyelitis	Urgent
Acute infectious hepatitis (A,B,C)	Urgent
Anthrax	Urgent
Botulism	Urgent
Brucellosis	Routine, urgent if UK acquired
Cholera	Urgent
Diphtheria	Urgent
Enteric Fever (Typhoid/Paratyphoid)	Urgent
Food poisoning	Routine, urgent if part of a cluster outbreak
Haemolytic Uraemic Syndrome	Urgent
Infectious bloody diarrhoea	Urgent
Invasive group A streptococcal disease	Urgent
Scarlet fever	Routine
Legionnaire's disease	Urgent
Leprosy	Routine
Malaria	Routine, urgent if UK acquired
Measles	Urgent
Meningococcal Septicaemia	Urgent
Mumps	Routine
Plague	Urgent
Rabies	Urgent
Rubella	Routine
SARS	Urgent
Smallpox	Urgent
Tetanus	Routine, urgent if associated with infecting drug use
Tuberculosis	Routine, urgent if healthcare worker or suspected cluster or multidrug resistant
Typhus	Routine
Viral haemorrhagic fever	Urgent
Whooping cough	Urgent if diagnosed in acute phase, routine if later diagnosis
Yellow Fever	Routine, urgent if UK acquired

24.5 Contact Details for Notification of Infectious Disease

East London Services Public Health England Health Protection Team
North East and North Central London Health Protection Team **Public Health England** Ground Floor, South Wing Fleetbank House 2-6 Salisbury Square London EC4Y 8JX **Email:** necl.team@phe.gov.uk nencl.hpu@nhs.net **Telephone:** 020 3837 7084 (Option 1) **Out of Hours Advice:** 020 7191 1860

Luton and Bedfordshire Services Public Health England Health Protection Team
PHE East of England HPT (Essex) Public Health England Second Floor Goodman House Station Approach Harlow Essex CM20 2ET **Email:** EastofEnglandHPT@phe.gov.uk phe.EoEHPT@nhs.net **Telephone:** 0300 300 8537 **Out of Hours for Health Professionals Only:** 01603 481 272

24.6 Time Frame for Notifications

Urgent notifications, as shown in the Notifiable Diseases and reporting criteria table, needs to be notified orally to the local Public Health England Health Protection Unit as soon as reasonably practicable and this should be followed up with written notification within three days.

Determining whether a case is urgent or not, factors that should be considered include:

- Nature of the suspected notifiable disease, other relevant infection or relevant contamination including morbidity, case-fatality and epidemiology of the disease – a rare disease, or one that is re-emerging, is likely to need urgent notification.
- Ease of spread of that disease or infection, route of transmission (for example, a highly infectious respiratory disease) or potential spread of contamination.
- If the spread of the notifiable disease, other relevant infection or contamination can be prevented or controlled, for example by immunisation, disinfection, isolation or prophylactic treatment.
- Specific circumstances of the case which might represent particular risks, such as occupation, age and sex. These details have a bearing if, for example, a patient is a healthcare worker, a child attending nursery or a woman of child-bearing age.

There may be other circumstances where urgent notification is necessary, for example, if a disease appears to be a cluster of cases rather than a single case.

25. Care of Deceased Patient with an Infection

For the management of a patient with an infection, the Royal Marsden clinical guidelines for last offices must be followed. This can be found here.

26. Laundry Management

Linen is defined as all reusable textile items requiring cleaning or disinfection by laundry processing including: Bed linen: blankets, counterpanes, cot sheets and blankets, duvets, duvet covers, pillowcases and sheets (woven, knitted, half sheets, draw and slide sheets); bibs, blankets, canvases, curtains, hoist slings, patient clothing (gowns, nightdresses and shirts, pyjama tops and bottoms), staff clothing (coats, scrub suits, tabards, uniforms*), towels etc.

For the management of linen please refer to the ELFT linen policy here.

27. Toy Cleaning

27.1 Introduction

Toys are often used by professionals in making assessments related to this. They can also be used as a distraction from threatening procedures and to occupy children who accompany their parents to a healthcare appointment. They are therefore found in a variety of environments. Toys are also used to assess child development and are used by play therapists and respite carers in the home. However, sharing toys can lead to them becoming contaminated from unwashed hands and body fluids e.g. when toys have been in a child's mouth.

27.2 Definitions and Terms

Soft Toy	Children's toy, typically a toy animal, made of fabric stuffed with a soft filling

Mechanical Toy	A toy that has parts that move, often using power from an engine or from electricity.

27.3 Toy Selection

Where possible toys should be avoided, particularly in communal areas. However, where toys are required, careful consideration must be given to how toys can be kept clean before they are purchased.

Procedures must be established to guide the ongoing cleaning routines and must identify when items must be cleaned and what with. This will depend on the material the toys are made of.

27.4 Cleaning/Decontamination Procedures for Toys

27.4.1 Soft Toys

Soft toys must not be kept for use in healthcare premises because they are porous, support microbial growth and can be difficult to decontaminate, i.e. they require machine washing to ensure adequate cleaning followed by thorough drying which takes some time.
If toys are used for individual therapy sessions, they must be subject to machine washing after each episode of care and thorough air drying.
Note: repeated decontamination can compromise the integrity of the fabric and create a choking hazard.
Children should be encouraged to bring their own soft toys to healthcare appointments if required but they must be used only by them and then taken home.

27.4.2 Hard Surfaced Toys

All toys must have smooth, non-porous surfaces that are easy to clean or must be disposable. They must be washed at least weekly or sooner if visibly soiled. Toys used in the community domestic setting by healthcare workers must be wiped down after each use with disinfectant wipe and then subjected to a weekly clean with hot water and mild detergent.

Toys with moving parts or openings can harbour dirt and germs in crevices and must be washed and scrubbed using warm water and a neutral detergent, before rinsing and drying.

27.4.3 Mechanical Toys

Mechanical toys must be surface wiped weekly, using a damp disposable cloth that has been rinsed in warm, soapy water followed by thorough drying. Toys with small parts must not be available where young children may have access and there is a risk of swallowing/choking.

27.4.4 Books

Books must be inspected weekly and surfaces wiped using a damp disposable cloth that has been rinsed in warm, soapy water followed by thorough drying. As they soak up water, books with signs of dampness or mildew must be discarded. They may require frequent replacement.

27.4.5 Coloured Pencils

Coloured pencils for drawing may be used as long as they are managed by the service, i.e. given to the individual child and returned when finished, monitored for signs of chewing and discarded if this is seen or when broken.

27.4.6 Ball Pools

Ball pools must be checked weekly and cleaned if necessary. The pool must be emptied monthly, surfaces washed with warm, soapy water and dried thoroughly. The balls must be washed and dried in a similar way.

27.4.7 Dressing Up Clothes

Dressing up can form an important part of a child's therapy or rehabilitation. The following principles must be followed:

- All clothes must be washable. Those that require dry cleaning must be avoided to minimise the risk of cross infection. If kept together in a bin, all clothes must be laundered weekly or more frequently if visibly contaminated.
- The storage bin must be washed weekly
- Preferably clothes must be kept hanging on a rail so that use can be easily monitored and a used bin must be provided to facilitate segregation of dirty/contaminated items.

27.5 Toy Cleaning Programme

Toys must be washed in warm, soapy water weekly with the details documented in a logbook for future audit purposes Toys must be of a washable material.

27.6 Additional Cleaning Measures

Where toys have been contaminated with specific organisms, for example during an outbreak, immediate or additional decontamination procedures may be required. Please contact the Infection prevention & Control team for further advice on any additional decontamination required.

27.7 Toy Storage

There must be a designated storage area for toys. Any storage boxes used must be washable, washed on a weekly basis and a record kept.

28. Bed Management

28.1 Introduction

The risks of health care associated infection (HCAI) are greatly increased by extensive movement of patients within the hospital, by very high bed occupancy and by an absence of suitable isolation facilities. The Department of Health's programme to reduce HCAI including MRSA requires a review of the patient journey for emergency and planned patients to identify and reduce the risks of infection transmission that are associated with movement of potentially infected patients (DoH, Saving Lives 2005). The need for restricting movement of infected patients between wards and for rapid isolation of infected patients has been emphasised in a Healthcare Commission Report into outbreaks of Clostridium difficile (Healthcare Commission, 2006).

28.2 Infection Prevention and Control Risk Assessment

Patients on admission should be assessed for risk factors for multi-resistant organisms, including MRSA, using the risk assessment tool, appendix 2.

Advice should be sought from infection prevention and control on Patients assessed as having an infection that may be contagious to others.

Patients should be re-assessed as their condition changes and at regular intervals. Communication between wards and departments regarding the "infection risk" of a patient is essential and enables the receiving department to put its local procedure in place.

28.3 Patient Admission from General Hospital or Accident and Emergency

The accepting ward must ensure that details of the physical health has been assessed and documented on the Patient Records.

28.4 Patient Admission from General Hospital or Accident and Emergency

Admission history must include details of any physical health or infection prevention and control assessment. This should be clearly recorded in the CPA.

If the resident is to be transferred to another hospital, care home, or has an appointment in a unit within the acute hospital e.g. X-Ray, Outpatient Department etc., the receiving hospital/home must be informed of the residents" infection status, if known.

28.5 Inter-Healthcare Transfer

The Inter-healthcare infection prevention and control transfer form has been designed by the Department of Health (2007) to improve communication of infection risks between healthcare providers.

An Inter-healthcare infection prevention and control transfer form should be completed and accompany patients requiring transferring between wards or to other hospitals.

An Inter-healthcare infection prevention and control transfer form should be completed and accompany patients discharged to other healthcare settings, including nursing and residential homes.

See Appendix 39

28.6 Transport of Residents by Ambulance

investigations, or treatment. The ambulance trust should be informed in advance in order to undertake the appropriate risk assessment. The fact that a resident has infection must never delay or prevent clinical attention, such as

28.7 Issues with Bed Management of Infectious Service Users

During working hours contact Infection control team, Infection prevention and control 0208 121 5662 or by email: ***elft.infectioncontrol.nhs.net***

Out of hours

In the absence of the Trust Infection prevention and control Team, Please contact the on-call manager and senior duty manager/ nurse.

29. Washing Machine Usage at Ward Level

29.1 Introduction

The provision of adequate laundry services is a fundamental requirement for patient care . The Trust has a contract with external provider for the provision of linen /towels etc., incorrect procedures for the processing and handling of linen can present an infection risk to both staff and clients.

In some inpatient units, service users will require access to laundry facilities. The Trust has an obligation to take steps to minimise this risk of infection to staff handling and laundering linen and clients who are using the laundry rooms. This section of the policy describes the responsibilities of managers and staff in minimising this risk ensuring the safe use and maintenance of ward based laundry facilities.

29.2 Purchase of Washing Machines

- Only industrial washing machines should be used.
- Ward staff will only buy washing machines that have been agreed by estates and facilities and procurement.
- Washing machines will be kept in a laundry room dedicated to this purpose.

29.3 Maintenance of Washing Machines

- Washing Machines will be serviced in accordance with manufacturer's instructions on a yearly basis.
- The Estates and Facilities Department should maintain a record of servicing, at ward level.

29.4 Facilities with the Laundry Room

- A hand-wash basin, complete with wall mounted soap, paper towels and waste bin, must be available close to the working areas.
- The room should be kept clean and tidy at all times.
- Dirty clothes should not be stored in the room.
- Follow health and safety guidance
- Laundry processing will be in accordance Health Technical Memorandum (HTM) 01-04: guidance about decontaminating linen used in health and social care.

29.5 Process of Washing Clothes

- Ward based washing machines are permitted with the agreement of the Infection prevention and control Team.
- If clients are doing the process this can take place in a laundrette type facility if there is a protocol.
- Washing machines must be appropriately situated in a designated area so as to reduce risk of cross contamination.
- Wherever possible patient’s personal clothing should be given to relatives/carers to be taken home for laundering.
- All items must be dried as quickly as possible, using a tumble drier, and not left hanging for long periods of time.

- Clean items must not become in contact with contaminated items or surfaces. Clean items must be stored in suitable areas to prevent contamination prior to use.
- Ward based machines must not be used for bedding etc. only for patient clothing.
- Hoist slings may be washed on a 40° C setting x 2 cycles to ensure an adequate wash. I would advise single patient use.

References

Infection Control Nurses Association (1997). Guidelines for Hand Hygiene.

ICNA Infection Control Nurse Association (2004) Audit tools for monitoring infection control standards. ICNA

Infection Control in Clinical Practice 2nd Edition Wilson, J., (2001),. London, Bailliere Tindall.

Loveday, H. Wilson, J. Pratt,R. Golsorkhi,M. Tingle, A. Bak, A. Browne,J. Prieto,J. Wilcox,M. Epic 3: National Evidence-Based Guidelines for Prevention Healthcare Associated Infections in NHS Hospitals in England. Journal of Hospital Infection. 2014. 86S1 S1-S70

NICE (2012) Infection Prevention & Control Quality Standard 61. National Institute for Health and Care Excellence Available from: http://publications.nice.org.uk/infection-prevention-and-control-qs61

NICE (2014) Infection Prevention & Control Quality Standard 61 Available from: https://www.nice.org.uk/guidance/qs61/chapter/Introduction

National Patients Safety Agency (2004). Clean Hands Helps To Save Lives. Patient Safety Alert 04

National evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England. Pratt, R., J., Pellowe, C., M., Wilson, J., A., Loveday, H., P., Harper, P., J., Jones, S., R., L., McDougall, C., Wilcox, M., H., (2007). epic 2: Journal of Hospital Infection. Vol. 65 Supplement 1: S1-64.
Pratt RJ, Pellowe CM, Wilson JA, Loveday HP, Harper P, Jones SRLJ, McDougall C and Wilcox MHl (2007) epic2: National evidence-based guidelines for preventing healthcare associated infections in NHS Hospitals in England, Journal of Hospital Infection, 65S, S1–S64.

RCN Working Well Initiative 2004 Good Practice in Infection Control Guidance for Staff.

World Health Organisation (2007). My 5 Moments for Hand Hygiene. Available from: http://www.who.int/gpsc/5may/background/5moments/en/index.html World Health Organisation (2007).

WHO Guidelines on Hand Hygiene in Health Care. Available from: http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf

WHO (2012) Hand hygiene in Outpatient and Home-based care and Long-term Care Facilities. Switzerland. Available at: http://www.who.int/gpsc/5may/EN_GPSC1_PSP_HH_Outpatient_care/en/

National Institute for Health and Care Excellence (2012). Infection prevention and control of healthcare-associated infections in primary and community care. NICE clinical guideline 139 (CG 139). London: NICE. https://www.nice.org.uk/guidance/cg139/resources/guidance-infection-pdf (accessed 01/09/15)

NHS England (2013). When to use a surgical face mask or FFP3 respirator. http://www.england.nhs.uk/?s=infection+control (accessed 01/09/15)

NHS England (2014). Prepare and Protect. Guidance for healthcare staff on personal protective equipment. http://www.england.nhs.uk/wp-content/uploads/2014/12/prep-prot-post.pdf (accessed 01/09/15).

Loveday, H et al (2014) epic3: National evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England. Journal of Hospital Infection; 86S1: S1-S70. http://www.his.org.uk/files/3113/8693/4808/epic3_National_Evidence-Based_Guidelines_for_Preventing_HCAI_in_NHSE.pdf (accessed 29.10.2015)
Personal Protective Equipment at Work Regulations (1992) Guidance on Regulations. HSE. Publication. London.

The Control of Substances Hazardous to Health Regulations with Approved Code of Practice 199-. HSE Publications. London.

World Health Organisation (2009) Glove Use information Leaflet. http://www.who.int/gpsc/5may/Glove_Use_Information_Leaflet.pdf (accessed 01/09/15).

Centres for Disease Control and Prevention (2010) Workbook for designing, implementing and evaluating a sharps injury prevention programme. Available at: www.cdc.gov

Council Directive 2010/32/EU (2010) Implementing the framework agreement on prevention from sharps injuries in the hospital and health care sector, concluded by HOSPEEM and EPSU, Official

Journal of European Union. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:134:0066:0072:EN:PDF

Department of Health (2008) HIV post exposure prophylaxis: guidance from the UK Chief Medical Officers' expert advisory group on AIDS, London: DH.

Department of Health (2011) Safe management of health care waste, London: DH. www.dh.gov.uk

Fryers v Belfast Health & Social Care [2009] High Court of Justice Northern Ireland. www.courtsni.gov.uk

Health Protection Agency (2014) Eye of needle:United Kingdom surveillance of significant occupational exposures to bloodborne viruses in health care workers, London: HPA.

