

Standard Operating Procedure Prevention of Contamination Incidents

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Purpose

This Standing Operating Procedure (SOP) sets out the procedures to be followed to prevent a Contamination Incident.

Who should read this document?

This procedure document is applicable to all staff; to include Ministry of Defence (MOD) personnel, contractors; those employed on a fixed term contract, honorary contract, agency or locum staff and students affiliated to educational establishments and volunteers.

Key Messages

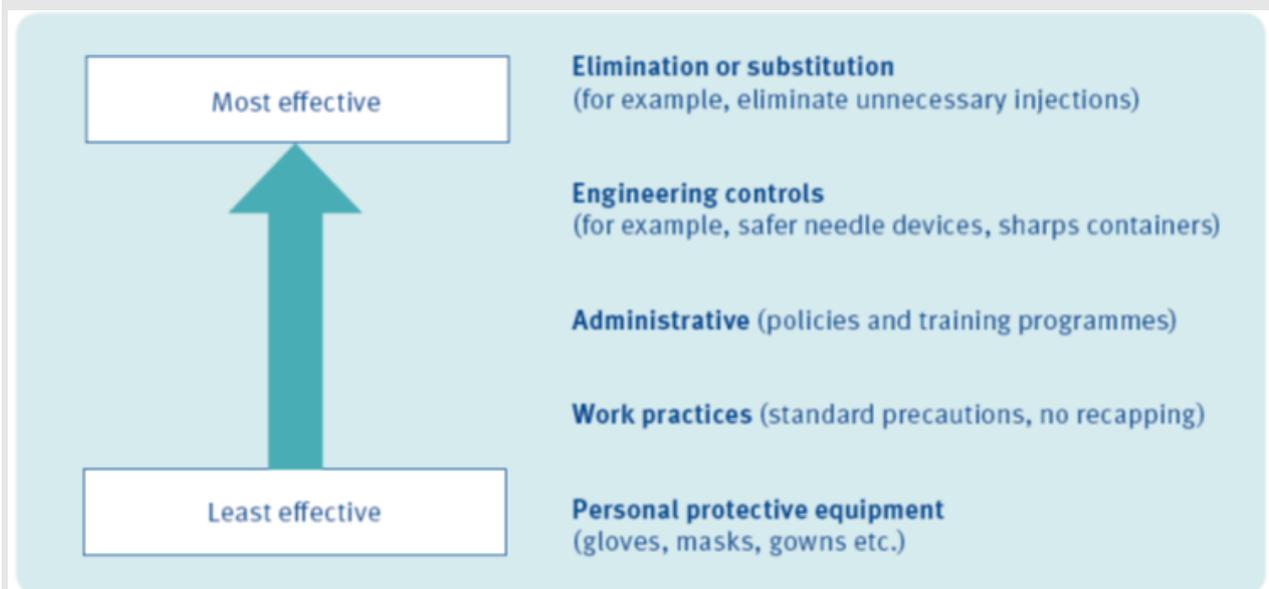
The Management of Health and Safety at Work Regulations 1999 state that Employers are required to reduce and control the risks as far as is reasonably practicable.

Furthermore, employers are required by the *Control of Substances Hazardous to Health Regulations 1994* (COSHH), to review every procedure carried out by their employees which involves contact with a substance hazardous to health, including pathogenic micro-organisms.

Employers and their employees are also responsible in law to ensure that any person on the premises (e.g., hospital patients and visitors) is not placed at any avoidable risk, as far as is reasonably practicable.

In addition, the European Directive on Safer Sharps systems (Directive 2010/32/EU) stated that sharps injuries in the healthcare sector must be prevented and systems must be in place by the required deadline of May 2013.

The Royal College of Nursing has produced guidance regarding the Directive 2010/32/EU and the following diagram related to control measures.



Core accountabilities	
Owner	Alison Williams Clinical Manager, Occupational Health & Wellbeing Department
Review	Infection Control Committee
Ratification	Medical Director
Dissemination	All PHNT Staff
Compliance	Infection Control Committee

Links to other policies and procedures

1. Management of Contamination Incidents Standing Operating Procedure 2012
2. Supporting Staff Standing Operating Procedure 2012
3. Procedure for the Assessment and Management of Risk
4. COSHH Assessment Procedure
5. Decontamination Guidelines and Procedures
6. Guidelines for the Handling of Cadavers
7. Guidelines for Staff Immunisation & Screening

Version History

V1	May 2012	Creation of SOP (from previous Control of Transmission of Blood Borne Virus Policy).
V2	May 2017	Review on expiration of SOP. Change of Dept. Title

The Trust is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff. We will treat people with dignity and respect, promote equality and diversity and eliminate all forms of discrimination, regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/maternity.

An electronic version of this document is available on Trust Documents on StaffNET. Larger text, Braille and Audio versions can be made available upon request.

Standard Operating Procedures are designed to promote consistency in delivery, to the required quality standards, across the Trust. They should be regarded as a key element of the training provision for staff to help them to deliver their roles and responsibilities.

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Standard Operating Procedure (SOP) Prevention of Contamination Incidents

1 Introduction

The Trust has a duty of care to minimise the risk of any preventable or controllable illness.

