

HAND HYGIENE

&

STANDARD INFECTION CONTROL PRECAUTIONS POLICY

(PPE, WASTE DISPOSAL, SHARPS HANDLING, LINEN
MANAGEMENT, BODY FLUID SPILLS, SPECIMEN HANDLING)

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1 Document Control Summary

Policy Title	Hand Hygiene and Standard Infection Control Precautions Policy
Policy aims	This policy aims to ensure that all Northamptonshire Healthcare NHS Trust staff working in hospital or community settings are aware of the practices, which maintains the highest standards of infection prevention and control, thus preventing the spread of infection to patient, staff and visitors, largely without the need to divulge patient information that may be confidential
Status: - New or Review	Review
Trust Policy Board Approved (Date, comments and areas of consideration)	07/04/09
Areas affected by the policy	Trustwide
Policy originators/authors	Author: Veronica Johnson-Roffey, Infection Control Senior Matron on behalf of Infection control Committee
Consultation and communication with stakeholders including public and patient group involvements (if necessary)	Circulated to members of the Infection Control Committee and for wider circulation in their areas as necessary. Circulation comprises representation from:- Mental Health & Learning Disability Services Sexual Health Service Drug and Alcohol Services Medical Representative Occupational Health, Facilities
Archiving Arrangements	A central register on the Trust intra-net will hold archived copies of this policy.
Register of Procedural Documents	A current copy of this policy will be held on a central register, on the Trust intra-net.
Equality Impact Assessment (Including Mental Capacity Act 2007)	Yes
Training Needs Analysis	See Appendix 1
Arrangements for monitoring effectiveness of policy.	Effectiveness monitored by Infection Control Committee and by infection control audits.
Meets National criteria with regard to:	
NHSLA	Yes: Standard 1.2.8 & 2.2.8
NICE	N/A
NSF	N/A
Mental Health Act	N/A
Other	"The Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance"
Further comments to be considered at the time of ratification for this policy (i.e. National policy, Legislation and consultation across SHA).	
If this policy requires Trust Board ratification please provide specific details of requirements	

2 Roles and Responsibilities

Infection control should be seen as everybody's concern and it is important that all healthcare workers observe good infection control practice.

Healthcare associated infections have an impact on the lives of patients and their families, therefore we need to do everything possible to prevent patients acquiring a healthcare associated infection. This is particularly true for people who are sometimes less aware of the need for personal hygiene because of their age or physical/mental disabilities. It is however important that unnecessary practices are avoided such as isolating patients when this may not be necessary.

The prevention and control of infection should be considered as part of all service activity and development. All managers have responsibility for infection control and cleanliness in their area and should ensure that their staff have opportunity to attend infection control training as detailed in the training needs analysis. **Appendix I**

NB: Throughout this policy wherever the term patient occurs, it incorporates residents/clients and service users.

Role of the Infection Control Senior Matron

The Infection Control Nurse (ICN) is responsible for providing advice in relation to infection control aspects of care delivery to patients in the learning disability, mental health, sexual health and addiction services of this Trust.

The ICN takes the key role in day-to-day infection control activities and serves as a specialist source of advice. S/he is an active member of the Infection Control Committee and for example, assists in drawing up infection control policies and participates in and initiates infection control audits. The ICN also provides input in identification, prevention, monitoring and control of infection in the Trust and works with the Modern Matron, Service leads and the Infection Control Link Nurses and others to improve surveillance and reporting of infections to strengthen the prevention and control of infection.

The ICN is proactive in the provision of infection control education for all levels of staff and in particular the development of the Infection Control Link Nurses.

Role of the Infection Control Committee (ICC)

The role of the Infection Control Committee is to advise the Chief Executive and Trust Board on matters relating to infection control through the Executive Governance Committee. The ICC also commission and approve policies and monitor their implementation, endorses the Trust's annual infection prevention and control programme, together with all infection control policies, procedures and guidelines.

Membership of the ICC reflects the services provided by the Trust and includes for example, the Infection Control Doctor, Infection Control Matron, Occupational Health, Estates, Facilities, Service leads and representatives from the other clinical services.

Role of the Infection Control Link Person (ICLP)

The Infection Control Link Person acts as a link between their own clinical area and the infection control team. Supported by the Infection Control Matron and their managers, their role is to increase awareness of infection control issues in their wards and departments and motivate staff to improve practice.

Northamptonshire Healthcare NHS Trust Infection Control

Name	Designation	Telephone Number
Veronica Johnson-Roffey	Trust Infection Control Matron NB: <u>First Point Of Contact For All Day-To Day Infection Control Problems</u>	01604 595216 PMH Internal: 2716 Mobile: 07917476475
Dr Tony Bentley	Consultant Microbiologist, NGH & Infection Control Advisor to NHT	01604 545138

Health Protection Agency East Midlands South

The Health Protection Agency provides Urgent infection control and outbreak advice out of hours, weekends and bank holidays.	0116 2631400 (Mon-Fri during office hours) <u>Out of Hours and weekends</u> 0115 929 6477
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Northamptonshire TB Services

TB Nurse for Northamptonshire	01604 615199
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Microbiology laboratories used by NHT

(Via main switchboards)

Northampton General Hospital	01604 634700
Kettering Hospital	01536 492000

2.1 Training

Infection control training is mandatory. Please refer to the Trust Statutory and Mandatory Training Policy HR 25, and Trust Policy for Infection Control ICP000 and see Appendix I of this policy

All clinical staff should receive hand hygiene update at least annually. Managers have the responsibility to ensure that their staff have hand hygiene updates and that they have the appropriate facilities and resources to facilitate hand hygiene practice.

A record of training delivered and names of attendees is recorded by the Infection Control Matron and passed to the Training Department for recording on the training

database. Training department will alert managers of non-attenders and it will be the manager's responsibility to follow up.

Routine infection control training will always include hand hygiene and in addition, the other elements of standard infection control precautions as outlined in this policy.

2.2 Monitoring Effectiveness

Effectiveness of all sections of this policy will be monitored by:

Audits using the DH/ICNA audit tool which included hand hygiene, sharps handling and Personal Protective Equipment. Audits will be undertaken by Infection Control Matron and Link staff annually. However for areas where the audit score is below 75% this will be repeated six months later. Results will be collated by Infection Control Matron and communicated to Matrons and Managers.

Unresolved infection control issues are entered onto local risk registers for discussion at local and directorate risk meetings.

Results of audits will be reported in the Infection Control Matron/ICC quarterly and annual reports to the Governance Committee of the Board.

Training record will be kept centrally by training department. Non-attendees for training will be reported by training department to individual managers to follow up.

2.3 Dissemination

This policy will be placed on the infection control policies site on the Intranet and a hard copy will be included in all ward/department infection control manuals. Managers are responsible for ensuring all their staff are aware of this policy.

3. Hand Hygiene and Standard Infection Control Precautions

General Introduction

There are many people in the health care setting who may be incubating a communicable disease such as chickenpox or harbouring a sub-clinical infection such as hepatitis B, C virus or HIV.

However it is not always possible to tell by looking at a person whether or not they have an infectious disease. Therefore, regardless of anyone's age, ethnicity, gender, background or lifestyle, Standard Infection Control Precautions (SICP) must be practiced at all times to protect both staff and patients. Each situation should be risk assessed to determine the precautions necessary, and all staff should be educated as to the use of SICP.

SICP aims to reduce the risk of cross infection between patients, usually via the hands of healthcare workers, and to reduce the risk of cross infection from patients to healthcare workers.