.Health and Safety Executive (2006) Identifying and evaluating the social and psychological impact of workplace accidents and ill health incidents on employees, Sudbury: HSE Books. Research Report 464, available at: http://www.hse.gov.uk/ research/rrpdf/rr464.pdf
Health and Safety Executive (2010) Hospital fined after health care worker infected with hepatitis C, Sudbury: HSE. Press release, available at: www.hse.gov.uk

Health and Safety Executive (2013) Health and Safety (Sharp Interments) in Healthcare Regulations 2013 - Guidance for employers and employees. Available at http://www.hse.gov.uk/pubns/hsis7.pdf

International Labour Organization/World Health Organization (2005) Joint ILO/WHO guidelines on health services and HIV/AIDS, Geneva: International Labour Office. Available at: www.who.int

Mast ST, Woolwine JD and Gerberding JL (1993) Efficacy of gloves in reducing blood volumes transferred during simulated needlestick injury,Journal of Infectious Diseases, 168 (6), pp.1589-92.

Royal College of Nursing (2013) Infection prevention and control: information and learning resources for health care staff, London: RCN. Available at: www.rcn.org.uk/publications

British Standard BS EN 14820:2004 Single-use containers for human venous blood specimen collection

British Standard BS 5213:1975 Specification for medical specimen containers for microbiology

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations, (2007)

Control of Substances Hazardous to Health Regulations (COSHH) (2002), Control of Substances Hazardous to Health Regulations
Department of Health (2008 revised 2015): The Health and Social Care Act 2008, Code of Practice for health and social care on the prevention and control of infections and related guidance.

Department of Transport: Transport of Infectious Substances (2007, revised 2011)

Department of Health (2007) Transport of Infectious Substances – best practice guidance for microbiology laboratories London

European Agreement (2007) Concerning the International Carriage of Dangerous Goods by Road
Health and Safety Commission (1986) Safety in health service laboratories: the labelling, transport and reception of specimens

Health and Safety at Work etc Act, (1974)

Health Protection Agency: Transmissible Spongiform Encephalopathy: Guidance for Healthcare Workers Working in Primary Care or Community Settings. www.hpa.org.uk Accessed 13th August 2015

Management of Health and Safety at Work Regulations, (1999, revised 2006)

Public Health England (2013) Unusual Illness Guidelines www.hpa.org.uk Accessed 13th August 2015

The Health & Safety Executive (2013): The Advisory Committee on Dangerous Pathogens

Approved List of biological agents 3rd Edition 2013
http://www.hse.gov.uk/pubns/misc208.pdf (accessed 13th August 2015)

The Royal Marsden Manual of Clinical Nursing Procedures (2011), 9th Edition. Accessible via Trustnet. Accessed 13th August 2015

Appendices

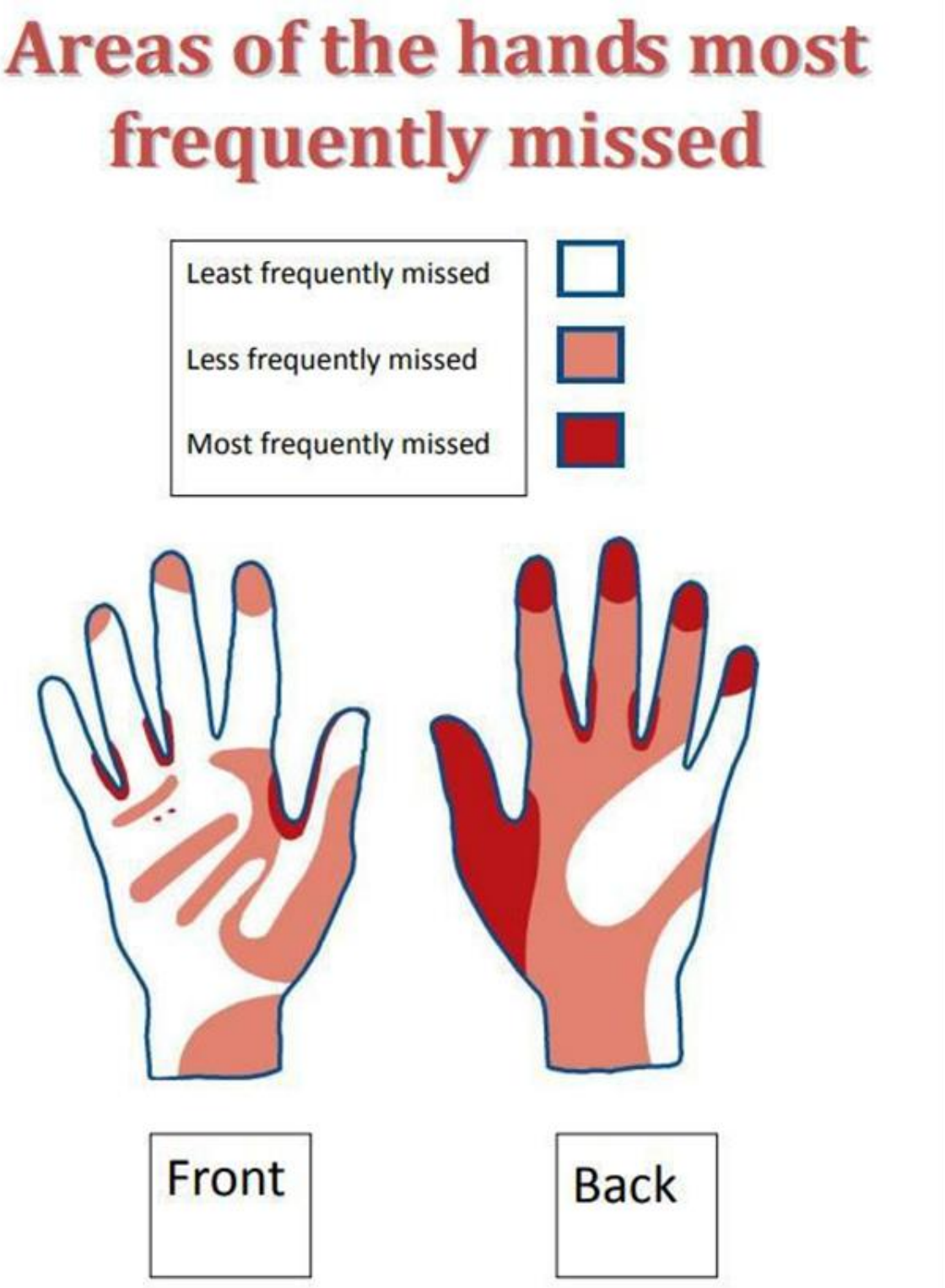
WHO 5 Moments for Hand hygiene

The World Health Organisation (WHO) has produced a model (5 Moments for 'Hand Hygiene at the point of care') explaining when hands should be decontaminated as described in the table below. Hands must be decontaminated immediately before each and every episode of direct patient contact or care and after any activity or contact that could potentially result in hands being contaminated.

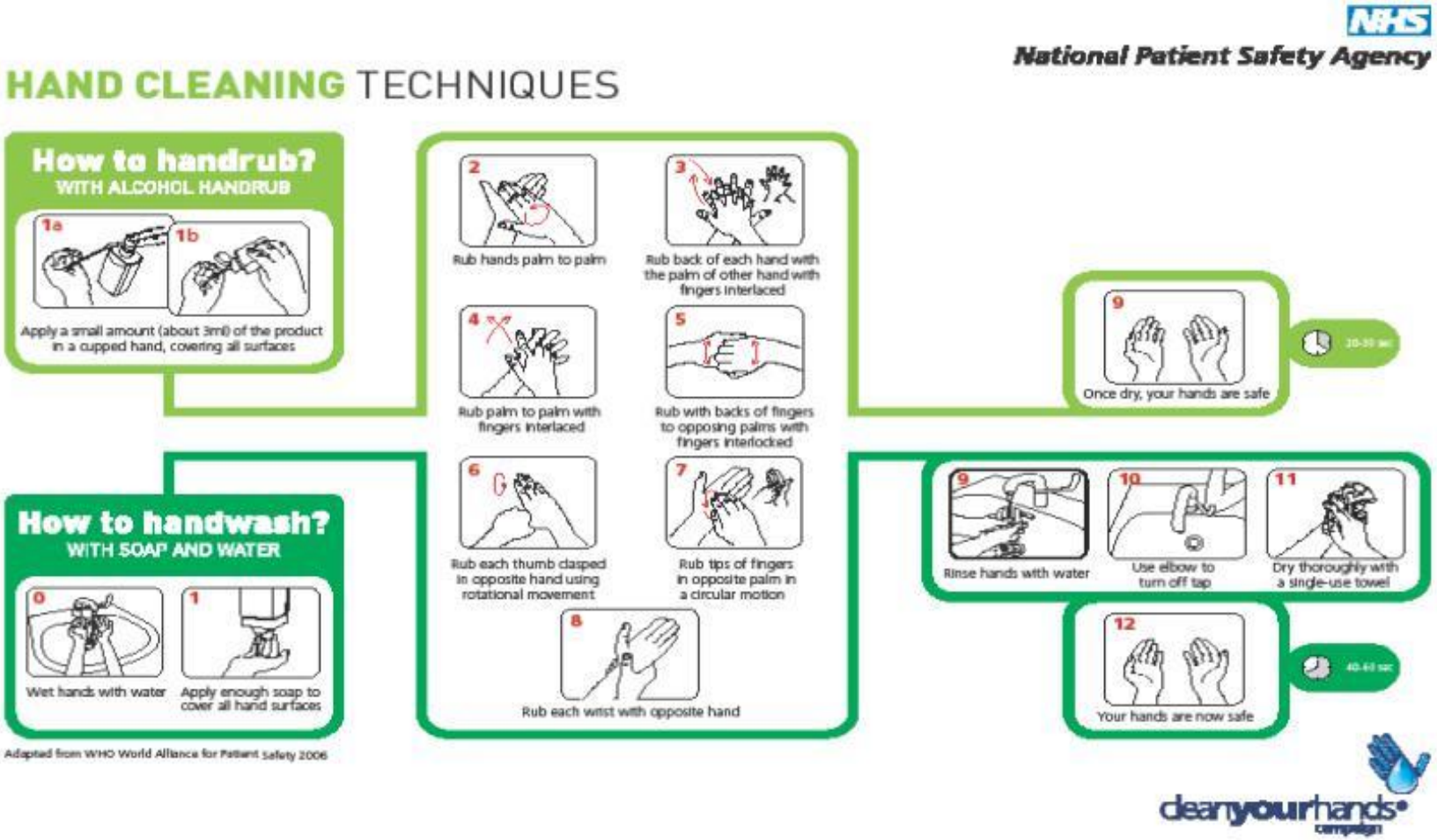
Before Patient Contact	WHEN? Clean your hands before touching a patient. WHY? To protect the patient against harmful germs carried on his/ her body.
Before an Aseptic Non Touch Technique task is undertaken	WHEN? Clean your hands immediately before any aseptic task. WHY? To protect the patient against harmful germs, including the patient's own germs from entering his/ her body
After body fluid exposure.	WHEN? Clean your hands immediately after a risk exposure to bodily fluids (and after glove removal). WHY? To protect yourself and the healthcare environment from harmful patient germs
After patient contact	WHEN? Clean your hands after touching a patient and his/ her immediate surroundings when leaving. WHY? To protect yourself and the health care environment from harmful patient germs.
After contact with patient surroundings	WHEN? Clean your hands after touching any object or furniture in the patient's immediate surroundings when leaving – even without touching the patient. WHY? To protect yourself and the healthcare environment from harmful patient germs

WHO 5 Moments for Hand Hygiene at the Point of Care

Areas of the Hands Most Frequently Missed



Hand Hygiene Techniques



Community Peripheral & Central IV Therapy ANTT

ANTT®
Aseptic non touch technique

Community Peripheral & Central IV Therapy

When entering the patient's home clean hands with soap and water or alcohol rub

1 Clean tray with detergent wipe followed by disinfectant wipe

2 Gather equipment

3 Put on disposable apron if risk of contamination

4 Clean hands with alcohol hand rub

5 Put on non-sterile gloves

6 Open equipment Prepare drugs & equipment using non-touch technique (NTT)

If IV port is already exposed and gloves are not contaminated move to step 7

7

If IV port is not Exposed:

6a Remove dressing

6b Remove gloves

6c Clean hands

6d Put on non sterile gloves

Clean key parts

- Using NTT, use a 2% chlorhexidine/70% alcohol wipe.
- Clean the port tip for total of 20 seconds using different areas of the wipe.
- Then wipe away from the tip.
- Allow to dry for 30 seconds.

8 Administer drugs using NTT

9 Dispose of sharps

10 Clean tray with detergent wipe followed by disinfectant wipe if soiled

11 Dispose of gloves, apron & equipment then immediately ...

12 Clean hands with alcohol hand rub

13 Dispose of waste bag according to clinical waste policy

Before leaving the patient's home clean hands with soap and water or alcohol rub

Infection Prevention & Control Team (Jan 2019)

Community Indwelling Urinary Catheterisation ANTT

ANTT® Aseptic non touch technique

Community Indwelling Urinary Catheterisation

Community Peripheral Venepuncture ANTT

ANTT®
Aseptic non touch technique

Community Peripheral Venepuncture

Community Wound Care ANTT

ANTT®
Aseptic non touch technique

Community Wound Care

When entering the patient's home clean hands with soap and water or alcohol hand rub

Decontaminate tray with detergent wipe followed by a disinfectant wipe

Gather equipment

Put on disposable apron if there is a risk of contamination

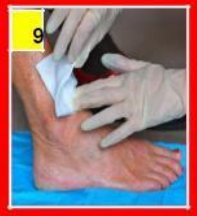
Clean hands with alcohol hand rub

Open pack using NTT

Open equipment and drop onto aseptic field / open pack

Put on non-sterile gloves using NTT

Place drape under the wound



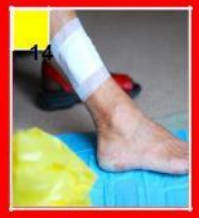
Remove dressing using NTT & dispose into waste bag

Dispose of gloves

Clean hands with alcohol hand rub

Put on non-sterile gloves (sterile gloves if key parts /sites must

Clean wound using NTT & dispose of gauze



Dress wound using NTT

Dispose of equipment & gloves

Clean tray with detergent wipes. Follow with a disinfectant wipe if soiled. Then immediately.....