The SOP covers all staff; to include Ministry of Defence (MOD) personnel, contractors; those employed on a fixed term contract, honorary contract, agency or locum staff and students affiliated to educational establishments and volunteers.

2 Definitions

2.1 Contamination Incident - a generic term which encompasses any **percutaneous** or **mucocutaneous** exposure to an object or fluid that has the potential to cause physical injury and possibly transmit a blood-borne virus (BBV).

2.2 Percutaneous Exposure - commonly referred to as a 'Needlestick' injury, is caused by a sharp, the commonest of which is hollow bore needles, particularly following blood sampling (venepuncture). This type of injury carries the greatest risk for the transmission of BBVs in a healthcare setting.

2.3 Mucocutaneous Exposure - occurs as a result of contamination of the mucous membranes of eyes, mouth or nose or of broken skin with infected blood or other infectious material.

2.4 Significant Contamination Incidents – incidents that occur by means of the following High Risk situations:

- A deep puncture wound
- Sharps device had been in the Source's artery or vein
- Sharps device was visibly blood-stained
- Sharps device has a hollow bore such as a needle
- A large volume of body fluid into member of staff's eyes or other mucous membranes
- A large volume of body fluid onto broken skin.

Or contamination with body fluid from a Source where they:

- If male, have had sexual relationships with other men
- Were born outside of Europe, in Australia or the United States
- Have injected drugs into their veins in the past
- Have received a blood transfusion or operation outside of Europe, in Australia or the United States
- Have had a sexual partner who originates from outside Europe, from Australia or the United States
- State that one or more of the above applies to them

2.5 High Risk Body Fluid – the following are considered a high risk of transmitting a blood-borne virus:

- Blood
- Amniotic Fluid
- Human breast milk
- Vaginal secretions or semen
- Cerebrospinal fluid
- Peritoneal fluid
- Pericardial fluid
- Pleural fluid
- Saliva in association with dentistry
- Synovial fluid
- Exudative or other tissue fluid from burns or skin lesions
- unfixed human tissues and organs
- **visibly blood-stained** urine, vomit, saliva or faeces

2.6 Blood Borne Viruses (BBVs) - referred to in this SOP are:

- Human Immunodeficiency Virus (HIV)
- Hepatitis B
- Hepatitis C

Transfer of a blood-borne virus can occur when blood, or blood-stained body fluids from the infected individual comes in contact with an uninfected individual's open skin lesions or mucous membranes.

2.7 Range of Estimates for Risk of Viral Transmission

BBV Risk of transmission
Hepatitis B 6%-30%*
Hepatitis C 0.4%-1.8%
HIV 0.25%-0.4%
*Where source patient is HBe antigen positive.

2.8 Sharps - any item having corners, edges, or projections capable of cutting or piercing the skin. Sharps include medical devices such as razors, injection needles, suturing needles, lancets and scalpel blades sharp body tissues such as teeth and fragments of bone.

2.9 DATIX - is the Incident Reporting System used by PHNT.

2.10 OPAS – is the Occupational Health Computerised Management System used by the Occupational Health & Wellbeing Department (OH&WB).

3 Regulatory Background

The Health and Safety at Work etc. Act 1974 states that an employer must make provision for securing the health, safety and welfare of persons at work and for protecting others against risks to health or safety in connection with the activities of persons at work.

The Control of Substances Hazardous to Health (COSHH) Regulations 2002 as amended represents the main piece of legislation covering control of the risks to employees and other people arising from exposure to harmful substances generated out of or in connection with any work activity under the employer's control.

The Health and Social Care Act 2008 provides a Code of Practice and related guidance for health and adult social care on the prevention and control of infections.

European Directive on Safer Sharps systems (Directive 2010/32/EU) states that sharps injuries in the healthcare sector must be prevented systems must be in place by the required deadline of May 2013.

4 Key Duties

The Chief Nurse:

- Seeking assurance that the preventative measures are adhered to in accordance with the SOP.

All Employees:

- Ensuring they are familiar and comply with this SOP and associated policies/guidance.
- If risk assessed as requiring protection, ensuring that they are immunised against Hepatitis B and being aware of their immunity status in the event of a contamination incident.

Line Managers:

- Ensuring staff complete mandatory training in Prevention of Contamination Incidents.
- Undertake local risk assessments pertaining to the prevention of contamination Incidents.

The Occupational Health & Wellbeing Department (OH&WB):

- Undertaking pre-placement health screening in line with current legislation, guidance and policy and identifying any potential work restrictions especially with regards to Exposure Prone Procedures (EPPs).
- Providing immunisations and advice to employees and managers based on The Department of Health guidelines as set out in the "Green Book "(Immunisation against infectious diseases).
- Assisting Managers and staff in providing information and training in the prevention of contamination incidents.
- Reviewing and updating this SOP in line with current national guidance.

The Health and Safety Department:

- Assisting Managers and staff providing information and training in the prevention of contamination incidents.
- Supporting managers in assessing and reducing the risk of BBV exposure.

The Infection Control Team:

- Assisting Managers and staff providing information and training in the prevention of contamination incidents.