This policy covers the following SICP principles:

- Hand Hygiene
- Personal protective equipment (gloves, aprons, face protection)
- Waste disposal
- Sharps disposal and the use of sharps

- Management of used linen
- Dealing with blood and body fluid spillage
- Collection and handling of specimens

Important Note

The use of alcohol hand preparations is widely recommended as a safe and effective means of hand decontamination in most situations. However it should be noted that for religious reasons some ethnic groups might object to the use of alcohol. However in writing these policies I have spoken to Shaykh Ibrahim, Chairman of Mosque and Community Affairs Committee, within the Muslim Council of Great Britain. His advice is that, as this is a synthetic preparation, which is not ingested, it does not contravene any of the Muslim teachings. However some patients/staff may still prefer not to use this hand decontamination preparation, this should be respected and in these circumstances thorough hand washing with soap and water is recommended.

4 Hand Hygiene

Introduction

Hand decontamination is the single most important activity for preventing infection and its transmission to others. The frequency of hand decontamination is determined by assessing the risks of the procedures that have been, and are about to be, undertaken. The aim of routine hand decontamination is to remove dirt, organic material and transient micro-organisms, rendering the hands socially clean. Routine hand decontamination is sufficient before and after most activities carried out in clinical practice. Prior to minor surgery and invasive procedures, a more intensive technique would be required to reduce the number of resident organisms. (Tables 1 and 2)

The wearing of gloves is not an alternative to hand decontamination.

Table I: Resident and transient micro-organisms

Transient micro-organisms	Resident micro-organisms
Do not normally colonise the skin. They are acquired on hands through contact with other sites on the same individual, other people or the environment (cross-infection). Easy to remove by hand washing.	Deep seated (in skin folds and follicles) difficult to remove associated with surgical wound infection, and following invasive procedures and manipulations, reduced by a surgical hand wash

4.1 Hand Hygiene Principles

The following principles must be adhered to by all staff undertaking clinical care-

Maintain intact skin - bacterial counts increase when the skin is damaged. Always cover Cuts and abrasions on hands and forearms with impermeable waterproof dressing. Report any skin problems to Occupational Health Department.

Keep nails short and clean – pay special attention to nails when decontaminating hands, microbial counts are very high beneath the fingernails.

Do not wear false nails, nail art, or nail polish. They harbour micro-organisms.

Stoned rings/rings with ridges should not be worn. Rings interfere with thorough hand decontamination and glove use. A wedding band or the equivalent, depending on religious beliefs, is the only hand jewellery permitted.

Wristwatches or bracelets should not be worn in the clinical area, as wrists should be included when undertaking hand decontamination.

Sleeves must be short or rolled back as per Trust Uniform policy.

Nailbrushes should be avoided however if there is ever a need to use, they should be single use and preferably sterile.

Protect skin by regularly applying hand cream. Pump action or 'one -shot' dispensers are preferable to communal pots which may become contaminated.

4.2 Hand Decontamination Facilities

Hand decontamination can be improved by the provision of adequate and conveniently located facilities. Basins must be provided where hand washing is required and in all areas where patient consultations will take place. Clinical hand wash basins should not have a plug or overflow, and ideally should have elbow, or foot-operated mixer taps. A separate sink should be available for other cleaning purposes, such as cleaning instruments, crockery and cutlery.

Hand wash basins should have in close proximity:

Wall mounted liquid soap dispensers with disposable soap cartridges in easy reach. They must be kept clean and replenished.

Disposable paper towels must be conveniently sited next to the basins. Soft paper towels will help to avoid skin abrasions.

Foot operated pedal bins must also be positioned near the hand wash basin and be of appropriate size.

Ideally also a pump-dispensed alcohol hand preparation after risk assessment and a pump dispensed moisturiser

Table II. Levels of Hand Decontamination

Method	Solution	Task
Social/Routine	Liquid soap or alcohol gel (15-30 seconds)	For all routine tasks
Hygienic hand disinfection	Social clean (15-30 seconds) followed by an antiseptic application e.g. Chlorhexidine, povidone iodine, or alcohol based hand-rub	In high risk areas and during outbreaks
Surgical scrub	Antiseptic e.g. Chlorhexidine or povidone iodine thorough and careful washing for 2-5 minutes. Dry on sterile towels	Prior to surgical and other invasive procedures

4.3 Social/Routine Hand Decontamination

The aim of social hand decontamination is to remove the dirt and most transient microorganisms found on the hands and should be carried out as often as necessary but always:

- Before starting work
- Before eating and handling food
- Before and after giving routine care to each patient

- Before administering medications (other than injections)
- After using the toilet
- After sneezing/blowing the nose
- After cleaning activities
- Before going home

Rubbing hands together vigorously for 15-30 seconds using a gentle liquid soap and the recommended hand wash technique (fig 1) is adequate for this purpose. Liquid soap is preferable because bar soap can become contaminated. A disposable, cartridge-type system should be used to contain liquid soap; a top-up system should not be used as this could harbour micro-organisms.

4.4 Alcohol Hand Rub

Alcohol hand liquids/gels/foams may be used as an alternative to soap and water if the hands are visibly clean. They are particularly useful when hand washing may be inconvenient, e.g. opening dressing packs, in the midst of routine care and when in a patients' own home. However, alcohol hand rubs are not effective against spore forming bacteria such as *Clostridium difficile* therefore soap and water should always

be used if patient has diarrhoea or other infection caused by a spore forming bacteria.

An application of alcohol hand rub, rubbed in until evaporated, will help to remove any potential pathogens that might be left after social hand washing and should be used on occasions such as:

- Before carrying out aseptic technique
- Before performing Venepuncture
- After contact with known or suspected infected
-
- During outbreaks

However for the majority of activities either soap and water or alcohol hand preparation is sufficient and the use of both will not be necessary.

Use of a good quality moisturiser will help to protect the skin from dryness. Communal pots of cream must not be used because the contents may become contaminated; use a pump-action container for communal use or use your own individual tubes. Hand creams must be compatible with the hand-washing agent as hand creams with an anionic (A negative ion) emulsifying agent reduce the residual antibacterial effect of Chlorhexidine. Most companies who provide the liquid soap will also provide a moisturiser for pump dispensers.

4.5 Surgical Hand Decontamination

The aim of surgical hand washing is the destruction of transient organisms and a reduction of resident flora before surgical or invasive procedures.

Surgical hand washing requires the use of an aqueous antiseptic solution applied for 2-5 minutes. A more rapid effect can be obtained by applying an alcoholic solution to clean hands, rubbed vigorously into the hands and forearms until dry. Two applications of 5mls (equivalent to two squirts) of alcohol hand rub are required. Alcohol hand rub can also be used between cases if hands are visibly clean.

4.6 Hand Decontamination Technique

The technique is more important than the cleaning solution used.

- Expose the wrists and forearms (short sleeves to be worn in clinical areas or sleeves rolled up (as per "Uniform and Workwear Policy))
- Wet hands under running water
- Apply soap or aqueous antiseptic solution
- Rub all parts of the hands vigorously, without applying more water using the recognised technique: (Figure 1)
15-30 seconds for Social hand washing
- Rinse hands under running water
- Dry thoroughly using disposable paper towels
- Alternatively, apply 5mls (one squirt) of alcohol hand rub to socially clean hands for routine decontamination and rub until dry using the recognised technique (Figure 1)

4.7 Hand Drying

This is an essential part of hand hygiene. Disposable paper towels should be used, communal cloth towels have been recognised as a source of cross contamination. Paper towels must be stored in a wall-mounted dispenser adjacent to the hand washbasin, and disposed of into a foot operated domestic waste bin. Hands must not be used to lift the bin lid or they will be re-contaminated. Hand towels should be sterile if used prior to a surgical procedure. Hot air dryers are not recommended in clinical settings, because they take too long to dry the hands and may re-circulate contaminated air.