Clean hands with alcohol hand rub

Dispose of waste bag according to Clinical Waste Policy

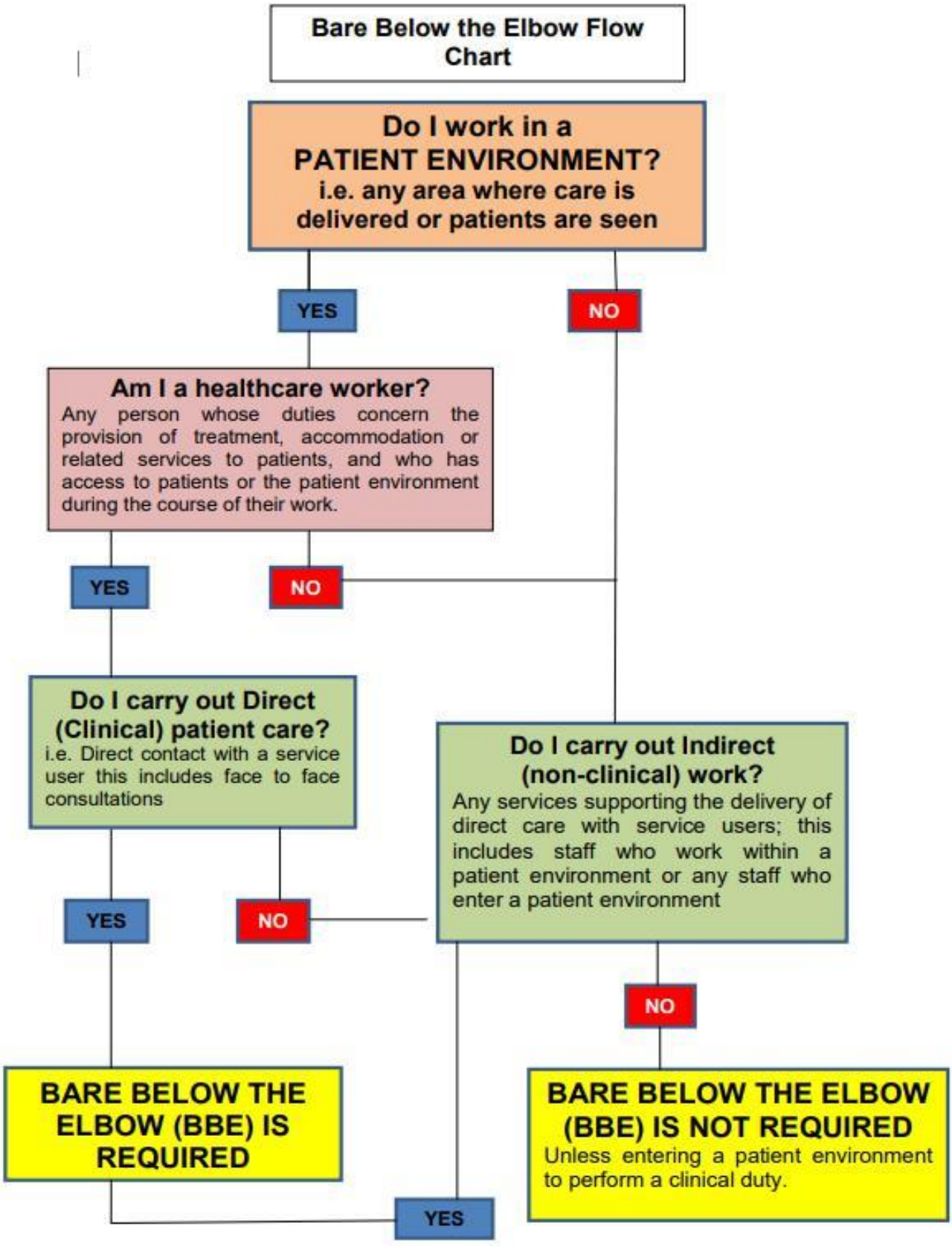
Before leaving the patient's home clean hands with soap and water or alcohol hand rub

Infection Prevention & Control Team

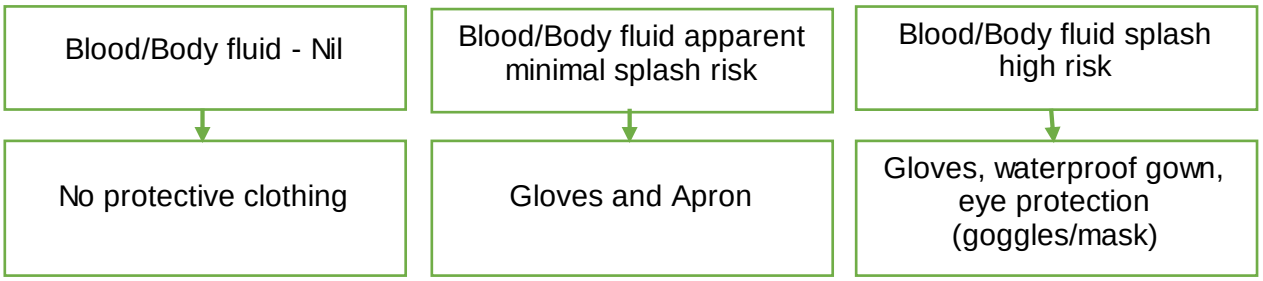
Use of ANTT for Specific Clinical Procedures

Procedure	Standard/Surgical ANTT	Rationale/typical Procedure
IV Therapy	Standard ANTT	Key parts can typically be protected by optimal critical micro fields and non-touch technique. Key sites are small. Procedures are technically simple and less than 20 minutes duration.
Simple wound Dressings	Standard ANTT	Key parts and sites can be protected by optimal critical micro fields and non-touch technique. Procedures are technically simple and less than 20 minutes duration.
Complex or Large Wound Dressings	Surgical ANTT	The complexity, duration or number of key parts may demand critical aseptic field.
Urinary Catheterisation	Standard/Surgical ANTT	An experienced healthcare worker can perform catheterisation with the use of a main general aseptic field. Micro-aseptic-fields and a non-touch technique. However, less experienced healthcare workers may require a critical aseptic field.
Cannulation	Standard/Surgical ANTT	Although technically quite simple the close proximity of healthcare worker hands to the puncture site and key parts may demand sterile gloves – dependent upon healthcare worker competency.
PICC/CVC Insertion	Surgical ANTT	The size of the CVC or PICC line, invasiveness, numerous key parts and equipment and duration will demand a critical aseptic field and full barrier precautions.
Surgery	Surgical ANTT	Surgical access involves deep or large exposed wounds, numerous key parts and equipment and long procedures. Standard operating room precautions are required.

Bare Below the Elbow Flow chart



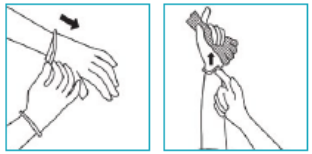
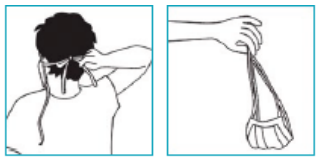
PPE Risk Assessment



Guidelines:

	Action	Rationale
1	All cuts or abrasions in exposed areas of skin should be covered with a waterproof dressing.	To prevent infection entering the body through an exposed break in the skin.
2	Gloves and apron should be worn: For invasive procedures such as catheterisation, wound care, intravenous infusion care.	To prevent contamination of skin and clothing.
3	Gloves and apron should be worn: When attending to patients sanitary requirements and when disposing of excrement.	To prevent contamination of skin and clothing.
4	Gloves and apron should be worn: When handling contaminated instruments, laundry, soiled dressings and clinical waste.	To prevent contamination of skin and clothing.
5	Gloves and apron should be worn: Performing venepuncture, finger prick blood testing.	To prevent contamination of skin and clothing.
6	Gloves and Apron Should Be Worn: Collecting specimens.	To prevent contamination of skin and clothing.
7	Gloves and apron should be worn: Dealing with spillage of blood and body fluids.	To prevent contamination of skin and clothing.
8	Hands should be thoroughly washed between procedures and before and after wearing gloves.	Hand washing is the single most effective measure in the prevention of the spread of infection.
9	Eye protection should be worn: When there is a high risk of blood/body fluid or contaminated debris splashing or flying into eyes.	To prevent contamination of eye.
10	Extreme care should be exercised when using and disposing of sharps.	To protect yourself and other health care personnel from needle stick injury.
11	Masks should be particulate filter mask when clinically indicated	To ensure effective filtering of microorganisms
12	A particulate filter mask must be worn during cough – including procedures on patients who are potentially infectious with tuberculosis	To protect staff from risk of infection
13	Patients with infectious TB, influenza, liable to cough or sneeze should be given a face mask when in contact with others and when transported through open wards	To reduce the aerosol produced by a cough or a sneeze
14	Masks should be worn by any clinical procedure involving cryotherapy	To reduce the risk of occupational hazard
15	Masks must always be donned and worn according to manufacturer's instructions	To ensure optimum efficiency

PUTTING ON personal protective Equipment (PPE)	
The type of PPE used will vary based on the type of exposure anticipated, and not all items of PPE will be required **The order for putting on PPE is: APRON, SURGICAL MASK, EYE PROTECTION and GLOVES**	
	**Apron (or Gown)** • Pull over head and fasten at back of waist
	**Surgical Mask (or Respirator)** • Secure ties or elastic bands at middle of head and neck • Fit flexible bands to nose bridge • Fit snug to face and below chin • Fit check respirator
	**Eye Protection (Goggles/Face Shield)** • Place over face and eyes and adjust to fit
	**Gloves** • Extend to cover wrist

REMOVING personal protective equipment (PPE)	
PPE should be removed in an order that minimises the potential for cross-contamination. **The order for removing PPE is: GLOVES, APRON, EYE PROTECTION and SURGICAL MASK**	
	**Gloves** • Grasp the outside of the glove with the opposite gloved hand; peel off • Hold the removed glove in the gloved hand • Slide the fingers of the ungloved hand under the remaining glove at the wrist • Peel the second glove off over the first glove • Discard in a lined waste bin (clinical waste)
	**Apron (or Gown)** • Unfasten or break ties • Pull apron away from neck and shoulders, touching inside only • Fold or roll into a bundle • Discard in a lined waste bin (clinical waste)
	**Eye Protection (Goggles/Face Shield)** • Handle only by the headband or the sides • Discard in a lined waste bin (clinical waste)
	**Surgical Mask (or Respirator)** • Unfasten the ties – first the bottom, then the top • Pull away from the face without touching front of mask/respirator • Discard in a lined waste bin (clinical waste)

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF INFECTION

Keep hands away from your face

Change gloves if they become torn or heavily contaminated

Limit surfaces touched in the patient environment

Regularly perform hand hygiene

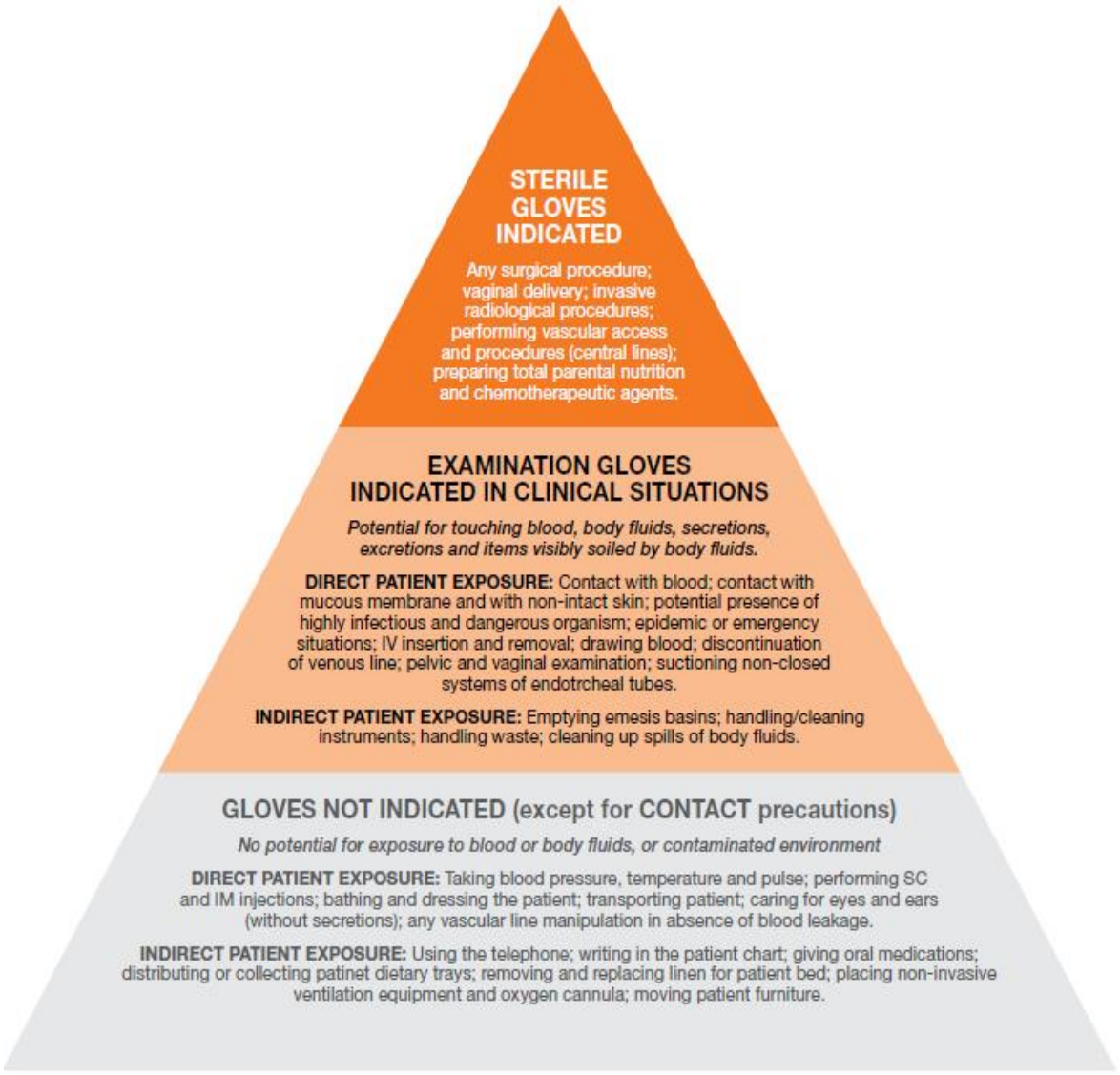
Always clean hands after removing gloves and all PPE	All PPE should be removed before leaving the area and disposed of as healthcare waste

Personal Protective Equipment – Glove Types

Natural Rubber Latex (NRL)	It is recognised that an increasing number of hypersensitivity reactions to NRL have been reported as a result of exposure. When providing general clinical care NRL are discouraged across the Trust, however, exceptions for usage have been agreed for specialist fields such as dentistry, family planning and tissue viability service.
Nitrile	Provide an excellent biological barrier resistant to punctures and tears. Are comparable to NRL in terms of barrier performance characteristics. Are a good alternative for latex sensitive individuals. Are less elastic than NRL. Can be used for handling certain chemicals, e.g. gluteraldehyde.
Vinyl	In laboratory conditions show an increased permeability to blood borne viruses. Break down in use more frequently. Are prone to leakage. Are inelastic and can be baggy to wear. Are relatively inexpensive compared to synthetic rubbers. Are suitable for staff and patients sensitised to NRL. Have produced no documented allergenic or other skin reactions in users.
Co-polymer	Are not recommended for use in a clinical setting. Usually ill fitting; Have heat sealed seams prone to splitting; Are thin and have a tendency to tear. Under no circumstances should staff be handling blood or body fluids without the use of protective gloves.

WHO Glove Pyramid (2009)

The World Health Organisation (WHO) Glove Pyramid - to aid decision making on when to wear (and not wear) gloves



When to Use a Face Mask or Respirator

When to use a **surgical face mask** or **FFP3** respirator

When caring for patients with **suspected or confirmed infectious respiratory virus**, all healthcare workers need to – prior to any patient interaction – assess the infectious risk posed to themselves and wear the appropriate personal protective equipment (PPE) to minimise that risk.

When to use a surgical face mask

In cohorted area (but no patient contact)	Close patient contact (within one metre)
For example: Cleaning the room, equipment cleaning, discharge patient room cleaning, etc	**For example:** Providing patient care, direct home care visit, diagnostic imaging, phlebotomy services, physiotherapy, etc
PPE to be worn	**PPE to be worn**
• Surgical face mask (along with other designated PPE for cleaning)	• Surgical face mask • Apron • Gloves • Eye protection (if risk of contamination of eyes by splashes or droplets)

When to use an FFP3 respirator

- **Carrying out potentially infectious aerosol generating procedures**

For example:
bronchoscopy, endotracheal intubation, tracheostomy procedures, cardiopulmonary resuscitation, diagnostic sputum induction:

- **Where a patient is known/suspected to have an infection spread via the aerosol route**
- **When caring for patients known/suspected to be infected with a newly identified infectious respiratory virus**

PPE to be worn
- FFP3 respirator
- Gown
- Gloves
- Eye protection

- Fit testing should be carried out by a properly trained competent fit tester.
- Other guidance is available on bacterial infections and pulmonary tuberculosis

These images are for illustrative purposes only. Always follow the manufacturer's instructions.

Remember

- PPE should be put on and removed in an order that minimises the potential for cross-contamination.
- The order for PPE removal is gloves, apron or gown, eye protection, surgical face mask or FFP3 respirator.
- Hand hygiene must always be performed following removal of PPE.
- Healthcare workers who have had influenza vaccination, or confirmed influenza infection, are still advised to use the above infection control precautions.

HSE

How to Fit a Respirator

HOW TO FIT AND FIT CHECK AN FFP3 RESPIRATOR

KEY FACTS

- FFP3 respirators are designed to protect the wearer from breathing in small airborne particles which might contain viruses.
- They should be worn only when carrying out potentially infectious aerosol-generating procedures on patients with symptoms of influenza.
- Respirators are available in different sizes and designs, and **must** be fitted correctly to provide the best protection.
- The respirator images shown below are for illustrative purposes only. Always follow the manufacturer's instructions.

FOLLOW THESE FIVE STEPS TO FIT YOUR RESPIRATOR CORRECTLY

Tip: It may be helpful to look in the mirror when fitting your respirator

1. Hold the respirator in one hand and separate the edges to fully open it with the other hand. Bend the nose wire (where present) at the top of the respirator to form a gentle curve.
2. Turn the respirator upside down to expose the two headbands, and then separate them using your index finger and thumb. Hold the headbands with your index finger and thumb and cup the respirator under your chin.
3. Position the upper headband on the crown of your head, above the ears, not over them. Position the lower strap at the back of your head below your ears.
4. Ensure that the respirator is flat against your cheeks.
5. Mould the nosepiece across the bridge of your nose by firmly pressing down with your fingers until you have a good facial fit. If a good fit cannot be achieved, try another size or design of FFP3.

NOW PERFORM A FIT CHECK

Cover the front of the respirator with both hands, being careful not to disturb the position of the respirator on the face.