The Safer Sharps Group:

- Ensuring compliance with the European Directive on Safer Sharps systems.
- Leading the implementation of product changes following successful trials of safer sharps to evaluate the best replacement products.
- Promoting good practice in safe handling and disposal of sharps products.
- Reviewing training in respect of safe handling of sharps; propose revisions to Trust processes where required.
- Reporting the residual risk in terms of products for which there is no effective alternative; report to Trust Board and on the Trust Risk Register.

The Procurement Department:

- Helping identify products and manufacturers of devices with engineered sharps prevention features; and provide cost data for making informed decisions.

5 Procedure to Follow

5.1.1 Risk Assess the Patient

- a) Before any procedure assess the potential for the patient to be uncooperative, combative, or confused.
- b) Obtain assistance from other staff or a family member to assist in calming the patient as necessary.
- c) Inform the patient of what the procedure involves and explain the importance of avoiding any sudden movement that might dislodge the sharp, for successful completion of the procedure as well as prevention of injury to members of Staff.

5.1.2 Risk assess the Environment or Situation

- a) Access to running water (or eye wash where running water isn't available) should be available in case of accidental splash exposure.
- b) Ensure there is adequate lighting.
- c) Ensure there is adequate space to perform the procedure safely.
- d) Inform your Line Manager of concerns or if you feel there is a safer way of working.

5.1.3 Risk Assess the Task or Procedure

- a) Ensure you have been appropriately trained and are competent to perform the task.
- b) Use the recommended and appropriate equipment provided.
- c) Wear appropriate PPE (**Appendix B**).
- d) Organise equipment such as a Sharps Bin at point of use (**Appendix E**).
- e) Inform your Line Manager of concerns or if you feel there is a safer way of working.

5.1.4 During the Task or Procedure

- a) Where appropriate reassure patient.
- b) Maintain visual contact with and control the location of the sharp.
- c) Be aware of staff/other patients nearby who could be affected.
- d) Do not pass exposed sharps from one person to another.
- e) Always use a pre-determined 'neutral zone' for placing/retrieving sharps.
- f) Inform your Line Manager of concerns or if you feel there is a safer way of working.

5.1.5 After a Procedure

- a) If a device has a safety feature always activate as soon as procedure is completed.
- b) Observe audible or visual cues to confirm that the safety feature has been successfully activated.
- c) Be vigilant regarding location of sharps and ensure they are disposed of correctly during 'clean up'.
- d) Inform your Line Manager of concerns or if you feel there is a safer way of working.

5.2 Universal and Standard Precautions

These are a series of measures to reduce the risk of transmission of blood borne viruses in healthcare. The key principle is that not all patients have had their BBV infection diagnosed; therefore, all blood, tissues and some body fluids should be treated as potential sources of BBV infection.

5.2.1 Handling, Use and Disposal of Needles and Other Sharps

- a) Wherever possible use safe sharp systems such as the BD 'Eclipse' system for performing venepuncture and BD Venflon Pro-Safety when cannulating. Where safe sharp systems are not available exercise particular care in handling and disposal (**Appendix A**)
- b) Intravascular guide-wires and glass slides must be disposed of as sharps.
- c) Needles must not be re-sheathed, recapped, bent or broken prior to use or disposal.
- d) Remove needles from syringes only when essential e.g. when transferring blood to a container, or when the needle is disposable but the syringe is not, e.g. local anaesthetic syringes as used in dentistry.
- e) Remove needles and attach blind hubs to syringes containing arterial blood which are to be sent to the laboratory.
- f) Needle forceps or other suitable devices should be readily available;
- g) Dispose of your own sharps – it is your responsibility not someone else's
- h) Place all disposable sharps in appropriate sharps containers immediately after use.
- i) Discard syringes and needles wherever possible as a single unit.
- j) Objects should not be removed from the sharps container.

5.2.2 If you find discarded or improperly disposed of sharps in the workplace

- a) Take care not to be injured and alert colleagues to the location of the sharp.
- b) Take a Sharps Bin to the sharp.
- c) If possible use a device to pick up the Sharp.
- d) Dispose of sharp into Sharps Bin.
- e) Report the incident on DATIX as a 'near miss'.

5.2.3 Handling & Disposal of Blood or Body Fluids

- a) Appropriate PPE should be worn when acquiring samples (**Appendix B**).
- b) Ensure care is taken to prevent a spray of fluid whilst obtaining samples.
- c) Ensure papier-mâché containers are intact and appropriate for use (vomit bowls, bed pans and urinals)
- d) If any body fluids have spilled – ensure correct methods of cleaning are adopted.

5.2.4 Safe Use of Sharps Bins

Sharps bins used within PHNT are incinerated on-site. All containers must conform to British Standard 7320, be puncture resistant, of adequate depth and capacity and suitable for incineration.

If sharps bins are to be transported off site for disposal they must be of a type approved under the requirements of the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996.

- a) Ensure sharps bins are correctly assembled (**Appendix C**).
- b) Ensure they are labelled according to manufacturer's instructions before use.
- c) Always use the temporary closure (**Appendix D**).
- d) Sharps bins should be placed safely out of reach of children, as near as practicable to point of use.

- e) Patients who self-administer medication such as insulin should use a sharps bin to dispose of their used sharps immediately.
- f) When moving sharps bins, ensure that the seal remains closed during and after transportation and carry by the handle and away from the body.
- g) Once a sharps bin is 75% full it must be sealed by the user, marked with the name of the ward, date and time and disposed of appropriately and not with other clinical waste (**Appendix D**).
- h) Objects should not be removed from within the sharps container after disposal.