4.8 Hand Hygiene in Domestic Care Setting

The potential for cross-infection exists not only in the acute hospital setting but also in community care settings. Increasingly healthcare workers such as residential home staff undertake a variety of care in community/domestic settings. Hand washing, as an effective means of infection control is no less important in such setting. However, it is recognised that sometimes facilities for hand washing in a patient's home may be limited. All clinical community staff in NHT are provided with individual hand hygiene kits which contains soap, alcohol gel and moisturiser. Community staff should adopt the following strategies for hand decontamination in patients' homes.

- Assess the infection risk of the procedure you are to undertake
- Always decontaminate hands before and after patient care

Use: -

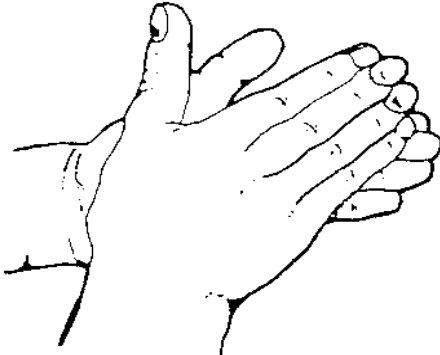
- Most appropriate room in the home for hand washing, e.g. bathroom or kitchen
- Liquid soap and kitchen roll if available
- Clean dry bar soap and designated clean cotton towel may be used as a last resort unless high-risk procedure
- Paper towel/kitchen roll to turn off dirty taps
- Paper towel in dressing pack if available for hand drying
- Carry alcohol hand rub as an alternative to soap and water.
- If possible visit patient with poor facilities at the end of shift.

4.9 Hand hygiene for patients/clients/service users

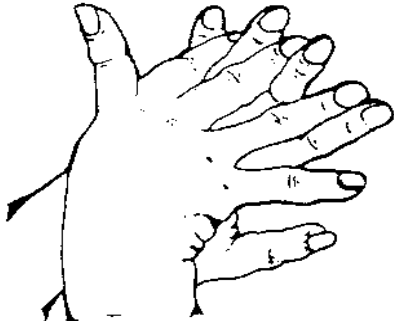
It is important to understand that cultural and religious factors may influence hand hygiene practices. Each individual patient/client/service user must have their belief respected but it is also important that as best as possible, appropriate measures are in place in order that one person's practices do not put another at risk of infection. Clinical staff must ensure that they afford patients dignity, opportunity and the equipment for hand hygiene as often as they wish. Those who are unable to practice adequate hand hygiene themselves should be offered assistance with this, especially before eating and after using the toilet.

Staff should also be aware that patients have a right to request that they, the healthcare worker perform hand hygiene before carrying out a procedure or touching them and this request should be respected.

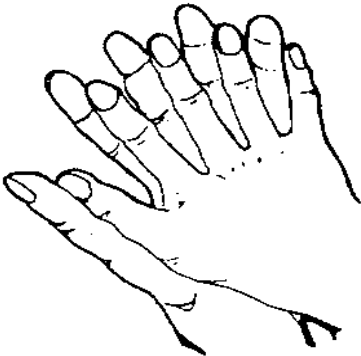
Figure I Hand Washing Technique



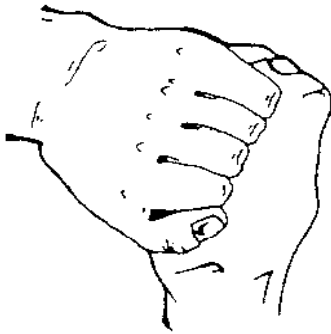
1. Palm to palm



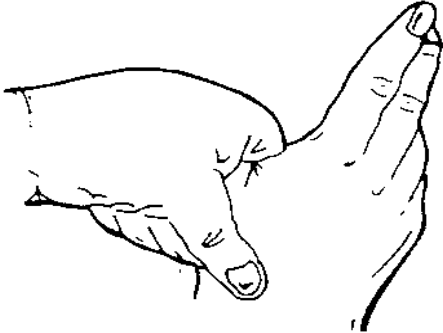
2. Right palm over left dorsum and left palm over right dorsum



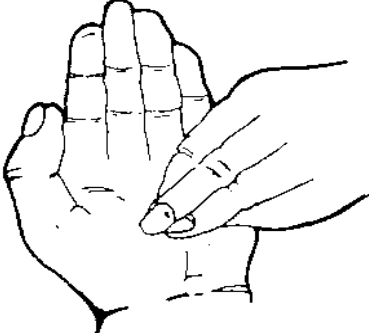
3. Palm to palm fingers interlaced



4. Backs of fingers to opposing palms with fingers interlocked



5. Rotational rubbing of right thumb clasped in left palm and vice versa



6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa

7. Finally, don't forget to wash your Wrists too

Appendix I Infection Control Training Needs Analysis

Staff Group	Standard Infection Control Training Necessary? Y or N	Frequency	Provided by
<u>Clinical</u> has patient contact in hospital or community (Nurses, Health Care Assistants/ Support workers)	Y	Induction then Clinical Update annually	Infection Control
<u>Clinical Bank Staff</u> (has pt contact in hospital or community)	Y	Induction then annually	ICN
<u>Allied Health Professionals</u> (has patient contact in hospital or community)	Y	Induction then Clinical Update annually	Infection Control
<u>Medical Staff</u> (has patient contact in hospital or community)	Y	Induction then Clinical Update annually	Infection Control
<u>Facilities</u> (domestics, Porters)	Y	Induction then Update annually	ICN
<u>Non-clinical staff</u> (e.g. Drivers, estates, ward clerks, (No direct patient contact but may be based in patient environment areas and may handle specimens)	Y	Induction then Update on hand hygiene 3 yearly	Infection Control

Standard Infection Control training Includes:

Hand Hygiene
 Use of Personal Protective Equipment
 Waste Management
 Cleaning and Decontamination
 Sharps handling
 Body fluid spillages
 Sharps/needlestick injury management
 Management of used Linen

4.11 Hand Hygiene References

- Ayliffe GAJ et al (2000) Control of Hospital Infection: a practical handbook (4th edition). London: Arnold.
- Bissett L (2002) Can alcohol hand rubs increase compliance with hand hygiene? *British Journal of Nursing* 11 (16) 1072, 1074-7
- Carroll A (2001) Handwashing for health care workers in domestic care settings. *British Journal of community Nursing* 6(5): 217-223
- Department of Health (2006) Essential steps to safe, clean care. Reducing healthcare-associated infections in Primary care trusts; Mental health trusts; Learning disability organisations; Independent healthcare; Care homes; Hospices; GP Practices and Ambulance services. DOH: London
- Greener M (1997) Why handwashing matters *Health and Ageing* Oct: 11-13
- Infection Control Nurses Association (2002) *Hand Decontamination guidelines*. ICNA
- Infection Control Nurses Association Audit Tool (2006)
- Kerr J (1998) Handwashing *Nursing standard* 12(51) : 35-39, 41-42
- Larson EL (1995) APIC Guidelines for handwashing and hand antisepsis in health care settings. *American Journal Infection Control* 23 (4): 251-269
- National Institute for Clinical Excellence. (June 2003) *Prevention of healthcare-associated infection in primary and community care. (No. 1) Standard principles*
- Pratt RJ, Pellowe CM, Wilson JA et al (2007) epic2: National Evidence- Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England. *The Journal of Hospital Infection* 65, S1-S64
- RCN (2005) *Good Practice in Infection Control: Guidance for nursing staff*. London: RCN
- Roland AJ and Alder VG (1972) Transmission of infection through towels *Community Medicine* May: 71-73
- World Health Organisation (October 2005), WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft). Part of the WHO Consultation on Hand Hygiene in Health Care Global Patient Safety Challenge, 2005-2006: "Clean Care is Safer Care." WHO