For an unvalved product – exhale sharply; for a valved product – inhale sharply.

If air flows around the nose, readjust the nosepiece; if air flows around the edges of the respirator, readjust the headbands.

A successful fit check is when there is no air leaking from the edges of the respirator. Always perform a fit check before entering the work area.

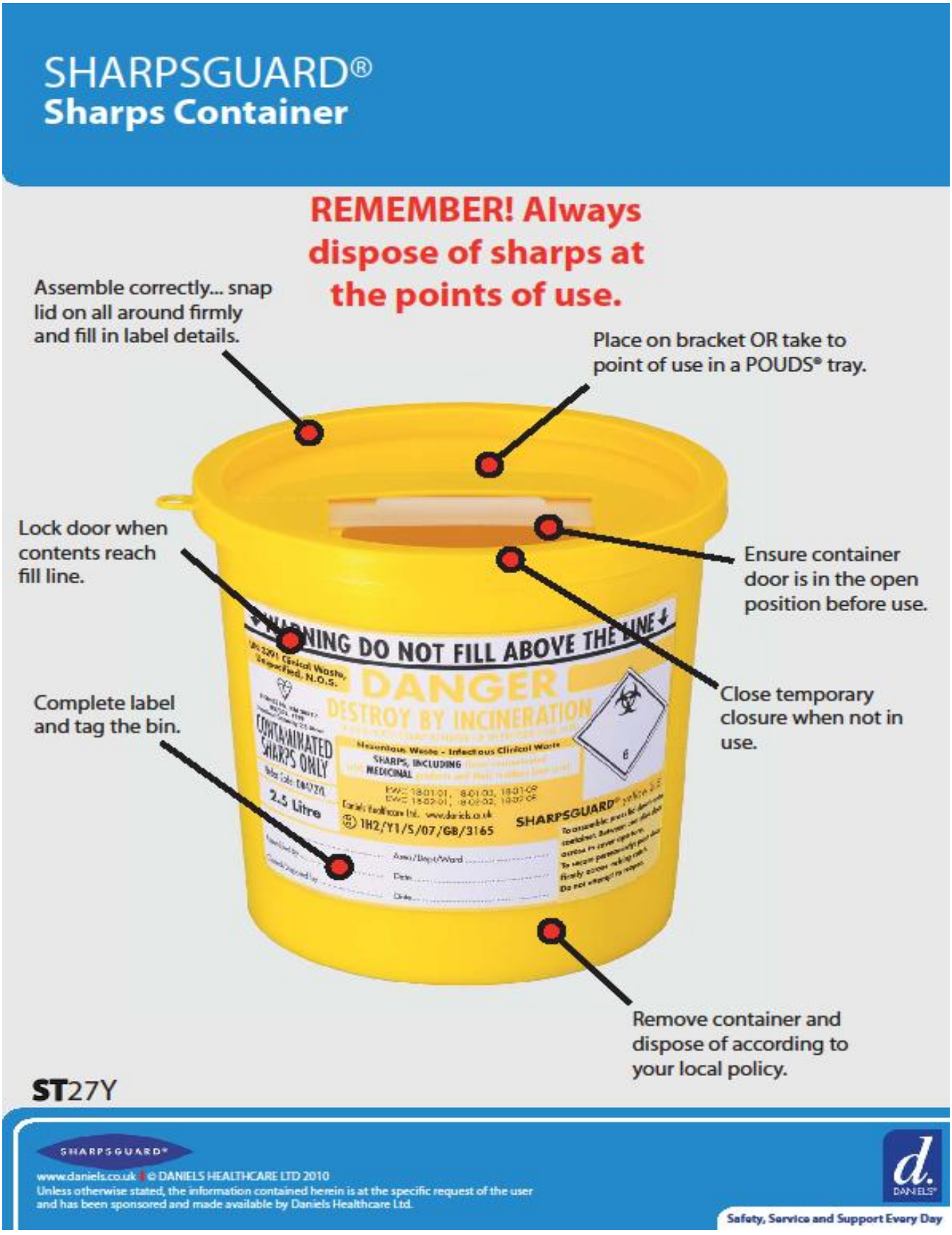
If a successful fit check cannot be achieved, remove and refit the respirator.

If you still cannot obtain a successful fit check, do not enter the work area.

REMEMBER!

- Respirators must be used with other necessary personal protective equipment (PPE) such as gowns, gloves and eye protection.
- Respirators should be replaced after each use.
- Respirators should be disposed of as clinical waste.
- Hand hygiene must always be performed following removal of PPE.

Assembling a Sharps Container



Sharps procedure for staff working within Newham & Newham Community Services

East London NHS
NHS Foundation Trust

INFORMATION ON SHARPS PROCEDURE

For All Sharps/Splash Contamination Injuries IMMEDIATELY Contact Team Prevent's Clinical Sharps Line:

Monday-Friday (08.30am-16.30pm) – 01327 810 777
Out of Hours – 0800 413 324

SHARP/SPLASH SAFE

1. **FIRST AID:**

   PROCEDURE FOR SHARP/NEEDLE-STICK INCIDENTS
   - ENCOURAGE BLEEDING BY SQUEEZING WHERE SKIN IS PUNCTURED
   - WASH THOROUGHLY WITH SOAP AND WARM WATER, DO NOT USE A SCRUBBING BRUSH

   PROCEDURE FOR SPLASH BY BLOODY OR BODY FLUIDS
   - IF EYES OR BROKEN SKIN AREAS ARE INVOLVED, WASH IMMEDIATELY WITH WATER
   - IF MOUTH IS INVOLVED, RINSE WITH PLENTY OF WATER BUT DO NOT SWALLOW

2. **CONTACT OCCUPATIONAL HEALTH - TEAM PREVENT IMMEDIATELY:**
   - MONDAY-FRIDAY (08.30am-16.30pm) – 01327 810 777
   - OUT OF HOURS – 0800 413 324

3. **MAKE SURE YOU:**
   - INFORM YOUR LINE MANAGER OR DUTY NURSE
   - SUBMIT AN INCIDENT REPORTING FORM ON THE TRUST INTRANET

For staff working within Newham and Community Health Newham Directorates:

Following the above preliminary process, if staff are advised by OH to seek further assistance, staff should go to The Greenway Centre, Newham University Hospital during opening hours (Mon-0900-1600; Tues-0900-1830; Wed-1200-1600; Thurs-1330-1830; Fri-0900-1600) or the Emergency Department, Newham University Hospital (all other times) for further assessment where there is a clinical indication that this is necessary.

Sharps procedure for staff working with City & Hackney, Forensics and Tower Hamlets

East London NHS
NHS Foundation Trust

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For staff working within City & Hackney, Forensic Services and Tower Hamlets Directorates:

Following the above preliminary process, if staff are advised by OH to seek further assistance, staff should go to the Accident & Emergency Department at the Homerton University Hospital NHS Foundation Trust.

Sharps procedure for staff working within Bedfordshire & Luton

East London NHS
NHS Foundation Trust

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   - IF EYES OR BROKEN SKIN AREAS ARE INVOLVED, WASH IMMEDIATELY WITH WATER
   - IF MOUTH IS INVOLVED, RINSE WITH PLENTY OF WATER BUT DO NOT SWALLOW

2. **CONTACT OCCUPATIONAL HEALTH - TEAM PREVENT IMMEDIATELY:**
   - MONDAY-FRIDAY (08.30am-16.30pm) – 01327 810 777
   - OUT OF HOURS – 0800 413 324

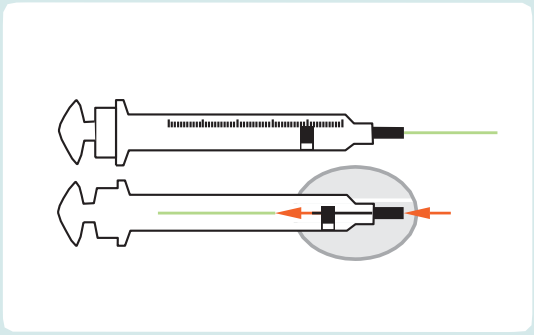
3. **MAKE SURE YOU:**
   - INFORM YOUR LINE MANAGER OR DUTY NURSE
   - SUBMIT AN INCIDENT REPORTING FORM ON THE TRUST INTRANET

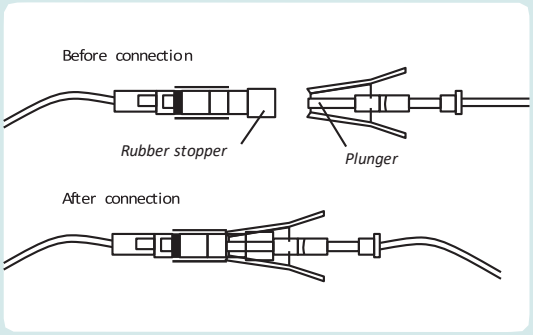
For staff working within Bedfordshire and Luton Directorates:

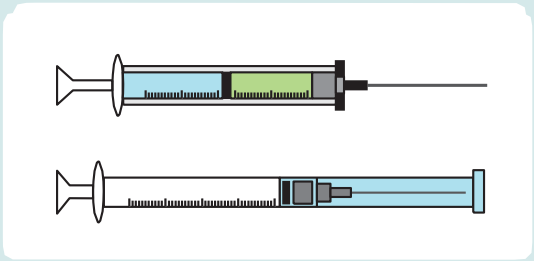
Following the above preliminary process, if staff are advised by OH to seek further assistance, staff should go to their local A&E Department for further assessment where there is a clinical indication that this is necessary.

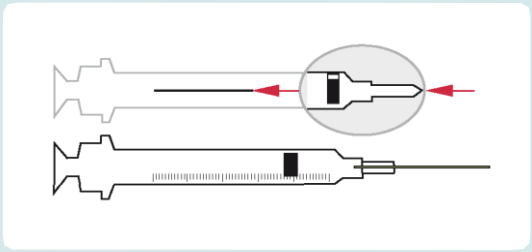
Safer Sharps Devices

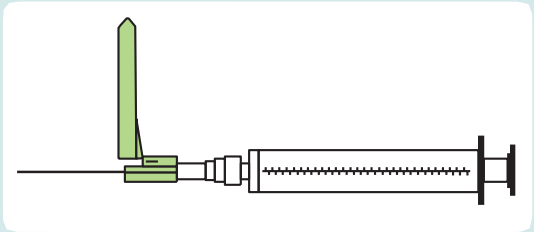
Types of safety-engineered devices	Example
Needleless connector systems	Connectors use devices other than needles to connect one IV to another.
Protective sheaths	Sliding or hinged needle shields attached to disposable syringes.
Retractable needles or blades	Needles of sharps that retract into a syringe or back into the device.
Self-blunting	A blunt cannula seated inside a phlebotomy needle is advanced beyond the needle tip before the needle is withdrawn from the vein.











Adapted from: OSHA

Specimen Collection and Storage Table

Specimen	Refrigerate	Container	To Laboratory
Wound Swab	Yes	Swab containing transport medium	As soon as possible within 24 hours. Can be stored in a dedicated specimen fridge until transportation to the lab
Sputum	Yes	Plain universal container	As soon as Possible within 24 h. Can be stored in a dedicated specimen fridge until transportation to the lab
Urine	Yes	Universal container	As soon as possible within 24 hours. Can be stored in a dedicated specimen fridge until transportation to the lab
Faeces	Yes	Stool specimen container	As soon as possible within 24 hours. Can be stored in a dedicated specimen fridge until transportation to the lab
Blood Cultures	NO – Send direct to laboratory	Specific bottles as supplied	Immediately
Blood for routine examination	NO – Send direct to laboratory or refrigerate	Specific bottles as supplied	Direct to laboratory

Preparations / Agents to be used in ELFT

To provide a standard approach across the Trust, a limited number of products are recommended by the Infection Control Team, Facilities and Pharmacy Departments. No additional products should be introduced without consultation with the IP&C team. Protective clothing should be worn when using / handling any of the following agents, in accordance with the outcome of COSHH assessment. Cleaning / decontamination agents must never be mixed with other products or decanted into other containers.

Cleaning and disinfection products should be used in line with manufacturers' recommendations.

Products to be used for Cleaning:

Product	Dilution	Usage
General Purpose Neutral Detergent / **Specific Equipment Detergent**	Dilute in hot water. Concentration as per manufacturer's instructions.	General cleaning of environment, furniture and any medical device considered to be of low risk. Solution must be changed frequently. Following cleaning, all equipment must be dried and stored dry.
Alternative: Pre-soaked detergent wipes (Clinell)		

Products to be used for Disinfection:

Product	Dilution	Usage
Chlorine-based disinfectant **NaDCC,** NB. Corrosive to metals and fabrics. Inactivated by organic matter.	10,000 parts per million (ppm) use granules Concentration of 1000 ppm solution. Follow instructions. on container	Decontamination of spillages of blood and blood-stained body fluids only (Refer to Spillage of Blood and Body Fluid Policy) Surface decontamination, e.g. commodes. ***NB. Chlorine agents must not be used on urine or mixed with hot water or other cleaning agents, as toxic chlorine fumes are released.***
Disinfectant wipes (Clinell)	Use as supplied	Surface disinfection of specific items

Examples of Decontamination Procedures

The following is not intended to be an exhaustive list of all items of medical equipment used within the Trust. The manufacturer's instructions must always be followed in regards to decontamination of a reusable medical device. Where manufacturer's decontamination instructions are unclear, or alternative disinfection agents to those described below are recommended, the Infection Prevention & Control Team should be contacted.

Where detergent wipes are referred to, hot water and detergent may also be used as appropriate. Combination detergent/disinfectant "one step" products are available and may be used following discussion with the IP&C team. If source isolation precautions are being taken because the service user is harbouring a virulent or antibiotic resistant micro-organism then disinfection is required in addition to cleaning. This applies on patient discharge/outbreaks of infection and in situations where equipment needs to be shared.

Where equipment has become contaminated by bodily fluids, these must be cleaned initially by nursing staff before any further cleaning by domestic staff or cleaners.

Individual Items	Recommended Method Of Routine Cleaning	Additional Comments
Alcohol Gel Containers	Never top up Wipe bottles with detergent daily	Personal containers - do not take home or refill Wipe at start and end of each shift with detergent wipes. Dispose of when empty.
Auriscope	Wipe with detergent	
Auriscope Ear Piece	Use Disposable	
Baby Feeding Bottles	Use pre-packed, prepared feeds and dispose.	Use pre-packed prepared feeds. Milton solution may be used for parent education – For single baby use ONLY dilute 1 in 80 and immerse for 30 minutes.
Baby Changing Mats	Wash with detergent and warm water. Check integrity regularly. Discard if mat is torn/worn or damaged	1:1000ppm Hypochlorite solution if soiled with body fluids.
Baby Feeding Teats	Single baby use	Single use only
Baby Scales	Wipe with detergent and hot water, rinse and dry	
Baths	Detergent and water/cream cleanser. Wipe with detergent solution and rinse between patients. Domestic clean daily.	After infectious patient wash with 1:1000 Hypochlorite solution and dry rinse before reuse.
Bed Pan - Plastic	Use bed pan liner. Use bed pan washer.	
Bed Pan Washer	The outside of the machine shoud be washed daily. Daily clean by cleaners	Run through cycle daily also when not in use, Record temperature daily. See manufacturer's instructions.
Bed Frames & Fittings e.g. Cot Sides	Wipe with detergent and hot water. Rinse and dry.	Where risk of soilage, wash with Chlor-clean. Follow instructions for PPE and safe dilution methods.