5.2.5 Care of Hands

The most important aspect of skin care is to keep skin healthy to maintain integrity.

5.2.6 Preventing Skin Problems

- a) At work and at home use moisturiser cream whenever you can ~ this helps the skin to stay healthy by maintaining its integrity. Use any emollients or treatment prescribed by your GP.
- b) Use lukewarm or tepid water to wash hands (damage can occur to the skin surface if too hot or too cold).
- c) Ensure hands are dried well after contact with water ~ but only pat hands dry with paper towels rather than rubbing.
- d) Avoid direct contact with washing up liquid and other detergents, cleaning agents, window / car / furniture / metal polishes, the peel or oil from citrus fruits such as oranges or lemons, hair shampoos, hair lotion or hair dyes, DIY chemicals such as paint or cement.
- e) Avoid prolonged contact with water ~ the use of a dishwasher and washing machine will markedly reduce your contact with water.
- f) Use PPE 'Personal Protective Equipment' (GLOVES) where appropriate (at work and home) ~ but reduce glove usage to a minimum to avoid irritation due to sweating inside the glove
- g) Wear non latex (nitrile) gloves at work to prevent the risk of latex allergy (Marigold manufacture nitrile gloves for use at home)
- h) If using gloves to wash dishes etc., ensure they are cleaned on the inside ~ turn inside out and rinse under hot water several times each week.
- i) **At home** consider using separate cotton lining gloves inside rubber or plastic gloves. (this is not recommended for work for Health Care Workers (Infection Risk))
- j) Wash and dry hands thoroughly before and after glove use.
- k) Wear warm gloves in cold weather to protect from the elements
- l) Remember rings and watch straps can aggravate and in some cases cause eczema as well as constituting an infection risk at work.
- m) It can take many months for skin to regain its resistance after an episode of eczema or dermatitis, even if the skin looks normal. Continue to follow professional advice for at least three to four months after the problem has cleared.

5.2.7 Hand Hygiene

- a) Where skin is not intact your manager must be informed and contact OH&WB for advice
- b) Cover existing wounds, skin lesions and all breaks in exposed skin with waterproof dressings (wear gloves if hands are extensively affected);
- c) Wash hands before putting on and after removing gloves.
- d) Decontaminate hands with alcohol hand gel before and after contact with each patient.

5.2.8 Personal Protective Equipment (PPE)

The main requirement of the PPE at Work Regulations 1992 is that personal protective equipment is to be supplied and used at work wherever there are risks to health and safety that cannot be adequately controlled in other ways. It is therefore considered as a 'last resort'.

PPE in a healthcare setting will include gloves, goggles, visors, aprons, closed toe footwear etc. **(Appendix B)** and should be used as follows:

- a) In situations where blood may be spilt, splashed, or where sharp instruments or needles are handled
- b) where contact with blood can be anticipated
- c) Whilst cleaning equipment prior to sterilisation or disinfection
- d) when handling chemical disinfectant
- e) When cleaning up spillages
- f) Protect mucous membrane of eyes with protective eyewear which should prevent splash injuries (including lateral splashes) without loss of visual acuity and without discomfort.
- g) Face shields may be considered appropriate for procedures which involve a risk of splatter of blood including aerosols or other potentially infectious material (various forms of combined eye and face protection are available (seek the advice of the Health & Safety or Occupational Health & Wellbeing Department).

6 In the Theatre Setting

These are of particular relevance to obstetrics and gynaecology, where the highest rates of occupational exposure of member of staff to the blood of patients have been recorded. However, the following is applicable to all areas of medicine, midwifery and dentistry where surgical procedures are performed.

In order to minimise the risk of injury, the tasks of each member of the surgical team should be outlined. Specific hazards and measures to reduce the risks from these should be identified for each team member and should be reviewed periodically.

6.1 Areas of Risk

- a) Passing suture hand to hand
- b) Guiding suture through tissue using digital pressure
- c) Tying suture with needle attached
- d) During scalpel blade use, if surgeons or assistants hand is in operating field.
- e) Passing the scalpel between surgeon and scrub nurse.
- f) Removal of the scalpel blade from the handle.
- g) Prior to, or during disposal (potentially through sharps disposal pads).
- h) Inappropriate disposal

6.2 Risk reduction strategies

- a) Opt for alternative less invasive surgical procedures where practicable and effective.
- b) Consider using safer systems such as blunt suture needles and safer scalpels (see 8.3; 8.4).**
- c) Have no more than one person working in an open wound/body cavity at any time (unless essential to the safe and successful outcome of an operation).
- d) Consider double gloving with a larger pair of gloves innermost for optimum comfort. This does not "prevent" sharps injury but has been shown to effect up to a six-fold decrease in inner glove puncture. The volume of blood transmitted may also be reduced due to the enhanced wiping effect of two layers of glove.

6.3 Handling, Use and Disposal of Sharps

- a) Avoid the use of sharp clips for surgical drapes; blunt clips are available as are disposable drapes incorporating self-adhesive operating film.
- b) Eliminate unnecessary use of sharp instruments and needles, e.g. by appropriate substitution of electrocautery, blunt-tipped needles and stapling devices for skin and bowel closure.
- c) Use instruments rather than fingers for retraction.