Appendix II Hand Hygiene Audit Tool

HAND HYGIENE AUDIT TOOL

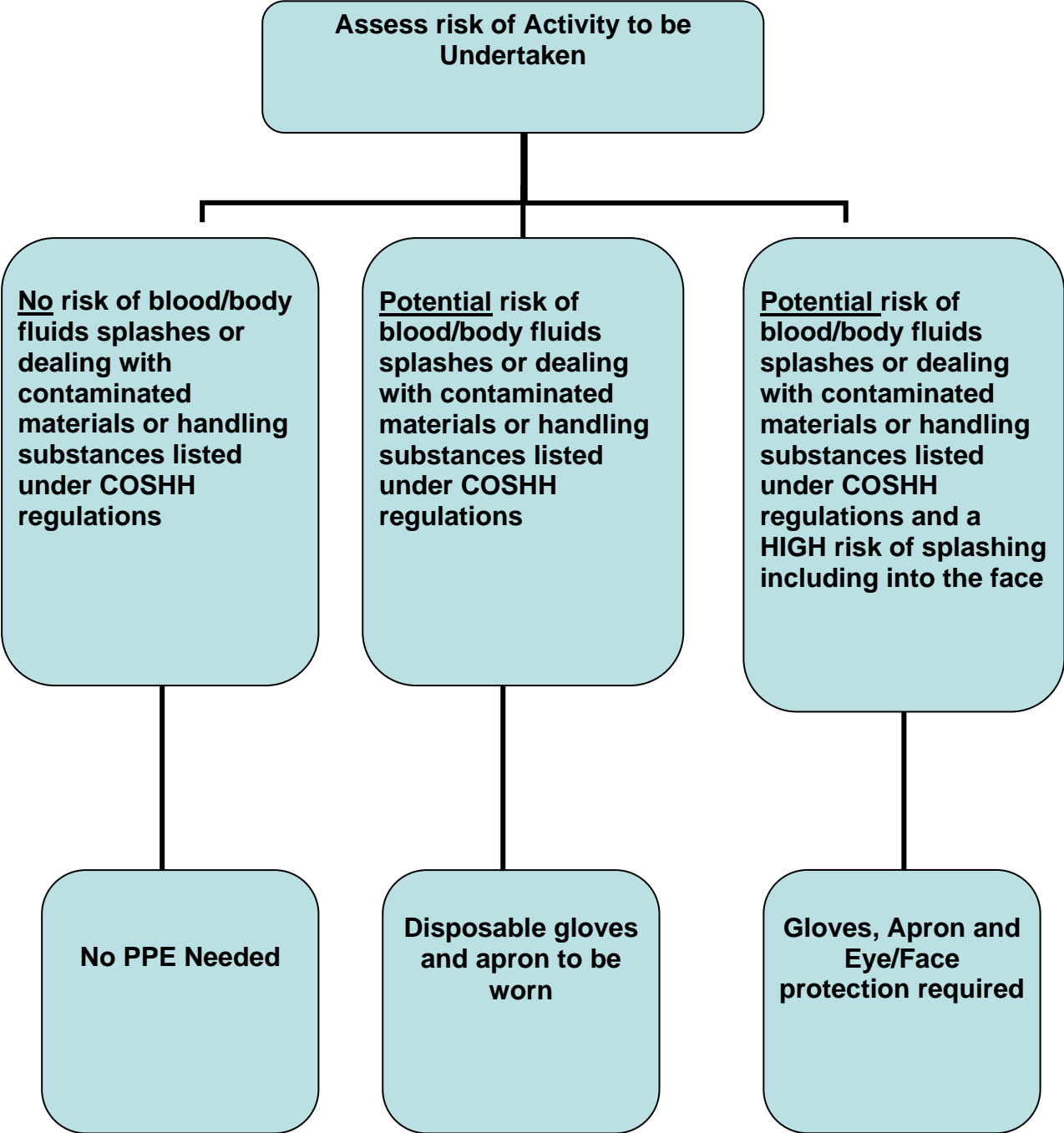
Standard – hands will be decontaminated correctly and in a timely manner using a cleansing agent, at the facilities available to reduce the risk of cross infection

Date Unit/Ward Auditor

	Criteria	Y	N	N/A	Comments
1	Liquid soap is available at all hand washing sinks				
2	Liquid soap is in single use cartridge dispensers				
3	Dispenser nozzles are visibly clean				
4	Soft absorbent paper towels are available at all hand washing sinks				
5	Foot pedal bin available near washbasin for towel disposal				
6	Hand Moisturiser is available				
7	There are no nail brushes used				
8	Hand washing sinks are free from inappropriate items – cups, medicine pots etc				
9	Hand wash sinks are dedicated for hand washing purpose only				
10	There are no plugs in the sink				
11	There are sufficient numbers of hand wash				
12	sinks available in accordance with national and local policy (e.g. one sink per six beds In mental health patient settings)				
13	Access to hand wash sinks is Not obstructed				
14	Hand washing facilities are clean and intact (check sinks, taps, splash backs.)				
15	There is appropriate temperature control to provide suitable hand wash water at all sinks				
16	Elbow operated or automated taps are available in hand wash sinks in clinical areas				
17	Alcohol hand rub is available for use either wall mounted or personal dispenser				
18	Alcohol gel is accessible at point of care				
	No wrist watches/stoned rings or other wrist jewellery are to be worn by staff performing patient care				
19	Staff nails are short, clean and free from nail polish				
20	No false or acrylic nails are worn by clinical staff				
21	Posters promoting hand hygiene are visible				
22	Staff have had hand hygiene training in the last year				
23	Patients are offered hand hygiene facilities especially after using toilet/commode and before eating				
	Observation				
24	staff use the correct procedure for hand decontamination (Observe practice of those on duty)				
25	All staff available staff can say when to use alcohol hand rubs				
26	Any signs of dermatitis (check hands of those on duty)				
26	If yes has it been checked by Occupational health?				

5 Personal Protective Equipment (PPE)

Table I Risk Assessment for use of PPE



COSHH = Control of Substances Hazardous To Health

5.1 Introduction

Personal protective equipment (PPE) is used to prevent the transfer of Microorganisms to or from patients, staff or their uniforms and equipment. The use of personal protective clothing, e.g. gloves, aprons and goggles should be adhered to for all patient contact when contamination with blood or body fluids or dealing with any contaminated material is likely. For routine infection control measures disposable gloves and apron and disposable or re-usable visor is normally sufficient and these should be readily available. If it felt that there is frequently a need for additional PPE (such as fluid repellent gowns, shoe covers) on a ward/ or department then the manager of that ward should ensure that they have a small supply of such PPE. The appropriate level of PPE should be determined according to the extent of possible exposure and not speculation about a patient infectious state (**Table 1**)

5.2 Disposable Plastic Aprons

Disposable plastic aprons provide an effective and practical barrier against the transfer of microorganisms to or from clothing. They also serve to protect the wearer from contamination from blood/body fluids. They are single use and disposable, which means that they should be used for one procedure only and then discarded as clinical waste. They should be worn for example:

- When contamination of the clothing is likely, i.e. during bed-bathing or other personal care or handling urine or faeces.
- To protect susceptible persons from microorganisms that may be present on the wearers clothing.
- Between each patient when undertaking aseptic procedures.

Where plastic aprons are used for serving food and drinks this should be a different colour (Usually Green) from that used for clinical procedures.