Blood Pressure Cuff	Wipe reusable cuffs with warm water and detergent or detergent wipes between patient use.	Dispose of if contaminated.
Bowls (Wash)	Wash with detergent and water, rinse and dry. Store inverted.	Single patient use.
Commode Chair	Wipe all surfaces with detergent and hot water and dry.	Ensure all under surfaces, legs and wheels are included when cleaning/disinfecting. Where risks of infection wash with chlor –clean.
Cot Sides	Wash with detergent and water	Remove from bed and clean attachments.
Doppler Probe	After each use, clean the probe with warm water and detergent using a damp cloth and dry thoroughly.	Follow manufacturers instruction.
Dummies	Single patient use only. If the dummy is hospital property, discard it after patient use. Between uses and whenever contaminated (e.g. dropped on the floor) clean in hot soapy water. Disinfect by soaking in 500ppm available chlorine, and then rinse in sterile water before use.	
Dynamap	Wipe all surfaces with a detergent wipe on a daily basis.	If cuff becomes visibly soiled, dispose of and replace.
Ear Syringe	See appendix….. for cleaning propulse	
Examination Chair/Beds	Wipe with detergent and hot water and dry. Check integrity of cover regularly.	Cover with paper roll and change between patients.
ECG Leads	Wipe the leads with detergent wipes. Store them dry.	Follow manufacturer's instructions.
Fans	Wipe outer area with detergent.	Regular maintenance and cleaning of inner area by Estates Department.
Flow Meters	Wipe with detergent and hot water.	Use disposable mouth piece.
Flower Vases	Wash with hot soapy water when changing flowers. Store dry.	
Hoists - Frame	Wipe with detergent and hot water and dry.	
Ice Makers	Clean and disinfect weekly.	For details see cleaners guidelines on each ward/dept.
Ivac Pumps	After each use, clean the surfaces of the pump with warm water and detergent and dry well.	
Macerator	When not in use turn on daily and record.	Should be part of facilities list.
Mattress	All mattresses should be protected by a waterproof cover	If cover is torn or damaged, or mattress is soiled, it must be

	(see below)	condemned.
Nebulisers	Single patient use Clean device with detergent wipes after use, or on a weekly rota.	Nebuliser masks are for single patient use.
Pillow Cover	Wipe with hot water and detergent and dry	If soiled/contaminated with blood or other body fluids clean with chlor clean.
Pillows	Pillows should be protected by a waterproof cover (see above)	If cover is torn or damaged or pillow has been soiled it must be condemned.
Raised Toilet Seat In patient/client's home. On return to Community Equipment Store	General purpose detergent (GPD)	Wash weekly with GPD and hot water or immediately if visibly soiled. Dry with disposable paper towel. Wash prior to return to community equipment stores. If visibly soiled treat as a spillage. (See spillages) Prior to removal from the patient/clients home raised toilet seats must be washed with GPD and hot water. If visibly soiled treat as a spillage. Wash with GPD. Wipe with 1000pm hypochlorite solution paying particular attention to grooves and fixing clips. Excessive scratching, cracks etc. will make cleaning difficult and seats like this must be discarded. Store dry.
Walking aids	Clean weekly or when dirty with detergent and water and dry thoroughly.	Single patient use. Ensure rubber is not compromised and measured for each patient by OT or Physio.
Scissors	Single Use	
Snoezellen Equipment	Refer to manufacturer's instructions. Caution with electrical power. Clean with detergent and warm water.	
Spillages – Blood/Other Body Fluids	See spillage guidance	Always wear PPE
Speculum (Mental Health)	Single use only	
Gynaecological Equipment	Sent for mechanical sterilisation.	
Stethoscopes	Wipe ear piece and diaphragm with detergent wipes	Clean after each use.
Suction - Units	Wash outer with hot water and detergent, rinse and dry.	Change filter between patients and when soiled.
Toys	Wash with detergent and hot water, rinse and dry. Communal toys to be cleaned	Only toys that are washable/cleanable should be given to children.

	weekly or when soiled.	Doft toys are to be avoided or washed in washing machine. Toys should have kite marks for safety.
Trolley Tops	Wipe with hot water and detergent and dry before and after use.	If contaminates, clean with chlor clean.
Vaginal Speculae	Disposable	
Diabetics – Glucose Monitoring	Glucometer should be cleaned after use with alcohol wipes.	
Wheelchairs	Wash weekly with detergent and hot water. Wash all surfaces	Clean with Chlor-clean if body fluid spillage.
Equipment Returned from Patients Home	Prior to removal from the patients home mattresses must be washed with GPD and hot water. If visibly soiled treat as a spillage. Rental mattresses must be returned to the rental company for cleaning. Mattresses owned by community Equipment Stores must be returned to the central store for cleaning prior to being loaned again.	All items must be serviced before loaned again.

Note: This does not cover all equipment. Where further guidance is required, please contact the Medical Devices Lead.

All wards should have a supply of:

- Disposable Cloths
- Hospec Detergent (general purpose detergent)
- Detergent Wipes
- Chlor-Clean
- Plastic Aprons
- Disposable Latex Free Gloves

Decontamination Certificate for Medical Devices

Before any equipment is re-used or sent for repair or storage both within and outside the Hospital it must be decontaminated (cleaned) and a certificate completed.

The certificate must accompany the equipment; failure to comply will result in return of the equipment.

Ward/Dept.		
Description of equipment		
Make	Model	Serial Number
To the best of my knowledge this equipment has NOT been in contact with potentially infected material e.g. blood, body fluids and therefore has not been contaminated		
This equipment MAY be contaminated by potentially infected material and has been decontaminated externally as per decontamination policy		
This equipment MAY be contaminated but could not be decontaminated because, Please give details		

The above piece(s) of equipment has been appropriately decontaminated following patient usage and is now ready for repair, service, storage or re-use.

SIGNATURE_____DATE_____

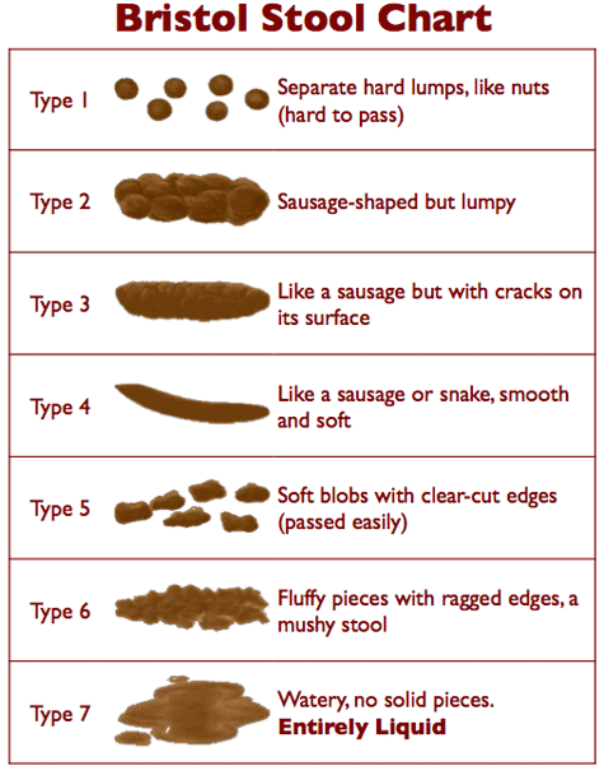
NAME_____DESIGNATION_____

Stool Chart

Name: **NHS number:** **Ward:**

Instructions: Please complete this form daily if indicated (Y = Yes / N = No)

Date	Time	Bowels Opened (Y/N)	Consistency of stool: Refer to stool chart and enter (Y) as appropriate							Comments e.g. colour, odour, amount	Signature	Bristol Stool Chart
			1	2	3	4	5	6	7			



Diarrhoea and Vomiting Outbreak Log Sheet

Please email this report daily at 09:00 to your infection prevention and control team - (elft.infectioncontrol@nhs.net)

Completed by _____ Service Line _____ Site _____ Dept _____ Date _____

	Surname / NHS Number (also include staff)	First Name	DOB	Sex	Room / Bed	Symptoms Diarrhoea +/- Vomiting	ONSET Date and Time	Date of Symptoms resolved i.e. 48 hours free	Specimen Date	Specimen Result	Comment e.g. using laxatives or taking antibiotics
1							Time: Date:				
2							Time: Date:				
3							Time: Date:				
4							Time: Date:				
5							Time: Date:				
6							Time: Date:				
7							Time: Date:				
8							Time: Date:				

***Indicate type of diarrhoea as guided by Bristol stool chart – also maintain an accurate fluid balance chart.**

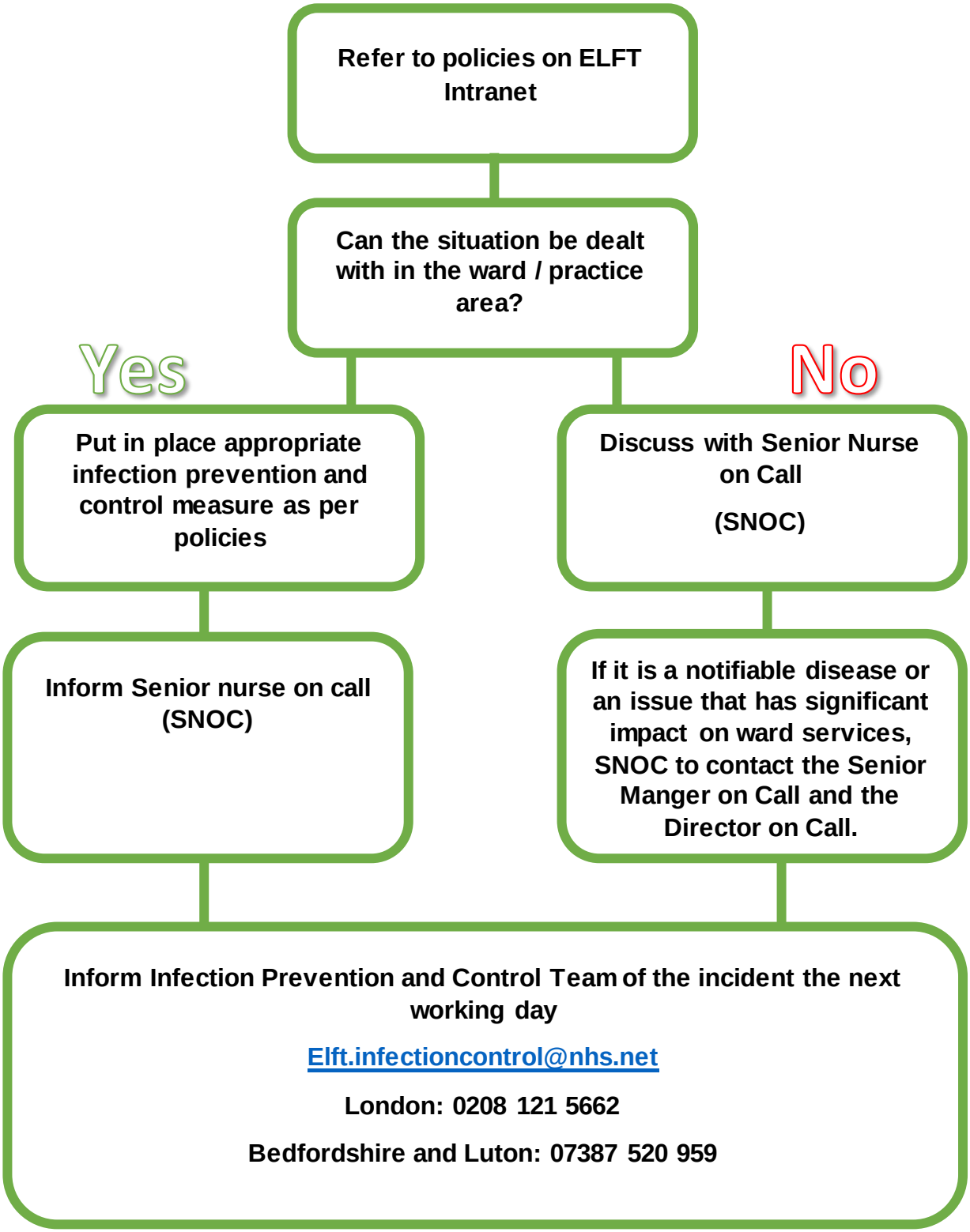
A-Z Management of an Outbreak

Blood pressure machine	One machine should be allocated to affected patients and wiped with Detergent wipe in between patients
Borrowing from/lending to other wards	Should not happen if at all possible. If an essential piece of equipment needs to be borrowed from an affected ward it should be cleaned with Actichlor first
Equipment	Whenever possible any equipment should be dedicated to affected patients only and cleaned in between usage.
Laundry	Patients' clothes for laundering should be collected by ward staff and taken to the laundry room. Symptomatic patients' clothing should be segregated and laundered separately. The laundry staff should NOT be visiting the affected wards.
Linen (clean)	Linen should be brought to the ward entrance, transferred to a ward trolley and taken immediately to the linen cupboard. The linen contractor should not visit the affected wards.
Linen (dirty)	Dirty linen bags from affected wards should be collected by porters after the unaffected wards
Meals	Meals should be delivered to affected wards after the unaffected wards. The kitchen staff will deliver and set up the food on the ward food trolley as usual.
Patients (affected)	Must be in a side room, or if there are many patients with symptoms, they could be nursed together in a dedicated bay. An accurate stool chart must be kept for everyone affected.
Patients (unaffected)	Should be looked after normally
Protective clothing	Yellow apron for isolated rooms All sizes of gloves to be available
Rooms (isolation)	Isolation sign on the door. Door shut at all times (unless in exceptional circumstances when patient safety may be endangered)
Staff	To be assigned on each shift to look after affected patients only
Therapy	Any unessential therapy should be postponed. Therapy staff should not attend affected wards if at all possible
Waste	Waste bags from affected wards should be collected by porters after the unaffected wards

Out of Hours: Infection Prevention and Control Guidance

The infection prevention and control team operates Monday to Friday 9:00am – 5:00pm.

In the absence of the infection prevention and control team during out of hours, please follow the below process.



For further infection prevention and control advice or to report an outbreak out of hours, Duty Senior Nurse can contact: London:

Public Health England – North East and North Central London Health Protection Team: 0203 837 7084 (Option 1)

Bedfordshire & Luton:

Public Health England – East of England Health Protection Team:

0300 303 8537 or 01603 481272

All Outbreaks (two or more affected patients) MUST be reported by the Borough Lead Nurse to the Health Protection Unit

Staff Issues Including Reporting Sharps Incidents

Contact Occupational Health: 0845 658 5464

Check List on the Team Members and Contacts for Outbreak Management

Agency	Name / Contact Number / Email
Public Health England Medical Microbiologist Public Health Nurse	
Environmental Health Services	
Microbiologist	
Local Authority	
ELFT Senior Operational / Borough Manager	
Medical Microbiologist	
Infection Prevention and Control Nurse	
Others: Water company, Food standards agency, veterinarian etc.	

Assign Role

Role	Nominated OCT Member
Chairperson	
Log Writer	
Record Keeper	
Press Representative	
Logistics Manager	
Communications Manager	

Communication

Organisation	Method	Nominated OCT Member
Clinical commissioning Group / Provider service Chair Chief Executive DPH		
PHE		
GPs		
Media Lead (Director)		
Press Officer (Contact)		
Helpline		
Advisory Statement		
111 (NHS Direct)		
External Expert		
Other		

Incident Review

Review incident progress	
Review membership	
Back up team	
Action taken	
Advice to public	
Second press statement if required	

Meeting Agenda Template for Outbreak Management

(To be tailored according to the incident/outbreak)

Minutes

The chair should ensure that a person not directly involved takes minutes of each meetin and that these are circulated with action points to all member usually within one working day after the meeting.

Agenda

1. **Chairs introduction, including terms of reference**
2. **Minute of last meeting (if applicable)**
3. **Review of membership**
4. **Outbreak resume and update**
    a. General Situation report
    b. Case report
    c. Microbiological report
    d. Environmental health report
    e. Other relevant reports
5. **Management of outbreak allocation of responsibilities**
    a. Control measures including contact tracing
    b. Implications for public health
    c. Care of patients (Trust hospital and community)
    d. Microbiological aspects (specimens,, analysis and resources)
    e. Environmental health aspects
    f. Organisation of investigations
        i. Environmental health
        ii. Microbiology epidemiology
6. **Issuing information/advice**
    a. Information and advice to employees and Trustees
    b. Information to the public (need for press release)
7. **Agree content of press release and press arrangements**
8. **Nominate others to assist chair in press conferences and interviews**
9. **Consider arrangements for enquiries from the public e.g. relatives (the need for a helpline)**
10. **Date and time of next meeting**

Interim Outbreak Report

Have specimens been taken?			
Specimen (site): Date taken: Date received at lab:			
Results (when due):			
Outbreak Control Team met?			
Notification			
Outbreak/incident database number (to be provided by PHE)			
Details of caller:	Name:		
	Contact Details:		
Date of call:		Time of Call:	
Geographic Lead notified? (yes/no)		Policy Lead Notified? (Yes/No)	
The Event			
Location:			
Date of Event:		Time of Event:	
Symptoms:			
Case definition:			
Date of onset of first reported case:			
Date of onset of last known case:			
The affected Group			
Vulnerable contacts e.g. residential home, nursery, hospital. Consider risk groups A-D			
Number of properties / Individuals affected			
Number of sensitive properties and vulnerable people affected ▪ Very young, (e.g. schools, nurseries) ▪ Elderly (e.g. nursing homes) ▪ Pre-existing health conditions (e.g. hospitals, dialysis patients) ▪ Food venues			
Time of first complaint:		Number of Complaints to date:	
Action Taken			
Who has been notified?			
Has outbreak flow chart been followed?			
Have checklists been completed?			

Terms of Reference of the Outbreak Control Team (OCT)

The purpose of this team is follows:

The OCT would work to the following terms of reference:

Review the evidence and establish whether a significant outbreak / incident really exist.