- d) Use a "hands-free" technique where the same sharp instrument is not touched by more than one person at a time.
- e) Avoid passing used sharps from person to person by hand, use a receiver instead.
- f) Use scalpels which are either disposable, have retractable blades or which incorporate a blade release device, use instruments when handling needles and to remove scalpel blades.
- g) Assure safer passage of necessary sharp needles and instruments via a "neutral zone" (a tray, kidney basin, a magnetic device or an identified area in the operative field) and announce when a sharp instrument or needle is placed there.
- h) Ensure that scalpels and sharp needles are disposed of or removed promptly by the scrub nurse.
- i) Direct sharp needles and instruments away from own non-dominant, or assistant's hand.
- j) Do not hold tissue with the fingers whilst suturing.
- k) Before tying sutures, remove sharp suture needles or tie with instruments rather than fingers.

6.4 Blunt Suture Needles

A safer alternative to conventional cutting and tapered suture needles is the blunt end suture needle. The tip of the needle is blunter than conventional suture needles; however the tip can still penetrate tissue. These needles cannot be used for certain procedures for example, skin closure or bowel anastomosis, however they can be used to close fascia. The fact that it is very difficult for these needles to penetrate skin should reduce likelihood of needlestick injury.

Several studies investigating the use of blunt tip needles during wound closure have found these needle types reduce needlestick exposures. For example, one study to evaluate blunt tipped suture needles as a replacement for conventional curved needles in gynaecological surgery found that the use of blunt tipped needles were associated with a statistically significant reduction in percutaneous injury rates and minimal clinically apparent adverse effects on patient care.

Overall the blunt tipped needles were generally well accepted by the gynaecology surgeons. However a small number of technical difficulties (deemed not to be clinically important) were reported with the use of these needles:

- a. Problems penetrating tissue
- b. Tearing of tissue
- c. Needle slippage
- d. Bleeding when needle entered tissue

6.5 Scalpels

Conventional scalpels are used for skin incision and tissue dissection and incorporate a metal scalpel handle with a disposable blade. Following use the blade is removed and disposed of, the handle is autoclaved. Alternatively for some applications disposable scalpels with a plastic handle and fixed scalpel blades are used, following use they are disposed of in their entirety.

6.6 Wearing of Personal Protective Equipment (PPE) (Appendix B)

Where a high volume of blood loss is anticipated or if legs or feet are at risk of contamination (as in obstetric and other procedures performed in the lithotomy position) choose waterproof gowns or wear a surgical gown with waterproof cuffs and sleeves and a plastic apron underneath.

- a) Surgical drapes with "catch-basins" are available to reduce the risk of leg and foot contamination.
- b) Wear waterproof footwear; Wellingtons or calf length overboots are preferable to shoes or clogs.

- c) Wear protective headwear and surgical mask. Male members of Staff should consider wearing hoods rather than caps to protect freshly shaven cheeks and necks.
- d) If a glove puncture is suspected or recognised, perform first aid, rescrub and re-glove as soon as safety permits.
- e) Ensure that all blood is cleansed from a patient's skin at the end of the operation, before patient leaves theatre.

6.7 Contaminated PPE

- a) Remove protective clothing including footwear on leaving a contaminated area.
- b) All contaminated reusable protective clothing, including footwear, should be subjected to cleaning and disinfection or sterilisation, with appropriate precautions for those undertaking it.
- c) Footwear should be adequately decontaminated after use.

7 During Venepuncture

Factors which increase the risks include:

- The patient is difficult to "bleed"
 - The member of staff has a cut or broken skin etc.
 - The member of staff obtaining the sample is inexperienced
 - The patient is restless
 - The patient is known to be infected with BBVs.
- a) Wherever possible use a BD Vacutainer as the routine blood collecting system. Both 21g (green) and 22g (black) BD Eclipse needles are available, plus a luer adapter for use with butterflies or cannulae.
 - b) Always take extra care to ensure bleeding has stopped after using the Vacutainer system.
 - c) Never force blood from a traditional syringe and needle, through the Vacutainer tube seal, as this can result in the production of aerosols of blood and in the separation of the syringe from the needle.
 - d) Never re-sheath ANY needle. If this is unavoidable use a safe and appropriate re-sheathing technique.
 - e) Never hold the sheath between the fingers

8 During Arterial Sampling

- a) Due to the possibility of gross contamination this procedure should only be performed by junior medical staff that have been taught by an experienced senior.
- b) Pressure must be applied to the puncture site for at least 5 minutes, until bleeding stops.
- c) The needle must be replaced by a syringe cap before transportation to the laboratory or blood gas analyser.

9 During Spillages of Blood and Body Fluids

Blood and body fluids from any individual must be considered a potential hazard and, therefore, care must be taken to avoid occupational exposure. All staff involved in dealing with body fluids have a duty of care responsibility for the safety of others as well as themselves.

- 9.1** Spillages occurring in clinical areas will be dealt with by clinical staff or staff trained in this procedure. Spillages occurring in a general public area (e.g. corridor) will be dealt with by Hotel Services staff, who should be notified immediately via their Supervisor.