5.3 Gloves

Gloves protect the hands from becoming contaminated with hazardous material and help to prevent cross-contamination of the hands. Gloves should not be used as a substitute for hand hygiene. Hands should be washed with liquid soap and water and dried thoroughly or decontaminated using an alcohol preparation before putting on gloves and also on removal. Gloves should be low in allergens, powder-free, seamless, well fitting and provided in a range of materials to accommodate individuals' adverse reaction to certain materials. Currently natural latex rubber (NRL) gloves are recommended for everyone except in cases of latex allergy. Anyone who suspects they have a latex allergy should report this to the occupational health department where this can be investigated and appropriate advice given (see Trust Latex Policy in the Health and Safety policies section).

Sterile gloves Protect the patient, and are only required for aseptic procedures or when caring for immunocompromised patients.

Non-sterile gloves Protect health care workers hands from gross contamination and should be worn when in contact with blood and body fluids or other potentially infected materials or substances listed under COSHH regulations.

NB: Because gloves made from nitrile has the same chemical range as latex, Persons with suspected sensitivity to latex gloves might also react to nitrile.

Gloves should be worn whenever:

- Contact with body fluids, mucous membranes or non-intact skin or other potentially infected material is anticipated.
- Cleaning patient equipment
- Handling substances listed under COSHH

And:

- They are not an alternative to hand washing.
- They should be changed after each procedure and hands must be washed following their removal.
- Gloves should not be washed because this may be ineffective and affect their integrity.
- A risk assessment on glove suitability for purpose should be undertaken to reduce exposure to latex to the lowest practical level and to ensure gloves are “fit for the purpose” of the task (see Table 2).
- Latex-free gloves must be provided for anyone who has a latex allergy.
- Polythene gloves should not be used in the health care setting.
- Dispose of used disposable gloves as clinical waste

5.4 Eye Protection

Goggles, protective glasses or visors are worn when a particular procedure is likely to cause splashing of body fluids or substances into the eyes. This would include the manual cleaning of instruments, during certain minor surgical procedures, administration of cytotoxic agents, or procedures that create aerosols. If re-usable, they should always be washed in warm water and General Purpose Detergent (GPD) at the end of each use. After drying, store in a clean dry place.





5.5 Mask

Masks do not need to be worn during routine care / procedures.

However it may be necessary on certain occasions to wear a mask when caring for patients with for example tuberculosis or pandemic influenza as detailed in the tuberculosis and pandemic policies.

The infection control team will advise if the use of mask is necessary when caring for a patient/service user with a particular infection.

Table II Selection of appropriate gloves

Type of Glove	Example of Use	Comments
<p>Rubber household gloves. (Durable and can be re-used)</p> 	<p>General cleaning and decontamination of environment.</p>	<p>These Gloves should be washed with general-purpose GPD and water after each use. Colour coding should be evident when cleaning a variety of areas, i.e. kitchens, toilets etc. If gloves become punctured they must be discarded.</p>
<p>Polythene Seamed Gloves (Single use only)</p>	<p>Catering purposes only</p> 	<p>Offer very limited protection as seams are heat sealed and may split. Therefore NOT for use in clinical areas.</p>
<p>Latex/vinyl gloves (Non-sterile Single use only)</p> 	<p>-Non sterile examination -Clinical tactile examination -Phlebotomy -Suitable for handling blood and body fluids.</p> <p>However, wherever possible, Vinyl should only be used for procedures that do not involve prolonged contact with blood</p>	<p>Should comply with European standard EN455 parts 1,2&3 and Medical Devices Directive 93/42/EEC Vinyl can be used as an alternative in cases of latex sensitivity.</p> <p>NB: Because gloves made from nitrile has the same chemical range as latex; Persons with suspected sensitivity to latex might also react to nitrile.</p>
<p>Latex procedure gloves (Sterile single use only)</p>	<p>Basic aseptic procedures e.g. sterile dressings, catheterisation</p>	<p>Should comply with European standard EN455 parts 1,2&3 and Medical Devices Directive 93/42/EEC</p>
<p>Surgeons Gloves Sterile</p> 	<p>For contact with normally sterile parts of the body, e.g. during surgical and invasive procedures</p>	<p>Should conform as above</p>

Appendix 1 Correct Order to Don and Remove PPE



Appendix 1

Do's of PPE

- 1) Work from Clean to Dirty
- 2) Limit opportunities for touch contamination – protect yourselves, other and the environment
- 3) Discard as clinical waste.

Don't's of PPE

- 1) Don't touch your face or adjust PPE with contaminated gloves
- 2) Don't touch environmental surfaces except as necessary during patient care



Donning PPE

1. **Mask** Open mask out, tie top ties around top of head i.e. above ears, tie second ties around back of neck. Ensure close fit over bridge of nose by using the nose clip.

Then, if risk assessment denotes:

2. **Apron** Put on the apron
3. **Gloves** Put on a pair of non sterile examination gloves.

Removing PPE

- 1) **Remove gloves**
 - Grasp outer edge near wrist
 - Peel away from hand, turning glove inside out
 - Hold in opposite gloved hand
 - Discard as clinical waste
- 2) **Apron** Rip the ties of the apron and remove. Dispose of in the clinical waste bin
- 3) **Mask** Remove face mask by breaking the ties, take care not to touch face. Dispose of in clinical waste bin
- 4) **Clean hands** using soap and water and/or an alcohol hand rub

References

www.hpa.org.uk

http://www.hpa.org.uk/infections/topics_az/avianinfluenza/algorithm.htm

http://www.hpa.org.uk/infections/topics_az/avianinfluenza/guidelines.htm

Ensure all staff are familiar with national guidelines

5.6 Personal Protective Equipment References

- Ayliffe GAJ et al (2000) Control of Hospital Infection: a practical handbook (4th edition). London: Arnold.
- Department of Health (2006) Essential steps to safe, clean care. Reducing healthcare-associated infections in Primary care trusts; Mental health trusts; Learning disability organisations; Independent healthcare; Care homes; Hospices; GP Practices and Ambulance services. DOH: London
- Health and Safety Executive (1992) Personal Protective Equipment at Work: Guidance on Regulations London: HMSO
- Health and Safety Executive (1999) Control of Substances Hazardous to Health Regulations. London: HSE
- Health and Safety Executive (1996). A Guide to Risk Assessment Requirements: Common Provisions in Health and Safety Law. London: HSE
- Infection Control Nurses Association (2002) A comprehensive glove choice. Bathgate: ICNA
- Infection Control Nurses Association (2002). Protective Clothing – Principles and Guidance. ICNA.
- Medical Devices Agency (1996) Latex Sensitisation in the Health Care Setting (Use of Latex Gloves) MDA DN 9601
- Pratt RJ, Pellowe CM, Wilson JA et al (2007) epic2: National Evidence- Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England. *The Journal of Hospital Infection* 65, S1-S64
- Wilson J (2001) Infection Control in Clinical Practice (2nd edition) London: Bailliere Tindall

6 Disposal of Waste

Should be read in conjunction with Waste Management Policy: HSC020

The safe management and disposal of all types of hospital and community waste should be managed in line with among other guidance, the Environmental Protection (Duty of Care) Regulations 1991 and the 2006 Health Technical Memorandum 07-01: Safe Management of Healthcare Waste guidance.







The Health and Social Care Act (2008, Code of Practice for the NHS on the prevention and control of healthcare associated infection and related guidance. Imposes legal requirement of duty of care and requires Trust to have a Lead person to be identified for Waste Management,

Producers of waste have a duty of care to ensure the safe management of the waste at all stages of handling and transportation until its final disposal.

All staff groups who handle waste must be instructed in the safe handling, segregation and disposal of waste and must be familiar with the procedures for dealing with spillages.

6.1 Categories Healthcare Waste

Safe Management of Healthcare Waste (HTM 07-01, 2006) categories healthcare waste and have recommended a colour coding system for segregation and disposal of such waste as illustrated below.