Agree a case definition

Assess the risk for the population and ensure case ascertainment is carried out.

Monitor the epidemiological progress of the incident/outbreak.

Agree and co-ordinate policy decisions on the investigation and control of the outbreak and ensure the decisions made are implemented, allocating responsibility to specific individuals who will then be accountable for taking action.

Determine the resource implications of the outbreak / incident and how they will be met including the possible need for an incident room e.g. board room.

Ensure that adequate communication arrangements are in place these will include:

- Nominating a lead person to be the point of contact with the news media throughout the duration of the outbreak / incident.
- Accurate and consistent information for patients / service uses, employees, relatives and other internal and external agencies.

Arrange for the necessary interviews, inspections and other investigations, such as samples to identify the nature, extent and source of the outbreak / incident.

Arrange for an ILOG number (a unique identifier for samples that are part of an outbreak) to be obtained from the regional PHE laboratory.

Prevent further cases of infection / illness by taking all necessary steps to ensure that the source of the outbreak is controlled and the risk of secondary person to person transmission is minimised.

The DIPC or the Consultant in Communicable Diseases (CCDC) will chair the meetings of the OCT. All meetings should have a written agenda. Minutes, with clear action points and policy decisions should be produced and distributed in a timely fashion, by the administrative and clerical support.

Outline for Full Outbreak Report

The need for, and the contents of, a report should be proportionate to the scale of the incident/outbreak. If produced, a report may include the following suggested headings, although the list is not exhaustive.

Terms and Abbreviations

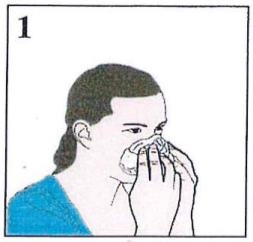
Summary

1. **Introduction**
2. **Background to the outbreak**
    i. Population demographics
    ii. Background rates of relevant infection
    iii. How the incident/outbreak was recognised
    iv. A chronological sequence of events could be included
3. **Epidemiological Investigations**
    i. Descriptive epidemiological
    ii. Case control or cohort study
4. **Environmental Health Investigations**
5. **Microbiological Investigations**
6. **Outbreak Control**
    i. Coordination and management of outbreak
    ii. Action taken
    iii. Advice and control measures
    iv. Media
    v. Advice to the public and relevant agencies
7. **Actions by other external agencies**
8. **Discussion**
    i. Environmental health
    ii. Microbiology
    iii. Epidemiology
    iv. Other issues/findings – if appropriate
    v. Control measures
    vi. Relevant information from other outbreaks
9. **Post outbreak: debrief, lessons learned, recommendations and conclusions**
10. **References**
11. **Appendices**
    i. Chronology of events
    ii. General background on relevant infection
    iii. The Outbreak Control Team – membership and terms of reference
    iv. Detailed epidemiology

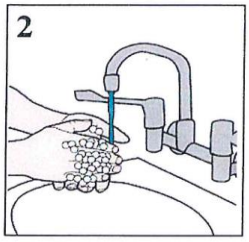
How to Collect MRSA Screening

PROCEDURE FOR MRSA SPECIMEN COLLECTION USING SIGMA TRANSWAB TRIPLE PACK

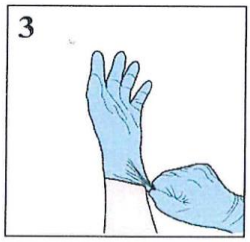
Nose	*White Swab*
Throat	*Red Swab*
Perineum	*Red Swab*



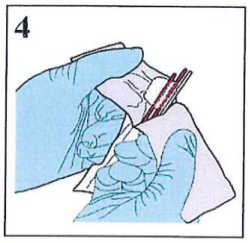
Ask patient to clear any nasal discharge.



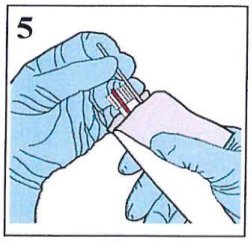
Wash YOUR hands and dry. Or if hands are visibly clean use alcohol gel.



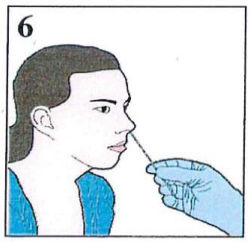
Put on disposable gloves



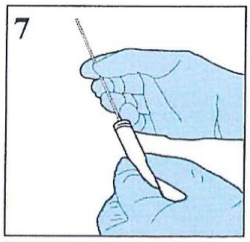
Open peel pouch containing swabs & tube



Remove white shaft swab from pack

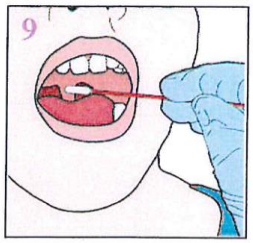


Insert swab approx 2cm into one nostril, gently rotate and repeat for the other nostril using the same swab

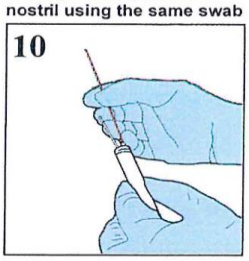


Remove cap from tube and place swab fully into tube

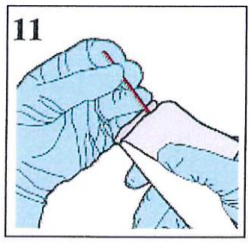
Remove one red shaft swab from pack



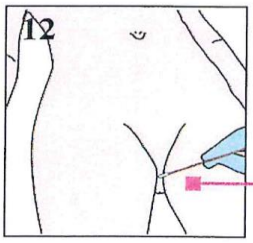
Carefully swab around throat



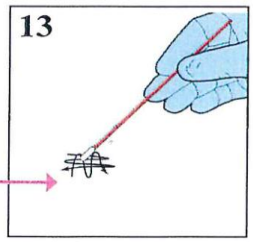
Place swab fully into tube



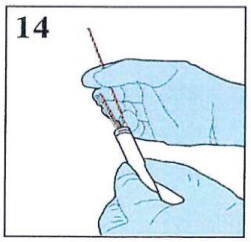
Remove second red shaft swab from pack



Bring swab to perineum, avoiding contact with external skin



Carefully swab perineum, according to pattern shown



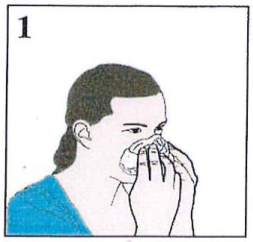
Place swab fully into tube

For enquiries please contact laboratory 0203 246 0320

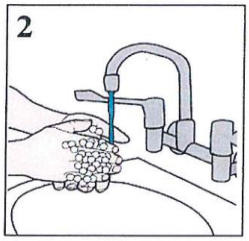
11.10.16

PROCEDURE FOR MRSA SPECIMEN COLLECTION USING SIGMA TRANSWAB TRIPLE PACK

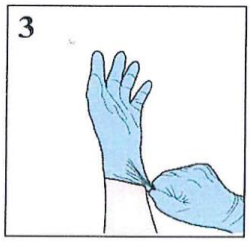
Nose	*White Swab*
Throat	*Red Swab*
Perineum	*Red Swab*



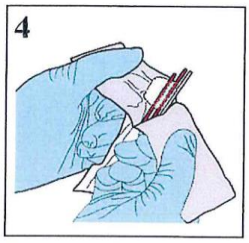
Ask patient to clear any nasal discharge.



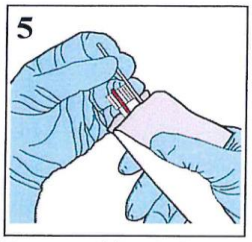
Wash YOUR hands and dry. Or if hands are visibly clean use alcohol gel.



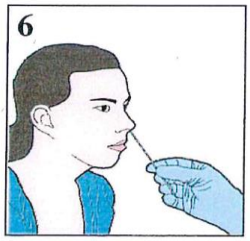
Put on disposable gloves



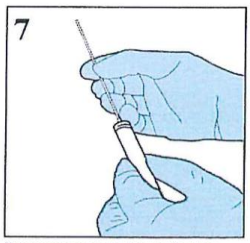
Open peel pouch containing swabs & tube



Remove white shaft swab from pack

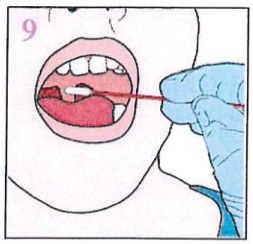


Insert swab approx 2cm into one nostril, gently rotate and repeat for the other nostril using the same swab

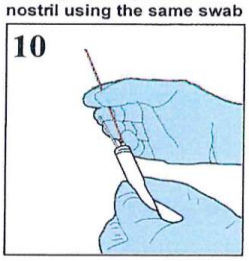


Remove cap from tube and place swab fully into tube

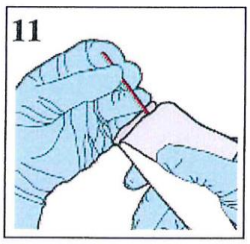
Remove one red shaft swab from pack



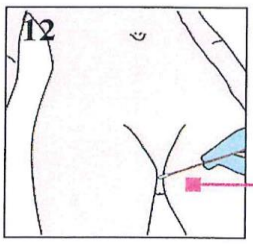
Carefully swab around throat



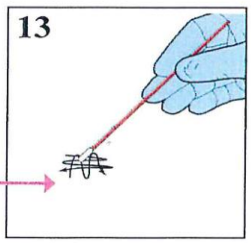
Place swab fully into tube



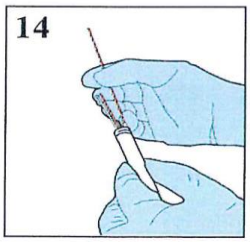
Remove second red shaft swab from pack



Bring swab to perineum, avoiding contact with external skin



Carefully swab perineum, according to pattern shown



Place swab fully into tube

For enquiries please contact laboratory 0203 246 0320

11.10.16

Head Lice (Pediculus Humanus Capitas)

Signs and Symptoms

Itching is often the only symptom of the disease, but misleadingly it may appear weeks or months after the onset of the infections particularly with people with a first infection. The louse bite produces an erythematous, itchy papule. Head lice do not bite below the hairline. However, a pruritic rash on the back of the neck caused by an allergic reaction to louse faeces is a fairly common sign of severe infection.

Due to head lice infestations being quite often itchy, this may lead to infection or scabbing. In addition to an itching or tickling sensation, children may also be irritable or have difficulty sleeping.

Transmission

Head lice are only spread by prolonged direct head to head contact. Clean hair does not provide protection against lice, as they do not need unhygienic conditions to survive. Transmission tends to occur in settings and groups where there is the opportunity for prolonged head to head contact. Transmission is more likely to occur amongst families, close friends and schools.

Treatment and Management

Prior to starting any treatment it is essential to ensure the correct diagnosis.

Insecticides

Insecticides are the only treatments for which there is clear evidence of effectiveness. There are three types of insecticides available: malathion, pyrethroids and carbaryl. Dimeticone is effective against head lice and acts on the surface of the organism.

It is now recommended that if one course of insecticide has failed or re-infection has occurred a different insecticide be tried. This is known as a "mosaic strategy", it prevents the repeated use of a single product and the potential for resistance to the treatment. All affected household members should be treated simultaneously.

The insecticide should kill live lice and eggs in a single application. However, young eggs are difficult to kill, a routine second application is recommended, 7 days after the first to kill any young lice emerging from eggs missed in the first treatment.

Treatment for Head Lice:

- The manufacturer's instructions should always be followed.
- The insecticide should be applied all over the scalp in a systematic way.
- The hair should be allowed to dry naturally as heat inactivates the insecticide.
- After treatment, the hair can be washed and dried as normal.
- It can take up to 24 hours for the lice to die.

Be mindful chlorine in swimming pools can weaken the effects of insecticides.

Other Treatments – Mechanical Methods

Mechanical methods of removing lice from the hair such as "bug busting" are popular because they do not involve the application of insecticides. The bug busting technique involves washing the hair with ordinary shampoo, applying conditioner thoroughly and combing the hair with a plastic fine tooth comb. The hair is combed until no more lice are found. Each treatment session takes about 30 minutes and needs to be repeated every 3-4 days for a minimum of two weeks until no more lice are found.

If undertaking treatment within the Trust staff should wear gowns and gloves while carrying out the treatment.

Post Treatment

- After the treatment, wear clean clothes and wash other clothes, bed linens, and towels in hot water (greater than 130°F [54.45°C]) and dry them using the hot cycle for at least 20 minutes.
- Do not share combs, hairbrushes, hats, towels, bedding, clothing, headphones, stuffed toys, or other items with someone who has head lice.
- You do not need to fumigate the home

Management of Contacts in the Community

As part of health education, families should be instructed in contact tracing that is listing people likely to have had head to head contact with infected members of the family during the 4 weeks prior to the detection of the case.

If undertaking this procedure in the Trust staff should wear gowns and gloves while carrying out the treatment.

Clothing/Body Lice (Pediculus Humanus)

Signs and Symptoms
Symptoms can take weeks to develop in a first infestation. Dermal hypersensitivity to louse bites can develop in 10 days of continuous exposure. There are two reactions to the bite itself, and/or pruritic inflammatory wheal, caused by the host immune response.

Transmission
Most transmissions occur during contact between fully clothed persons.

Treatment and Management
In the UK treatment does not usually require pesticides.

- Dry clothes turned inside out, they can be tumbled dried at approximately 50 degrees centigrade for 30 minutes, this will kill lice and eggs and clothes can then be washed in normal way.
- Dry cleaning is effective against lice and eggs but expensive. Infested clothes should not be cleaned together with unaffected clothing
- Clothes washed on a hot cycle should kill eggs and lice.
- Affected individuals should brush, shower or bathe to remove any lice left on the body after removing infested clothing.

If undertaking this procedure in the Trust staff should wear gowns and gloves while carrying out the treatment.

Crab Pubic Louse (Pthinus Pubis)

Sign and Symptoms
Itching, often intense, is the main symptom but may begin some months after onset of infestation.

Transmission
Person to person transmits the lice. Clothing, bed linen and toilet seats do not play a role in transmission. It is normally considered to be sexually transmitted as the pubic and peri-anal areas are the most frequently affected. P. *pubis* can infest all coarse body hair. Its claws are large and it has a wide leg span enabling it to cling to thicker, sparsely distributed hairs including axillary hair, beard, eyebrows and eyelashes.

Treatment and Management
Permethrin and malithion are used to eliminate *crab lice* (*Pthinus pubis*). An aqueous preparation should be applied, allowed to dry naturally and washed off after 12 hours: a second treatment is needed after 7 days to kill lice emerging from surviving eggs. All surfaces of the body should be treated, including the scalp, neck, and face.

For treatment of the eyelashes, removal of the hatched lice is recommended, but this is a difficult procedure as this involves the risk of harming the eye. Alternatively use petroleum jelly among the closed lashes twice a day for 10 days, this kills the nymphs as they hatch. Ant lice on the eyebrows can also be treated this way.

If undertaking this procedure in the Trust staff should wear gowns and gloves while carrying out the treatment.

Scabies (Sarcoptes Scabie Var Hominis)

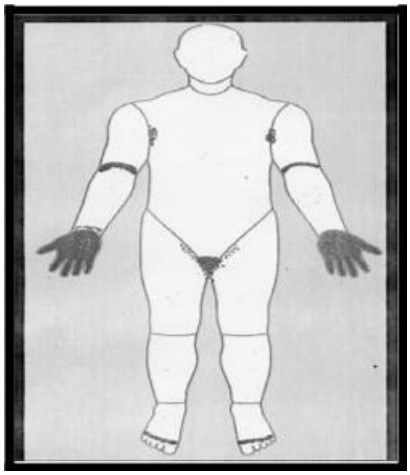
Sign and Symptoms

Classical Scabies

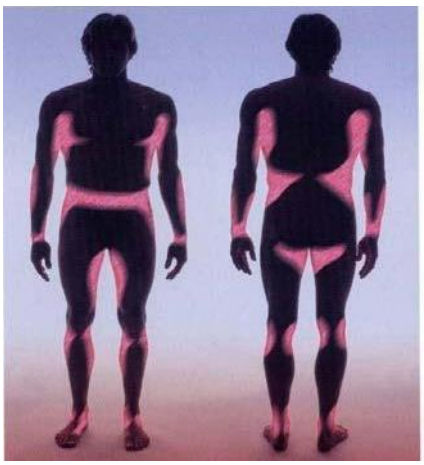
The clinical picture in healthy individuals is the appearance of raised burrows, or small, red, slightly elevated papules or vesicles, particularly on the wrists, back of the hands and between the fingers. Further spread is usually confined to elbows, armpits, beneath the breast, waist, groin, genitalia, buttocks, knees and ankles.