9.2 Spillages of blood or blood-stained body fluids should be dealt with immediately; the area should be cordoned off and the following equipment collected together:

- a) Disposable non-sterile gloves
- b) Face/eye protection
- c) Disposable plastic apron
- d) Paper towels
- e) Bleach - Sodium hypochlorite 0.1% (1000 parts per million) diluted with tepid, not hot, water.
- f) Orange clinical waste bag

9.3 Procedure

- a) Clear up spillage of blood promptly and disinfect surfaces.
- b) Wear PPE (**Appendix B**).
- c) Where the spillage may contain sharp material, forceps should be used to remove the sharp material, placing it in an appropriate sharps bin
- d) If the spillage is large, soak up the excess fluid using paper towels and carefully place these in an orange waste bag
- e) Follow safe procedures for disposal of contaminated waste.
- f) Clean surface with warm water and detergent using a disposable cloth or mop.
- g) Apply bleach (sodium hypochlorite solution) to surfaces that will tolerate it. Wipe surfaces with a damp cloth to remove any residue.
- h) If the spill is on a carpeted area this should be cleaned using a steam cleaner or wet extract carpet shampooer.
- i) Major spills, especially if of a known infected secretion, will still require treatment with hypochlorite, which may lead to damage of the carpets unless local risk assessment can identify a less damaging and equally effective alternative.
- j) Curtains or loose fabric covers should be laundered or dry cleaned.
- k) Remove PPE and wash hands thoroughly.

10 During Decontamination of Equipment

Thorough physical cleaning of instruments in warm water with detergent to remove blood and debris is essential prior to disinfection or sterilisation, for either procedure to be effective. Neither cold nor hot water should be used for this purpose; the former may harden fats and the latter may cause proteinaceous material to adhere.

If items are despatched to suppliers, or presented for service or inspection on hospital premises without a declaration of contamination status (by a Decontamination Certificate) and without prior agreement, suppliers and other users may refuse to handle such items until they have been decontaminated and a declaration (i.e. a Decontamination Certificate) provided.

In particular situations, for example when the condition of an item which is the subject of complaint or investigation may be altered or influenced by a decontamination process, the investigator may wish the item not to be decontaminated. In such situations, the advice of the investigating body should be sought and, if the item is to be dispatched from the hospital premises:

- a) prior warning should be given to the intended recipient
- b) the condition of the item should be clearly labelled so that it can be determined prior to opening of the inner packaging
- c) the packaging should be sufficiently robust to withstand transport
- d) the packaging should ensure that the content of the inner pack cannot contaminate the outer one.

11 Whilst Handling Clinical Waste and Contaminated Linen

Defined as waste arising from medical, nursing, dental, pharmaceutical or similar practice; investigation, treatment, care, teaching or research which by nature of its toxic infectious or dangerous content may prove a hazard or give offence unless previously rendered safe and inoffensive.

Such waste includes human or animal tissue or excretions, drugs and medical products, swabs and dressing, instruments or similar substances and materials.

11.1 As with all other contaminated items, clothing and linen stained with blood or other potentially infected body fluids which is to be reused should be handled with care and placed in suitable bags for safe storage and transportation for laundering.

The recommended temperatures for thermally disinfecting linen are contained in the DH guidance Hospital Laundry Arrangements for Used and Infected Linen. In the community setting or elsewhere without access to specialist services, contaminated clothing or linen should be:

- a) Washed with detergent using the hot wash cycle of a domestic washing machine to a temperature of at least 80oC; or
- b) Dry cleaned at elevated temperatures, or dry cleaned cold followed by steam pressing; or
- c) Incinerated.

Overloading of washing machines should be avoided. If washing by hand is unavoidable, PPE must be worn (**Appendix B**).

12 Whilst Transporting and the Receipt of Specimens

Specimens which include tissues, blood and body fluids from any individual must be considered a potential hazard and, therefore, care must be taken to avoid occupational exposure.

12.1 More detailed information on collection, labelling, despatch and transport of specimens is available in the guidance used by the Advisory Committee on Dangerous Pathogens (ACDP), Protection against blood-borne infections in the workplace.

- a) For transportation by hand or by local transport should be despatched in individual sealable transparent plastic bags.
- b) A suitable means of containing request forms, e.g. a separate pocket on the bag, should be provided.
- c) Specimens from patients with known or suspected BBV infection should be conspicuously labelled or marked "danger of infection". Accompanying paperwork should be similarly labelled. For reasons of patient confidentiality the diagnosis, if known, should not be specified.
- d) The request form should give sufficient information to the laboratory staff receiving it to assess what special precautions may be required in the laboratory.
- e) Such information is confidential and is only available to those who "need to know". It should not be available to porters and others transporting specimens.

12.2 Postage of specimens within the UK

Clinical material which may contain BBVs may be sent by post provided that the conditions of the Transportation Company are met. Please refer to the following documents for further guidance:

http://www.who.int/csr/resources/publications/WHO_CDS_CSR_LYO_2004_9/en/

<http://www.hse.gov.uk/aboutus/meetings/committees/acdp/080609/acdp-92-p5g.pdf> .