Colour	Description
	Waste which requires disposal by incineration Indicative treatment/disposal required is incineration in a suitably permitted or licensed facility.
	Waste which may be "treated" Indicative treatment/disposal required is to be "rendered safe" in a suitably permitted or licensed facility, usually alternative treatment plants (ATPs)). However this waste may also be disposed of by incineration.
	Cytotoxic and cytostatic waste Indicative treatment/disposal required is incineration in a suitably permitted or licensed facility.
	Offensive/hygiene waste* Indicative treatment/disposal required is landfill in a suitably permitted or licensed site. This waste should not be compacted in unlicensed/permitted facilities.
	Domestic (municipal) waste Minimum treatment/disposal required is landfill in a suitably permitted or licensed site. Recyclable components should be removed through segregation. Clear/opaque receptacles may also be used for domestic waste.
	Amalgam waste For recovery

Following waste assessment and audit, the categories of waste likely to be produced in NHT are:

Waste which Requires Disposal by Incineration

This is all waste disposed of in yellow sharps container throughout the Trust.

Clinical Waste which may be treated by alternative measure (Orange Bag)

However this waste may also be destroyed by incineration.

This is waste arising from all NHT sites except for the Learning Disability Homes.

Offensive Hygiene Waste (Yellow Tiger stripe bag)

This is the waste generated from the Learning Disability Homes and is waste which can be disposed of in a suitably permitted or licensed landfill site

General Waste (Black bag)

Waste arising from offices, staff and visitors catering areas, stores, workshops and other similar areas where there is no risk of potentially infected materials being present.

6.2 Segregation of waste

Waste should be segregated into easily recognisable containers. (Appendix 1)
Protective clothing should be used when handling any waste

- **Clinical waste** (orange or tiger stripe bags) bags should be in foot operated, rigid bins. They should be removed once $\frac{3}{4}$ filled. The "Swan Neck" method of securing should be used. (Appendix 2)
- **Sharps boxes** should be kept out of public areas and out of the reach of children. Ensure correctly assembled and the lids should be closed when not in use. They should only be filled to the Maximum Fill line then container must be sealed and labelled indicating department of origin and dated.
- **Domestic waste** needs to be visibly in a separate bin from clinical or other waste.

6.3 Storage of Waste

- All waste must be stored out of the reach of the general public (in a locked, rodent and animal proof container) and handled with care.
- All waste sacks must be securely tied at the neck when $\frac{3}{4}$ full
- Clinical waste to be segregated from other waste and food preparation area.
- Clinical waste must be secured using swan neck technique and tagged, then stored in a clean secure locked area, or locked container and protected from adverse weather conditions and rodents whilst awaiting collection.
- Sharps container should never be placed in a clinical waste bag.
- Clinical waste bags must be transported in rigid leak proof containers.
- Any leakage/spillage must be dealt with immediately as indicated in spillage procedure.
- A registered waste carrier must collect clinical waste.

6.4 Clinical Waste from Patients Homes

Where professional staff treats patients at home, employers have a duty to ensure that clinical waste generated is disposed of safely. Arrangements for disposal may be made by special arrangement with the local authority, or should be risk assessed for disposal as domestic waste.

Waste generated through a procedure by a nurse in the home of a patient should be risk assessed. In most cases it is safe to deal with in the following manner:

1. Waste generated in a patient's home (e.g. small dressings, incontinence pads etc.) shall be assessed by the nurse. In most cases, it will be appropriate to dispose of the waste by double wrapping and depositing it with domestic refuse. However ensure the patient is aware of this and check with them that their bin is safe while awaiting local authority refuse collection.
2. Where, based on the assessment, a nurse decides that depositing waste with the domestic refuse is inappropriate, she may arrange for a clinical waste collection by the local authority.
3. Sharps boxes must be brought back by the Community Nurse and dealt with as in section 7.

It is not advisable for staff to carry clinical waste bags (Excluding Closed sharps boxes) in private vehicle.

Managers need to ensure that staff has adequate supplies of UN type approved sharp boxes if transporting sharps waste. All such waste carried in private vehicles should be kept safely and securely out of sight.

NB: Within Northamptonshire Healthcare Trust, The ligature audit group have discussed the standard within the NIMHE environmental audit tool regarding no plastic bags in inpatient areas.

It was agreed that there should be no plastic bags or bags with drawstrings used in patient private areas such as bedrooms within in-patient wards. Therefore clinical waste bags should only be kept in locked areas and a bag taken to the patient for care and removed to the dirty utility area after use.

6.5 Further information and advice from:

- Northampton Healthcare NHS Trust Estates Manager responsible for waste management. Via St. Mary's switchboard 01536 410141.
- Local Authority Districts and Borough councils as below for clinical waste collection advice.

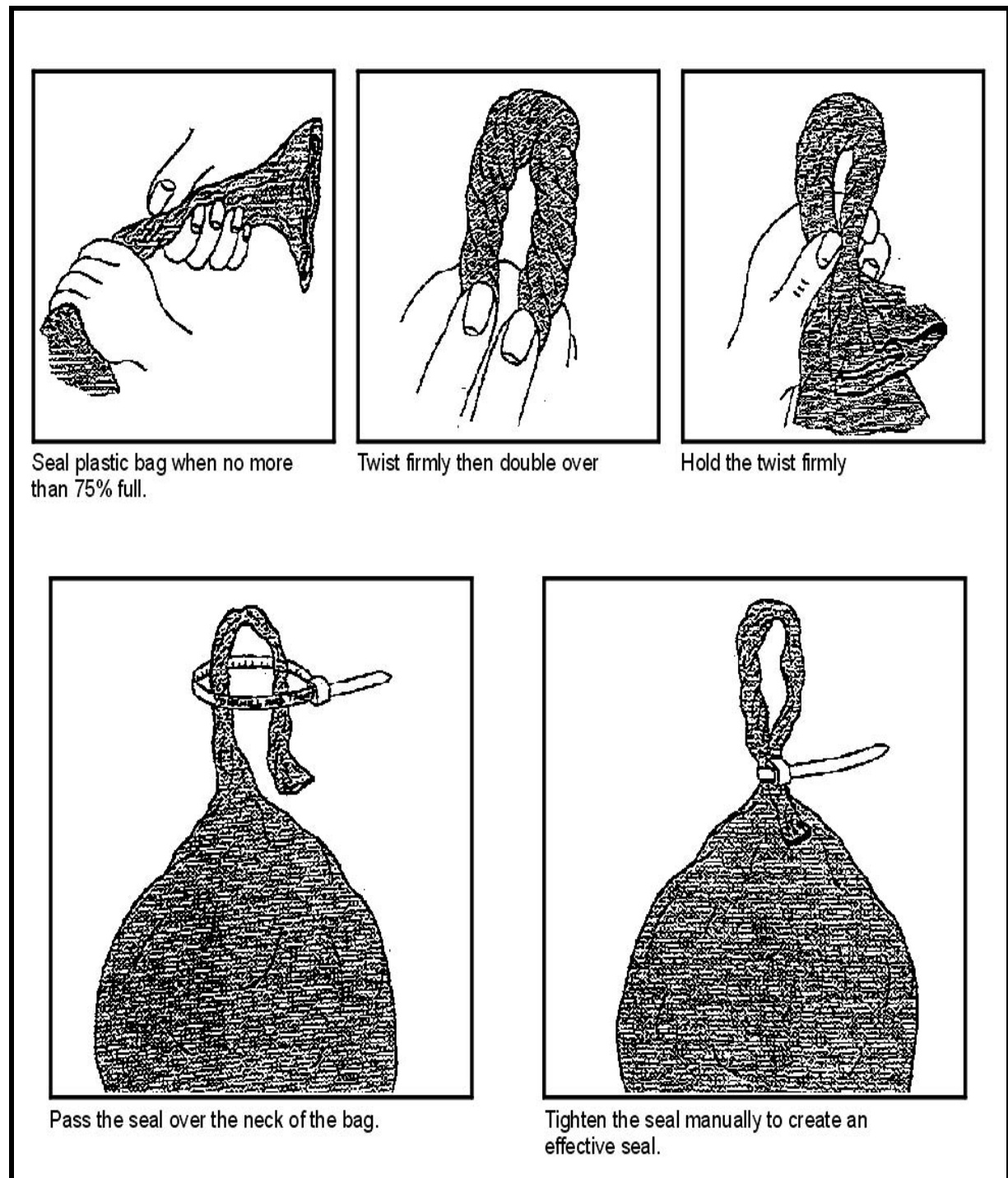
<p>Corby Borough Council Grosvenor House George Street Corby NN17 1QB Tel: (01536) 464000</p>	<p>Daventry District Council Lodge Road Daventry Northamptonshire NN11 5AF Tel: (01327) 871100</p>	<p>Borough Council of Wellingborough Council Offices Wellingborough Northamptonshire NN8 1BP Tel: (01933) 229777</p>
<p>East Northamptonshire Council Cedar Drive Thrapston Northamptonshire NN14 4LZ Tel: (01832) 742000</p>	<p>Kettering Borough Council Bowling Green Road Kettering Northamptonshire NN15 7QX Tel: (01536) 410333</p>	<p>Northampton Borough Council The Guildhall St Giles Square Northampton NN1 1DE Tel: (01604) 837837</p>
<p>South Northamptonshire Council Springfields Towcester Northamptonshire NN12 6AE Tel: (0845) 2300226</p>		