The incubation period is: 2-6 weeks before the onset of itching in those affected for the first time, but symptoms may occur 1-4 days after re-exposure. Symptoms are due to an allergic reaction to toxins released by mite faeces, and include itching particularly at night. Itching is most intense when the patient is in a warm bed or when the body is warm.
The distribution of the rash is unrelated to the location of the mites and burrows, so the whole body of the infected person must be treated.

Typical Sites of Scabies Mites



Typical Sites of Scabies Rash



Atypical and Crusted Scabies (Norwegian Scabies)

Immuno-compromised people/service users may present with an atypical form with minimum signs, or rarely a severe crusted form. When the immune response is impaired, thousands, and may be millions of mites may present compared with only (10-20) when healthy people become infected.

Patients with this atypical form are highly infectious but may not itch. A delay in diagnosis may lead to a widespread dissemination including all that have close contact with them. Typical burrows may not be seen and the service user may present with a rash resembling a chronic dermatitis. There may also not be the classical itch present. This form of scabies is highly infectious and can cause environmental contamination. Within in-patient - bedded areas the patient should be isolated.

Transmission

Spread is person to person via direct skin contact including sexual contact. Transfer from under-garments and beddlothes, occurs only if these have been contaminated by infectious persons immediately beforehand. The mites penetrate the epidermis causing tiny, characteristic, linear burrows that may be seen in the skin. Eggs are laid in the epidermis, and hatch after 3-4 days.
The emerging larvae then appear on the surface of the skin before excavating new tunnels. The life cycle of S. scabiei begins with the pregnant female laying two to three eggs a day in burrows several millimetres to several centimetres in the length of the skin. About 5—72 hours larvae emerge, and wander to make new burrows. Mites usually live 30-60 days.

Treatment and Management
A thorough single application of scabicide is usually adequate. In cases particularly of heavy infestations a second application is useful after an interval of 5-6 days. This is long enough for eggs to give rise to larvae but not for adult mites to develop. Treatment should be applied on cool, dry skin over the entire body and allowed to work between 8-24hrs depending on the manufacturers instructions. The lotion or cream should be applied from the chin downwards. All areas of the body, including genitalia, must be treated, except for the face and neck. It should be left on for the instructed length of time, after which the service user should bath or shower.

Outbreak of Scabies – Management
In the event of an outbreak of scabies in the community, some people may be asymptomatic incubators of infection. All close contacts of infected people, bed partners and members of the household of the index case, even if asymptomatic must be treated simultaneously.

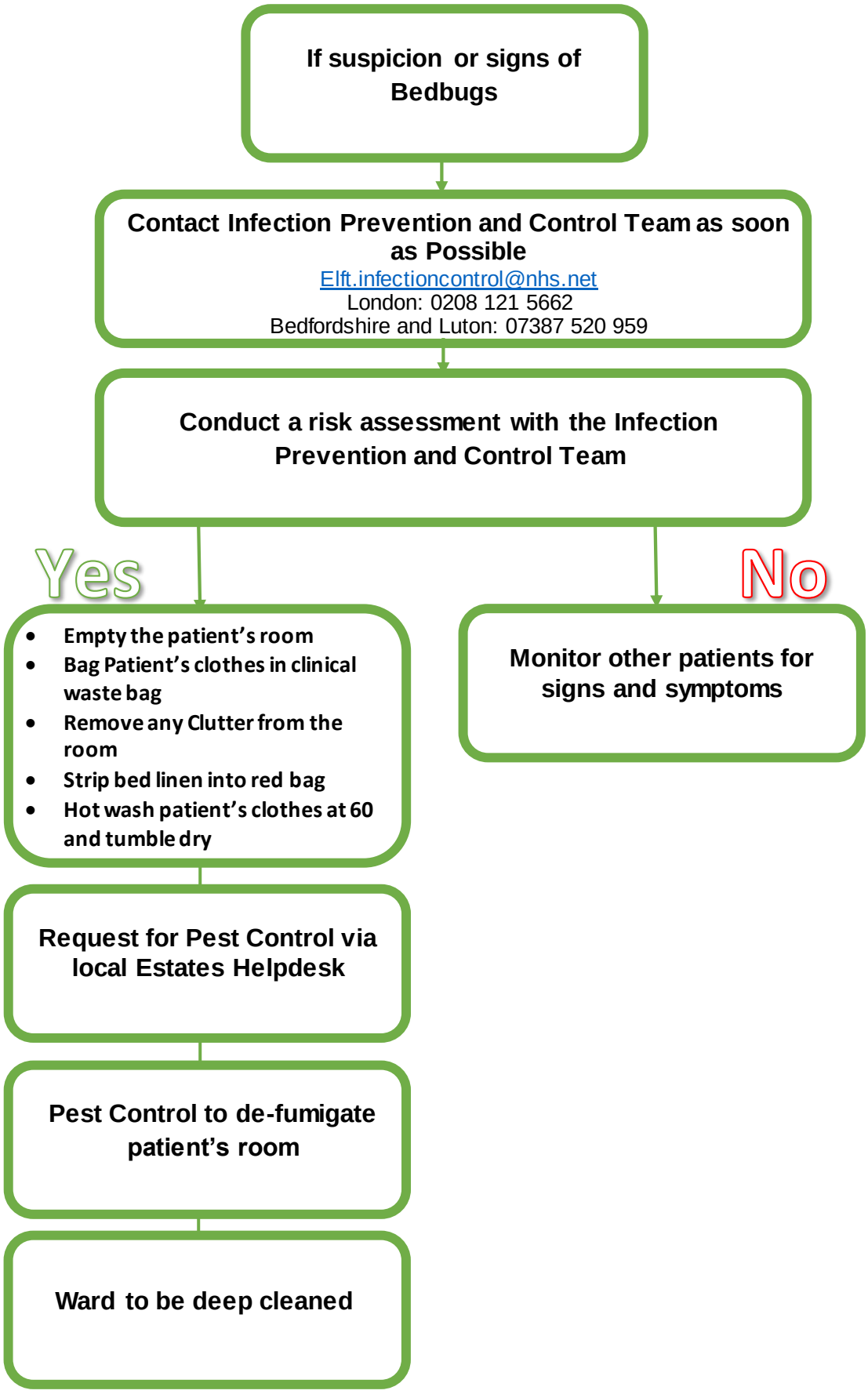
Contact tracing is required to identify those with intimate skin contact over a prolonged period of time within the previous 2-6 weeks (including sexual). In the event of an outbreak PHE should be informed.

If undertaking this procedure in the Trust staff should wear gowns and gloves while carrying out the treatment.

Treatment and Prophylaxis of Scabies

Application of Scabicides: General Principals	
1	Gowns and gloves are worn when applying scabicides to patients.
2	Bathe patients as usual and change bed linen. Allow skin to cool completely.
3	Apply scabicide to every square inch of skin, from the posterior ear folds down over the entire body. Include intergluteal cleft, umbilicus, skin folds, palms and soles, and webs between fingers and toes. If scabicide is washed off during handwashing, toileting, or perineal care, it must be reapplied.
4	In infants and young toddlers, the elderly, and the immunocompromised, the head (forehead, temples, and scalp) requires application of scabicide. Pay close attention to the area behind the ears. Do not get the scabicide near the eyes or mouth. Prior treatment failure may be an indication to include the head upon retreatment.
5	Fingernails and toenails should be clipped and scabicide applied under nails.
6	Follow directions and precautions in the package accompanying scabicide.
7	A cleansing bath is taken when scabicide is to be removed.
8	Linen and clothing are changed after treatment. Contaminated clothing and linens may be 1) dry-cleaned or 2) washed in the hot cycle of the washing machine and dried in the hot cycle of the dryer for 10-20 minutes.
9	Provide detailed written instructions for scabicide use when dispensing scabicide for home application by employees and household members.
Treatment Regimen for Typical Scabies Infestation	
1	A single adequate application of 5% permethrin cream is usually sufficient to eradicate typical scabies, whether a symptomatic case or asymptomatic carrier. Re evaluate response to treatment in 14 days
2	In facilities with recurrent or endemic scabies or when application of scabicide for treatment of symptomatic scabies is not performed by a trained individual, a second application 3-7 days after the first is recommended by some authorities
Treatment Regimens for Crusted (Norwegian) or Severe Atypical Scabies	
1	Cases of crusted scabies and other variants of severe atypical scabies are best managed with the assistance of a dermatologist. Controlled studies to determine the most effective regimen for treatment of crusted scabies infestation have not been performed. The following regimens were selected from several that have appeared in the literature and have been successful in single or small series of cases. They are included as examples and are not necessarily endorsed by Advisory Committee on Dangerous Pathogens (ACDC).
2	Patients with crusted or keratotic lesions should be soaked in a tub of lukewarm water for 10 minutes immediately prior to application of scabicide to hydrate the skin; use of keratolytic agents (e.g., salicylic acid) may soften scales and enhance penetration of scabicide. Allow skin to cool before applying scabicide.
Regimen A	
1	% permethrin cream for 12 hours, followed by repeat application of 5% permethrin cream for 12 hours, wash off
2	After seven days, repeat step (a), above.
3	Seven days following last treatment, obtain scrapings from at least 3 sites. If scrapings are positive or if symptoms unabated, treat again.
Regimen B	
1	Apply 5% permethrin cream, as previously described, on day one.
2	Apply 10% crotamiton lotion, as previously described, on days 2-6.
3	Reapply 5% permethrin cream on day 7.
4	Reassess on days 7 through 14, obtain scrapings from at least 3 sites in one month. If scrapings are positive or if symptoms unabated, begin regimen again
5	1 Partners and close contacts should be treated simultaneously (within 24 hours) HPA 2010

Flowchart on Management of Bedbugs in In-Patient Wards



Management of Bedbugs in Domestic/Community Settings

Staff in community and people's homes may come into contact with premises and patients with infestations

Community health staff face particular risks This document describes procedures to mitigate the risk to healthcare staff and other patients

There are a variety of "insects" that houses or patients may be infested with, this protocol should be used in conjunction with the trust infection control policy

Bedbugs

Bedbugs are small blood-sucking insects that live in cracks and crevices in and around beds. They crawl out at night and bite exposed skin to feed on blood. They do not fly, swim or jump they do crawl slowly.

Adult bedbugs are oval-shaped, flat and up to 5mm long – similar to an apple seed. Their colour varies between dark yellow, red or brown.

Bedbugs aren't dangerous and don't spread any diseases, but some people experience a reaction to their bites and they can be stressful to live with.

Signs of a bedbug infestation can include:

- Small bugs or tiny white eggs in the crevices and joints of your mattress and furniture – use a bright torch to check for these
- Bites on your skin
- Tiny black spots on your mattress – this could be their dried poo mottled bedbug shells – bedbugs shed their skin as they grow
- Blood spots on your sheets – these can occur if you squash a bug after it has fed.
- An unpleasant, musty scent in your bedroom
- Bedbugs tend to prefer fabric or wood over plastic and metal, and often hide near to where you sleep– for example, under the mattress or along the headboard.
- They can be found away from the bed in other furniture, along the edges of carpets and even behind mirrors or inside smoke alarms.

Bedbug bites are painless, but some people experience a reaction to them. This can occur from a few minutes after being bitten up to a week or two later.

Bedbug bites:

- can cause itchy red bumps on the skin
- usually occur on exposed areas such as the face, neck, hands or arms
- often occur in lines across the skin
- may cause a rash or fluid-filled blisters in more severe cases
- can become infected with bacteria if scratched – signs of infection include pain, increasing redness and swelling

The bites usually fade in a few days. If they're very itchy, you can buy a mild steroid cream (such as hydrocortisone) or antihistamine tablets to relieve the itch.

Advise the occupants of the premises to:

- wash infested clothes or bed linen at 60C, or put them in a dryer on a hot setting for 30 minutes
- use a vacuum cleaner with a hose to suck up any bugs you can see – dispose of the contents of the vacuum cleaner in a sealed bag
- consider throwing away any mattress or furniture that's heavily infested
- use plastic mattress covers that encase the entire mattress – this will stop any bedbugs getting in or out

Once in the home, they can quickly spread from room to room. They don't jump or fly, but can crawl long distances.

It can help to:

- inspect your mattress and bed regularly for signs of infestation and get professional advice if you think you have bedbugs
- avoid buying second-hand mattresses and carefully inspect second-hand furniture before bringing it into your home
- keep your bedroom tidy and remove clutter

Bedbugs are not attracted to dirt, so they're not a sign of an unclean home, but clearing up any clutter will reduce the number of places they can hide.

Management of Fleas in Domestic/Community Settings

The entire cycle, from egg to adult flea, is complete in 12 – 22 days when temperature and humidity conditions are ideal, but more commonly takes 3 – 4 weeks. Surprisingly, only approximately 5% of a flea infestation is made up of adult fleas on your pet, whereas 95% is in your home as eggs, larvae and pupae.

Fleas won't climb up humans. There's little concern for the insects reaching a person's hair. Even the pubic area is too far from the ground. Flea jumps reach slightly above a human ankle. Once landing, they bite people right away without much wandering, and leave after feeding.

Fleas are well-known for their jumping abilities. However, jumps are usually only performed by newly emerged adults to acquire a host. Once emerged from their cocoons, fleas jump from the ground and onto a passing animal. Fleas will also jump if they're disturbed or are abandoning a dead host. Fleas do not swim. Fleas live on pets such as cats and dogs.

Healthcare workers who routinely have to visit people's homes may be at risk of transporting **insects Using good standard precautions with all patients all of the time will reduce the risks** of spread
to office home or vehicle.

Prevention
The prevention and management of infestations starts with awareness. Staff should be up to date with standard infection control training precautions and should be aware of:

Risk assessment
- Communication of risks
- Identification of live risks

Evidence of a bed bug infestation, where bed bugs hide, how to conduct a self-inspection for bed bugs, and proper containment or isolation procedures for infested items.

Standard Precautions

Preparing for Home Visits
- Wear simple clothes.
- Wear shoes that can be heated in clothes dryer.
- Avoid accessories, especially scarves, jewellery, and handbags.
- Carry a supply of sealable plastic bags overshoes aprons and hand gel.
- Carry a large plastic bag to be used to place all necessary items inside for the duration of the visit.

Discovering Bed Bugs at a Client's Home
If bed bugs are discovered whilst you are at the client's home, remain calm. Take the following steps to avoid transporting the bed bugs out of the client's home:

- Inform your line manger
- Remove your clothes as soon as you get to the office or home Place your clothes and shoes in a plastic bag
- Place your clothes in a hot dryer Complete a datix
- Report the infestation to social services
- If you feel unable to deal with the issue alone make polite excuses and leave to call your line manger to discuss how best to deliver care.

Confirmed infestation
Work with other agencies involved to plan how best to ensure visits are organised and that prevention strategies and eradication plan is in place.

Be extra diligent if a bed bug infestation has been confirmed at the home. Contact infection control team prior to visit if you are unsure what to do.

Contact the client prior to visiting
- Inform the client that you will be visiting and what for and that you have been advised to take extra precautions.
- Wear protective booties. Inform the client that the booties help protect against potentially having insects transported into the client's home.
- Do not sit on upholstered furniture or on the bed. Inspect the cracks of hard chairs before sitting down. If possible, bring a hard surface chair or plastic stool.
- Carry only essential items into the home. Use a plastic clipboard to hold any paperwork. Avoid placing any be longings on up-h bolstered furniture, bedding or against the walls.

After the visit
- When leaving the house remove the booties immediately and seal them in a plastic bag. Dispose of the bag before getting into the car. If the client lives in a multi-unit dwelling, remove the protective gear just outside the client's door. Do not l eave the shoe covers on while walking through the building. Place them in a tightly sealed bag and place the bag in an outdoor trash receptacle.
- If coveralls were worn, remove the coveralls by turning them inside out and trapping any bed bugs inside.
- Put the coveralls in a plastic bag and d dispose of the bag before getting into the car.
- Check clothes, shoe treads, cuffs, and collar.
- If an insect is found, use a wet wipe to capture it. Place it in a Ziploc® bag for identification. Use a second wet wipe to wipe down seams, button s, and other b ed bug hiding places.

Additional Suggestions
The following additional practices may help avoid transporting bed bugs from a client's home:
- Keep the car clear of clutter; inspect it frequently; vacuum weekly.
- Keep a pair of shoes and a jacket for use only in clients ' homes in a sealed container in the
- Discourage clients from sharing their vacuum cleaner with neighbours.
- Discourage clients from accepting clothes, furniture, or other items from friends or neighbours.
- Keep informed about bed bugs in order to offer clients accurate bed bug information.