13 Whilst Handling and Disposal of Cadavers

There are approximately 600,000 deaths per year in the United Kingdom and about two-thirds of these occur in hospital. Less than 1% of UK deaths are associated with a known or suspected infection, and fewer still relate to known BBV infection (HPA data – 2006*). Precautions, however, are always necessary for those handling human remains, particularly when one considers that 70% of these will be treated with some level of embalming, which involves the embalmer handling the cadaver.

Hepatitis B is known to remain viable for weeks within body fluids, and since final disposal of the body is usually just 7-10 days after death, a BBV exposure risk does exist for such workers. This is especially so where body fluids are present outside of the cadaver, as would be the case for those performing invasive post-mortem procedures, handling trauma fatalities or preparing cadavers for burial. The exposure risk is further increased by the necessary use of sharp implements during such procedures.

13.1 All staff involved in dealing with body fluids have a duty of care responsibility for the safety of others as well as themselves.

- a) Any body which is externally contaminated with blood, or known or suspected to be infected with a BBV should be placed in a disposable plastic body bag as soon as possible.
- b) Absorbent material may be needed when there is leakage, e.g. from surgical incisions or wounds.
- c) Drainage tube sites and open wounds should be covered by waterproof dressings.
- d) Those despatching a body for storage, post mortem examination or embalming should ensure there are no sharps remaining in it.

13.2 Wearing of Personal Protective Equipment (PPE)

When there is any risk of contact with blood and body fluids in handling bodies for any purpose, protective clothing should be worn (**Appendix B**).

- a) Disposable gloves and plastic aprons should be worn for all procedures where contact with blood or body fluids is expected.
- b) Gloves and aprons should be disposed of as clinical waste.
- c) Eye protection (goggles or face visor) and a high efficiency FFP3 disposable respirator mask should be worn during procedures likely to generate aerosols or droplets of blood or body fluids

13.3 Deceased patients known or suspected to be infected with a BBV

It is a statutory duty under the HASWA of those with knowledge of an infected body to ensure that those who need to handle the body, including ward/dept. staff, mortuary and post-mortem room staff and funeral personnel are aware that there is a potential risk of infection.

Although the diagnosis should be kept confidential, the discreet use of "danger of infection" or similar labelling is appropriate, always making clear what type of precautions are required.

14 Document Ratification Process

The design and process of review and revision of this procedural document will comply with The Development and Management of Trust Wide Documents.

The review period for this document is set as default of five years from the date it was last ratified, or earlier if developments within or external to the Trust indicate the need for a significant revision to the procedures described.

This document will be approved by the Infection Control Committee and ratified by the Medical Director.

Non-significant amendments to this document may be made, under delegated authority from the Medical Director, by the nominated author. These must be ratified by the Medical Director and should be reported, retrospectively, to the Infection Control Committee.

Significant reviews and revisions to this document will include a consultation with named groups, or grades across the Trust. For non-significant amendments, informal consultation will be restricted to named groups, or grades who are directly affected by the proposed changes

15 Dissemination and Implementation

Following approval and ratification, this procedural document will be published in the Trust's formal documents library and all staff will be notified through the Trust's normal notification process, currently the 'Vital Signs' electronic newsletter.

Document control arrangements will be in accordance with The Development and Management of Trust Wide Documents.

The document author(s) will be responsible for agreeing the training requirements associated with the newly ratified document with the Medical Director and for working with the Trust's training function, if required, to arrange for the required training to be delivered.

16 Monitoring and Assurance

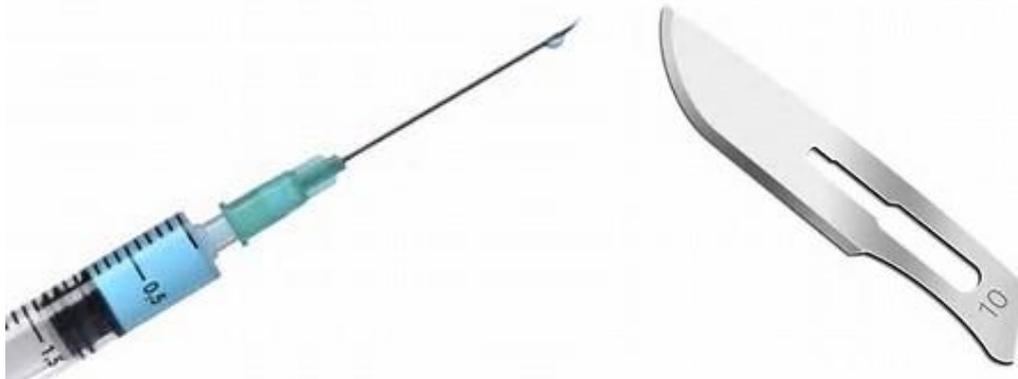
The Trust will assign a suitable member of staff to monitor the occurrence of each and every Contamination Incident via DATIX.

A Route Cause Analysis (RCA) will be undertaken where appropriate and opportunities for learning will be investigated.