Appendix I Waste Categorisation within NHT

Category of Waste	Colour Code for Segregation	Content of Waste examples	Disposal and Storage	Current Destruction Method (MAY BE SUBJECT TO CHANGE)
Clinical Waste which may be treated. (All trust sites Except LD Homes)	Orange Clinical Waste Bag (Gauge: 2225)	Soiled dressings, swabs, used blood bags, materials contaminated with blood and body fluids. Waste from patients in isolation, PPE	-Secure with tie using "swan neck" technique -Always label bags using identification tag -Must await collection in a safe secure area	Alternative treatment
Offensive Waste (LD Homes)	Yellow Tiger stripe Bags	Incontinence pads PPE, dressings, disposable bedpans.	As above	Landfill
General Waste	Black Bag	Waste from offices, small amounts of food paper hand towels etc.	Tie bags securely and place in designated secure area to await collection.	Landfill
Sharps	Yellow Sharps Bin with yellow lid BS7320 approved.	Hypodermic needles, syringes, scalpels, lancets, giving sets, small amounts of glass, any sharp disposable instruments.	Once $\frac{3}{4}$ full secure lid, label container and store in appropriately secure area to await collection. DO NOT PLACE IN CLINICAL WASTE PLASTIC BAGS	Incineration
Pharmaceutical	Designated Pharmacy container	Out of date medicines/vaccines	Contact pharmacy To discuss.	By pharmacy
Glass, aerosols	Designated cardboard box	Glass and aerosols	Once $\frac{3}{4}$ full secure box and store in designates safe collection area	Landfill

Appendix II Securing Clinical Waste Bags

When clinical waste bags are filled to three quarters (75%) capacity, the “Swan-neck” method of sealing should be used as demonstrated below.



Source: Environmental Protection Department of Hong Kong
<http://www.info.gov.hk/epd> accessed 11th July 2005

Notice on website:

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6.6 Disposal of Waste References

- Ayliffe GAJ et al. (2000) Control of Hospital Infection: a practical handbook (4th edition). London: Arnold.
- DH (2006) HTM 07-01 Health Technical Memorandum (*Safe Management of Healthcare Waste*)
- Department of the Environment (1991) Environmental Protection Act 1990: waste management the duty of care a code of practice. London: HMSO
- Health Service Advisory Committee (1999) Safe Disposal of Clinical Waste (2nd edition). Sudbury: HSE Books
- Health and Safety Commission (2002) The Control of Substances Hazardous to Health Regulations (4th edition). Sudbury: HSE Books
- HMSO (1974) Health and Safety at work Act. HMSO London

7 Safe Use and Disposal of Sharps

7.1 Introduction

Please also refer to ICP006 Management of Occupational Exposure to blood-borne virus Policy.

Sharps frequently cause injury to healthcare workers and may transmit blood-borne viruses such as Hepatitis B, C and Human Immunodeficiency Virus (HIV).

Sharps are defined as anything which may puncture skin and which may be contaminated by blood or other body fluids. This includes cannulae, giving sets, as well as hypodermic needles and syringes, suture needles and scalpel blades.

It is the responsibility of managers and all members of staff to safeguard the health of the general public, other members of staff and themselves by complying with the Health and Safety at Work act 1974