Contact Tracing List

Infection: **Ward/Service:** **Date of Positive Result:**

Patient / Staff Name	NHS Number	Date of contact screening completed (if no contact screening completed state reason)	Result of contact screening

Inter-Healthcare Infection Control Transfer Form

Patient client details: (Insert label if available) Name: Address:	**Consultant:** **GP:** **Current patient/client location:**
NHS Number: Date of Birth:	**Transferring facility – hospital, ward, care home, other:** **Contact no:** **Planned Transfer Date:** Is the IPC team aware of transfer: YES / NO
Receiving Facility – hospital, ward, care home, other: **Contact no:** Is the IPC team/ambulance service aware of transfer: YES/NO	Is the patient/client an infection risk? **Please tick most appropriate box and give confirmed or suspected organism** ☐ confirmed risk Organism ☐ confirmed risk Organism ☐ suspected risk Organism ☐ No known risk Patient/client exposed to others with infection e.g. D&V YES/NO

If patient/client has diarrhoeal illness, please indicate bowel history for last week: (based on Bristol Stool from scale)

Is the diarrhoea thought to be of an infectious nature? YES/NO

Relevant specimen results (including admission screens – MRSA, Glycopeptide-resistant enterococcus SPP, C.Difficile, multi-resistant Acinetobacter SPP) and treatment information, including antimicrobial therapy:

Specimen:				
Date:				
Result:				

Treatment information:

Other Information:

Is the patient/client aware of their diagnosis/risk of infection? YES/NO

Does the patient/client require isolation? YES/NO

Should the patient require isolation, please phone the receiving unit in advance

Name of staff member completing this form:

Print name:
Designation:
Contact number: Date form Completed :

Carbapenem-Resistant Enterbacteriaceae

FACT SHEET – COMMUNITY SERVICES

Carbapenem-Resistant Enterobacteriaceae (CRE)

(also known as Carbapenemase-Producing Enterobacteriaceae CPE))

What are Carbapenem-resistant Enterobacteriacae?
Carbapenem-resistant Enterobacteriaceae are a subgroup of Gram negative organisms that are difficult to treat because they are resistant to commonly used antibiotics including carbapenems. Occasionally these organisms are resistant to all available antibiotics. They are therefore an important risk to public health.

The Enterobacteriaceae family of bacteria include *Escherichia coli* (E coli) and *Klebsiella* species and which are found in the normal human intestine. Sometimes these bacteria can cause serious infections such as pneumonia, bacteraemia, urinary tract infections, wound infections and meningitis. Enterobacteriaceae are one of the most common causes of bacterial infections in both healthcare and community settings.

Carbapenems are a group of antibiotics frequently used to treat severe infections. They include doripenem, ertapenem, imipenem and meropenem.

Resistance to carbapenems can be due to several different mechanisms. One common way is through the production of *Klebsiella pneumoniae* carbapenemase (KPC). KPC is an enzyme that is produced by some carbapenem resistant Enterobacteriaceae which breaks down carbapenems, rendering these antibiotics ineffective. In addition to KPCs, other enzymes such as NDM, VIM and IMP can also break down carbapenems.

Carbapenem-resistant Enterobacteriaceae remain relatively rare in the UK, but infection and colonisation with these organisms is rapidly increasing. Carbapenem resistant organisms are found in many countries:

NDM	Widespread in Enterobacteriaceae (especially *K. pneumpniae* & *E. coli*) in India and Pakistan
VIM	Scattered globally. Sometimes imported to UK via patients previously hospitalised in Greece
IMP	Scattered worldwide
KPC	In USA since 1999. Also prevalent in Israel, Greece and Italy
OXA-48	Widespread *K pneumoniae* in Turkey, Middle East and N Africa.

Who is at risk?
Carbapenem-resistant Enterobacteriaceae cause a variety of infections, ranging from pneumonia, urinary tract infections, serious bloodstream or wound infections. Symptoms vary depending on the infection. Infection typically occurs in ill patients with exposure to acute and long-term care settings. Patients are particularly at high risk if they have received medical treatment in hospitals within countries where these pathogens are more prevalent. Some people may only be colonised with Carbapenem-resistant organisms.

Spread of Carbapenem-resistant Enterobacteriaceae:
Carbapenem-resistant Enterobacteriaceae bacteria are most often spread person to person in healthcare settings through direct or indirect contact with infected or colonised patients.

The resistant organisms can cause infections when they enter the body, often through medical devices such as IV lines, urinary catheters or wounds caused by injury or surgery.

Treatment of Carbapenem-resistant Enterobacteriaceae:

Carbapenem-resistant Enterobacteriaceae are often resistant to many commonly prescribed antibiotics. Occasionally they are resistant to all available antibiotics. Decisions on treatment of
infections with these organisms should be made on a case-by-case basis. Some people may be colonised rather than infected with CRE, and may therefore not require treatment.

Infection prevention & control (IPC) measures required within the community:

Detection of CRE must be followed promptly by the implementation of a robust and effective infection prevention and control strategy to prevent both transmission locally and transmission to other healthcare facilities.

Scrupulous adherence to standard (universal) infection control precautions is the most effective way of preventing the spread of CRE. Precautions should bear in mind that these organisms are generally carried in faeces and that risk of spread is increased if the patient is incontinent or has diarrhoea. Precautions include:

- Meticulous adherence to hand hygiene with soap and water. In addition, alcohol gel must be available for healthcare workers.
- Promotion of high standards of hygiene within the household or care home.
- Gloves and aprons to be worn when providing direct patient care. A risk assessment will need to be carried out regarding the use of disposable gowns i.e. in cases where there is significant contact between patient / resident and healthcare worker. For example in the case of babies or very young children.
- Re-usable equipment must be kept to a minimum. However, any re-usable equipment that is required should be left in the patient's home / residents room wherever possible. Strict decontamination of re-usable equipment following the organisations Decontamination of Equipment Policy. Additional disinfection of equipment or the environment is not normally necessary in the community. However, additional cleaning of frequently touched surfaces in the vicinity of the patient / resident is recommended.
- Linen soiled with faeces should be washed at the maximum temperature allowed for the fabric (ideally minimum 65°C) and should not be washed by hand.
- Clinical waste should be dealt with according to the organisations Waste Policy. Additional waste collections beyond those usually recommended are not usually considered necessary. However, an individual risk assessment should be undertaken.
- The presence of CRE must be clearly communicated in any referral to other healthcare provider/service, and where possible sufficient time provided to enable the provider to ensure that effective Infection Prevention and Control arrangements are in place.
- Patients in their own home should have their home visits arranged at the end of the day and care home residents should have personal care carried out after that of other residents (where possible, and safe to do so).

In order to determine whether any additional precautions are required, an individual assessment should be undertaken, taking into account the sites of patient colonisation or infection, level of continence, ability to maintain personal care, as well as standards of hygiene and hand washing facilities within the home,

Screening of contacts is usually recommended in the acute care setting depending on a persons level of exposure to a case. Screening is usually by rectal swab or stool sample, plus wound swabs and catheter urine (if present). Within the community, the requirement for screening needs to be decided on a case-by-case basis.

Decolonisation therapy is not routinely recommended for colonised patients.

Carbapenem resistant Enterobacteriaceae prevention strategies:

- Antibiotic stewardship
- Robust diagnostics and surveillance to ensure early detection (including screening of all high risk acute admissions)
- All acute Trusts to have written plans for managing cases, clusters and outbreaks. These should be agreed and endorsed by the Board.

Portable fans Use

Infection Prevention and Control do not advocate the use of portable fans in clinical environments/ clinical rooms. They have been linked to cross infection.

Portable fans can be used in non-clinical areas and must follow manufacturer's instructions to clean & disinfect when visibly soiled. The fans should be subject to planned preventative maintenance. Please contact your local Estates department for further information.

A common sense approach is required that balances the risk of infection with patient and staff comfort and safety. In cases where a fan is sanctioned for use by a healthcare facility, these guidelines aim to assist in the proper use of that fan.

Portable fans Must NOT be used in the following situations:

- In high risk areas including clinical rooms
- In rooms where a patient is on airborne precautions
- In rooms where a patient is on droplet or contact precautions e.g. clostridium difficile, MRSA, norovirus
- In the event of an outbreak

Prior to commencing use of a portable fan, complete risk assessment and confirm:

- The use of fans is not prohibited in the clinical environment
- Alternative cooling methods have been attempted with no success (air conditioning)
- The patient is in a non-restricted use location (see above)
- The use of a fan is determined to be of benefit to the patient's clinical condition or comfort

If a portable fan is sanctioned for use the following tips may be used:

Position:

- Ensure airflow is not directed towards the door of room or across environmental surfaces. The direction of flow should be upwards toward the ceiling, avoiding smoke detectors
- Ensure airflow is not blowing directly on burned skin, burn dressings, open wounds or directly into the patient's face
- In non-patient areas, such as staff stations, ensure airflow is directed within the area

Cleaning:

- Determine who will be responsible for cleaning and disinfecting the fan
- Follow the manufacturer's instructions to clean, disinfect and maintain the fan on a scheduled basis and whenever it becomes visibly soiled
- Perform hand hygiene before handling fan

Turn fan off one hour, before the following procedures:

- Any sterile or aseptic procedure e.g. intravenous cannulation, catheterisation, wound dressing change
- Any procedure that may result in sprays or splashes of body fluids e.g. nail toe cutting.

References:

- *Gupta S, Carmichael C, Simpson C, Clarke MJ, Allen C, Gao Y, et al. Electric fans for reducing adverse health impacts in heatwaves. The Cochrane database of systematic reviews. 2012;7:*
- *Covenant Health. Infection Prevention and Control - The Use of Portable Oscillating Blade Fans for use in Healthcare Facilities.*
- *Winnipeg Regional Health Authority. Acute Care Infection Prevention and Control Manual – Portable Fans Cleaning and Use Restrictions.*
- *Alberta Health Services. Infection Prevention and Control Guidance – Use of portable fans in healthcare.*

Document Control

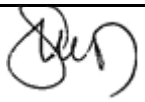
Procedure Checklist

To be completed and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

	Title of document being reviewed:	YES / NO / UNSURE	Comments
1	**Title**		
	Is the title clear and unambiguous?	Yes	
2	**Purpose**		
	Are reasons for development of the document stated?	Yes	
3	**Development Process**		
	Are people involved in the development identified?	Yes	
	Do you feel a reasonable attempt has been made to ensure relevant expertise has been used?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4	**Style/Format**		
	Is the document in the correct structure/format?	Yes	
	Is the document clear and concise?	Yes	
	Are key terms defined?	Yes	
5	**Content**		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
	Are the statements clear and unambiguous?	Yes	
6	**Evidence Base**		
	Is the type of evidence to support the document identified explicitly?	Yes	
	Are key reference cited?	Yes	
	Are the reference cited in full?	Yes	
	Are supporting documents referenced?	Yes	
7	**Approval**		
	Does the document identify which committee/group will approve it	Yes	Infection Prevention & Control Committee and Quality Committee
	If appropriate have the Joint Human Resources/Staff side committee (or equivalent) reviewed the document?	N/A	
8	**Implementation Plan**		
	Is there an implementation Plan?	Yes	
	Does the plan clearly state how the procedure will be disseminated?	Yes	
	Does the plan include the necessary training/support to ensure compliance?	Yes	

9	**Document Control**		
	Does the document identify where it will be held?	Yes	
	Have archiving arrangements for superseded documents been addressed?	Yes	
10	**Impact Assessment**		
	Is the impact assessment completed?	Yes	
11	**Review Date**		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
12	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	Deputy Director of Infection Prevention & Control. Infection Prevention & Control Team.

Individual Approval			
If you are happy to approve this document, please sign and date it and forward to the chair of the committee/group where it will receive final approval.			
Name	Rana Begum – Trustwide Lead Infection Prevention & Control Nurse	Date	8th April 2019
Signature			

Committee Approval			
If the committee is happy to approve this document, please sign and date it and forward copies to the person with responsibility for dissemination and implementing the document and the person who is responsible for maintaining the organisation's database of approved documents.			
Name	Lorraine Sunduza	Date	8th April 2019
Signature			

Equality Analysis

A template for undertaking equality analysis of new and existing policies, function, service redesign, internal reorganisations or restructuring processes.

Contents

Part 1: Equality Analysis Details

Title of 'Proposal'	Policy review
Name of Directorate	Corporate services
Name of Manager Undertaking the Equality Analysis	Rana Begum – Trustwide Lead Infection Prevention and Control Nurse
Consutation Date/s with Staff	N/A
Consultation Date/s with Service Users	N/A
Date Equality Analysis Completed	8th April 2019
Review Date **(Review at least once every 3 years)**	April 2021

Part 2: Proposal Details

1) What are the aims of the proposal? Indicate if this is a new proposal or the review of an existing one?
(The term 'proposal' covers activities such as policy development, policy review, service redesign and internal reorganisation or restructuring processes)

This is a review of existing Infection Prevention and Control Policy Manual

2) Provide a summary of the current activity to which the proposal relates e/g/ policy or service structure and provision and the reasons for the changes being proposed? (State if the proposal involves relocating a service to another site; extended service hours; puts staff at risk or involves significant change)

This is a review of existing Infection Prevention and Control Policy Manual

Part 3: Equality Analysis of Staff

Protected Groups Identify the impact or potential impact on each of the following protected groups, with due regard to the three aims of the PSED (Public sector equality duty)	**Impact Positive or Negative? Or No Impact?**	**Please describe the process of your analysis with reference to the following:** • Results of consultation • Data or research on the protected groups that you have considered • Implications for the protected groups
Age:	No impact	
Disability: (Consider a range of impairments, including – sensory, mental, physical and learning disability)	No impact	
Sex:	No impact	
Religion or Belief: (including no belief)	No impact	
Sexual Orientation:	No impact	
Race: (Including ethnicity and nationality)	No impact	
Gender Reassignment:	No impact	
Pregnancy and Maternity:	No impact	
Marriage and Civil Partnership:	No impact	

Part 4: Equality Analysis of Service Users / Patients

Protected Groups Identify the impact or potential impact on each of the following protected groups, with due regard to the three aims of the PSED (Public sector equality duty)	**Impact Positive or Negative? Or No Impact?**	**Please describe the process of your analysis with reference to the following:** • Results of consultation • Data or research on the protected groups that you have considered • Implications for the protected groups
Age:	No impact	
Disability: (Consider a range of impairments, including – sensory, mental, physical and learning disability)	No impact	
Sex:	No impact	
Religion or Belief: (including no belief)	No impact	
Sexual Orientation:	No impact	
Race: (Including ethnicity and nationality)	No impact	
Gender Reassignment:	No impact	
Pregnancy and Maternity:	No impact	
Marriage and Civil Partnership:	No impact	

Part 5: Findings from the Equality Analysis

Use this space provided below to elaborate on your decision based on the findings of the equality analysis
1. Accept the Proposal – No evidence of discrimination and appropriate opportunities have been taken to advance equality and foster good relations. Accept the proposal as there is no equality impact
2. Adjust the Proposal – Take steps to remove barriers to advance equality. It may involve introducing actions to mitigate the potential effect or to look at how to deliver the proposal in a different way. It is lawful under Equality Law to treat people differently in some circumstances, for instance developing single sex provision where required. N/A
3. Continue the Proposal – Despite adverse effect or taking opportunities to advance equality provided the proposals do not unlawfully discriminate and can be objectively justified. **(To identify whether a proposal may unlawfully discriminate due regard should be given to discrimination on the basis of the protected characteristics)** N/A
4. Stop the Proposal – The policy shows unlawful discrimination and adverse effects that cannot be mitigated N/A

Part 6: Equality Analysis Action Plan

Adverse Impact - Staff	
	No adverse impact on staff

Adverse Impact – Service Users	
	No adverse impact on service users

What Happens Next?

Once a plan has been put in place to mitigate against adverse impacts, the Equality Analysis should then be signed off by the Director/Head of the Service . Following this, the proposal can then be implemented. It is important to remember that Equality Analysis is not a once off process. It is important therefore, to be alert to emergent equality impacts throughout implementation.

This Analysis has been checked and approved by:

Name: Rana Begum

Title: Trustwide Lead Infection Prevention and Control Nurse

Date: 8th April 2019

Once completed, the document should be sent to the Trust's Risk & Datix Manager to support the policy development and review process: j.sims3@nhs.net

References

http://www.eastlondon.nhs.uk/about_us/equality_and_diversity.asp Equality Information including examples of Equality Analysis, East London Foundation Trust

www.equalityhumanrights.com Equality and Human Rights Commission

www.stonewall.og.uk Lesbian, Gay & Bisexual Information and Research, Stonewall

www.ndti.org.uk; Achieving Age Equality in Local Mental Health Services, National Mental Health Development Unit