1. Department of Health (DH) 1998 Guidance for clinical HCW: protection against infection with blood borne viruses: Recommendations of the Expert Advisory Group on AIDS and the Advisory Group on Hepatitis. Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002766
2. DH 2002 Hepatitis C infected HCWs. Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4010554
3. Department of Health 2007 Health clearance for tuberculosis, hepatitis B, hepatitis C and HIV: New HCWs. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073132
4. Department of Health. HIV infected HCWs: Guidance on management and patient notification. 2005.
5. Department of Health. Hepatitis B infected HCWs and antiviral therapy. 2007.
6. Department of Health. Hepatitis B; chapter 18. In: Immunisation against infectious diseases. 2009.
7. Health and Safety Executive 2001 Blood borne viruses in the workplace: Guidance for employers and employees. Available at: <http://www.hse.gov.uk/pubns/indg342.pdf>
8. Health and Safety Executive The Reporting of Diseases, Dangerous Occurrences Regulations 1995. Available at: www.riddor.gov.uk
9. National Institute for Occupational Health and Safety November 1999. Preventing needle stick injuries in healthcare settings. Available at: <http://www.cdc.gov/niosh/docs/2000%2D108/>
10. European Directive on Safer Sharps systems (Directive 2010/32/EU)

INOCULATION INJURIES CAN BE PREVENTED BY:

- Assessing the Risk
- Following Standing Operating Procedures
- Using Safe Sharps
- Wearing Eye Protection Where Necessary
- Assembling Sharps Bin Correctly
- Ensuring Sharps Bin is within Easy Reach
- Using a Receiver to Pass Sharps & Scalpels
- Disposing of Sharp immediately after Use
- Not re-sheathing Needles
- Only Filling Sharps Bin to indicator Line
- Always using Temporary Closure



Gloves



Apron



Safety Goggles



Visor



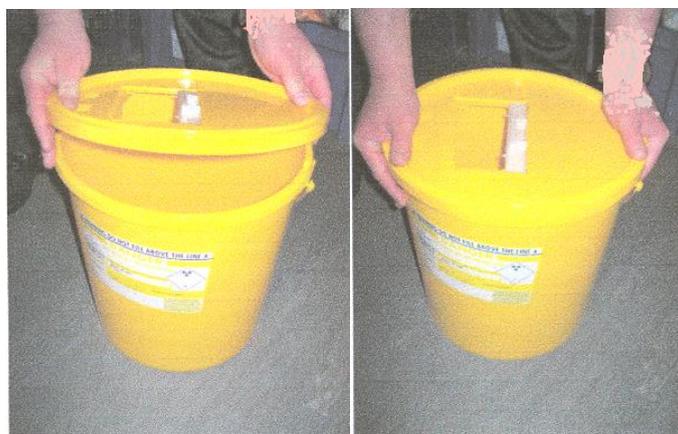
Depending on the size of bin it can be put together in two key ways



Placing the lid on a flat surface, place the bin over the lid and with gentle force push down until edges have clicked into place.



Placing bin on flat surface, place lid over bin and with gentle force push lid into place.



Do not fill above the line identified on the sharps bin.



Once locked shut, complete the "Closed / Disposal" by details.



How not to use a sharp bin!





Position the Sharps Bin at Point of Use



Use an attached Tray

Use temporary closure



Problem	Problem Assessment	Possible Prevention Strategies
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Recapping injuries	<ul style="list-style-type: none"> • Are recapping injuries associated with certain devices or procedures? • Are there certain locations where recapping injuries appear to be occurring? If so, what is different about these locations? • Is there a need to recap certain needles? • Are point-of-use needle disposal containers available so HCWs do not need to recap? • Is it likely that a device with a safety feature would prevent or deter recapping? 	<ul style="list-style-type: none"> • Implement device(s) with sharps prevention features • Install sharps disposal containers in more convenient locations • Establish a policy/procedure for safe recapping when necessary for the procedure being performed • Reinforce recommendations concerning recapping during annual BBP education
Injuries during sharps disposal	<ul style="list-style-type: none"> • Where are these injuries occurring? • Is there any pattern by occupation, location, or device? • Does there appear to be a problem with the sharps disposal container being used? If so, is it the type of container? Location (e.g. height, proximity) of the container? • If a single type of device is involved, what is it about the device and/or the disposal container that contributes to the problem? 	<ul style="list-style-type: none"> • Change the position of the sharps container • Change the type of sharps container • Re-educate staff about disposal hazards and provide instruction on safe practices
Injuries during specimen transfer	<ul style="list-style-type: none"> • How are specimens being collected? • Is there an alternative means to perform specimen collection that would avoid the need for specimen transfer? • Is there a way to avoid the need for needles during specimen transfer? Would this create another hazard? 	<ul style="list-style-type: none"> • Revise procedures for specimen collection • Purchase new specimen collection devices with safety features • Educate staff on safe means for collecting specimens
Injuries to housekeepers, laundry, and maintenance workers, and/or injuries associated with improper disposal of sharp devices	<ul style="list-style-type: none"> • Where are these injuries occurring? • Is there any pattern by occupation, location, or device? • Are sharps disposal containers available in all locations? • Are they appropriate for all needs? • Are they being used? If not, why not? 	<ul style="list-style-type: none"> • Inform the organisation as a whole of the problem via the Health & Safety Committee (or area if problem is localised) and send written communication (e.g., memo, newsletter article) • Informal meeting with key staff • Encourage reporting of improperly disposed needles and other sharps, regardless of whether injuries occur