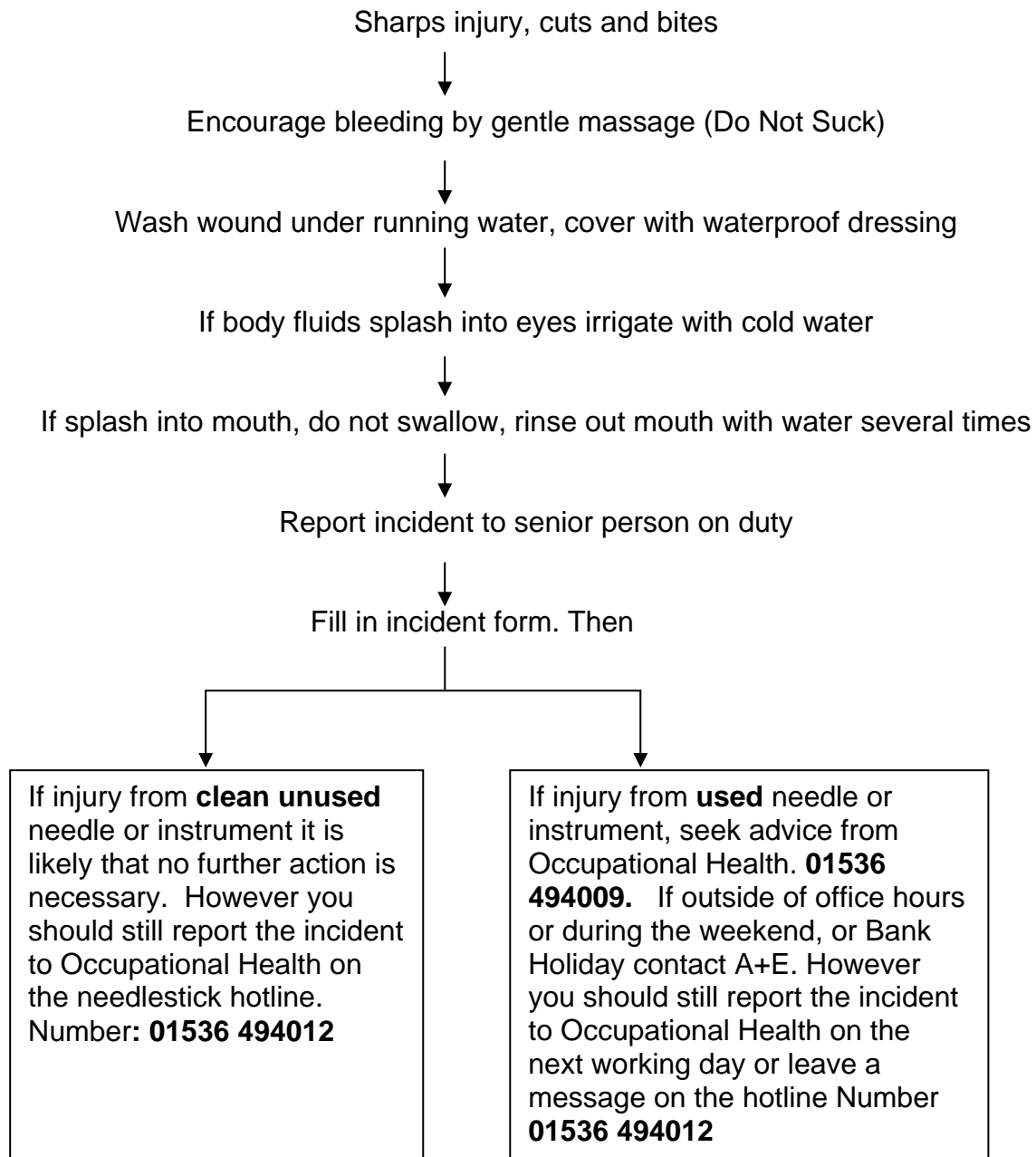
7.2 Sharps Use

- Sharps must be handled as little as possible to minimize the risk of injury
- All sharps including hypodermic needles, suture needles, cannulae, scalpel blades etc must be discarded directly and immediately into a sharps disposal container, at point of use. Sharps container must comply with BS 7320 and be of the appropriate size for its purpose. Must be correctly assembled, signed and dated by the assembler.
- Do not dispose of sharps in anything other than in an approved sharps container.

- Never re-sheath needles prior to disposal. Needles must not be bent or broken prior to use or disposal. Needle should never be removed from the syringe but should be discarded as a single unit,
- In general it is the responsibility of the person using the sharp to dispose of it properly. Do not leave your sharps for someone else to dispose of.
- Always follow the manufacturers' instructions when assembling sharps containers taking particular care to ensure that the lid is properly fastened into position prior to use.
- When full, write the area, e.g. ward, in which the sharps container has been used, the date container was sealed and sign to comply with controlled waste regulations 1992 and 1999 guidance.
- Sharps containers must be readily available in any area where sharps are used. For procedures where sharps are used at the bedside, a sharps container must be available so that the sharp can be discarded directly and immediately into the sharps container after use.
- Staff who need to transport sharps boxes within the community should ensure they are transported safely and securely.
- Sharps containers must never be placed at floor level. They should always be placed out of the reach of children and where unauthorized people cannot gain access to them when not in use.
- It is the duty of the person in charge of the area to carry out a risk assessment to determine the safest places for sharps containers to be stored to minimise the risk of injury.
- Sharps containers should ideally be secured using wall brackets or a trolley for larger containers.
- Do not attempt to retrieve any items from sharps containers and do not attempt to press down or shake the box to make more room in the sharps container.
- Do not fill sharps containers above the manufacturers fill line. Check the sharps container before use to ensure it is not overfull.
- Keep temporary closure in place when sharps box not in use.
- Permanently lock the used sharps container when ready for final disposal (i.e. 3/4 full) using the integral locking mechanism. Store in a safe designated place away from the public prior to collection. Never put in a clinical waste bag.
- Change sharps container every 4-6 weeks whether full or not.

Figure I - Action following Sharps Injury and Splash Incidents

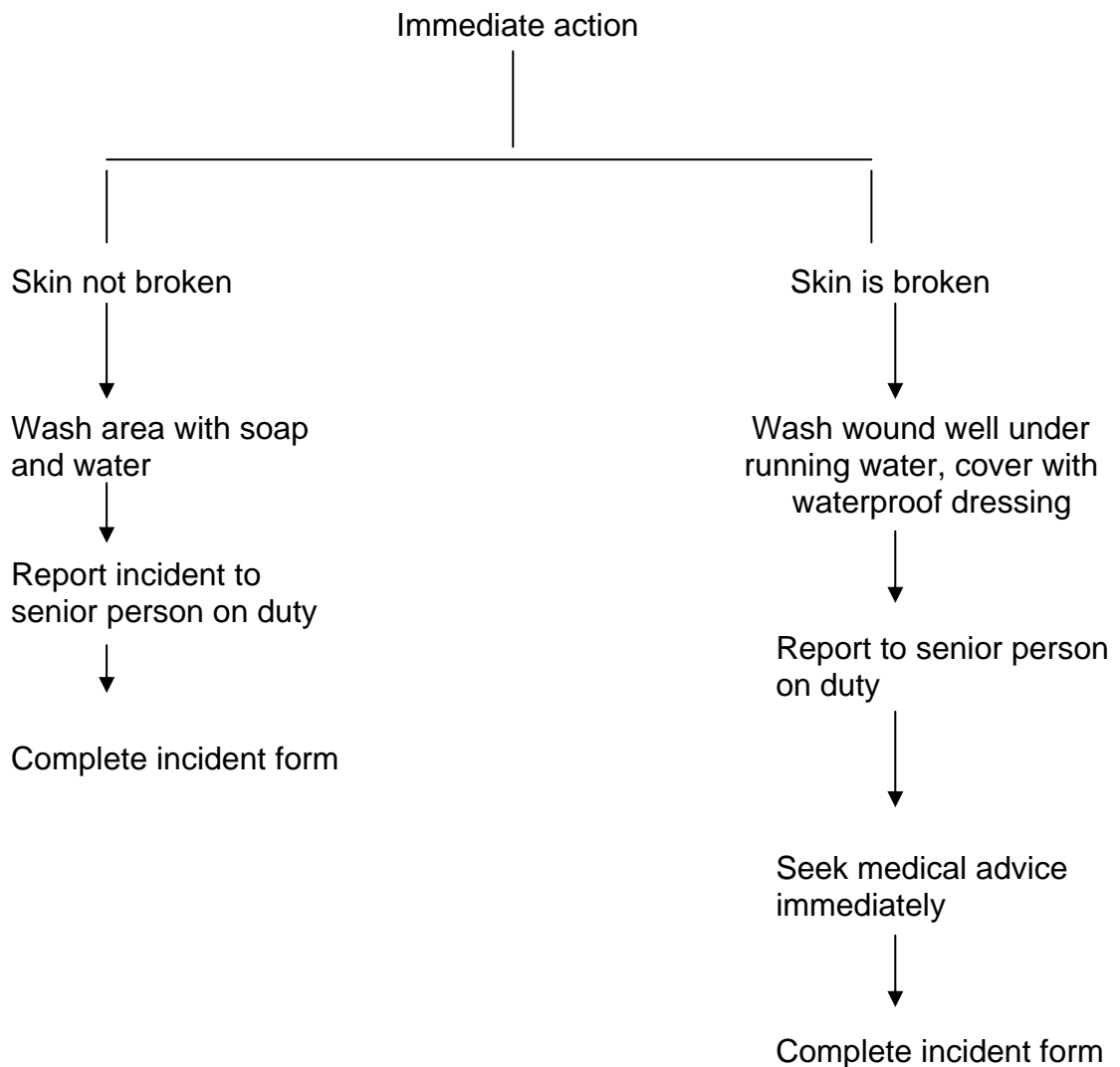
Following injury with a used sharp, follow the procedure below immediately.



During office hours Occupational Health Department can also be contacted via St Mary's Hospital switchboard: **01536 410141** or direct: **01536 494009**

Outside of office hours, weekend or bank holidays contact nearest A+E department:
Northampton General Hospital: - **01604 634700**
Kettering General Hospital: - **01536 492350 / 2435**

Figure II. Action Following Human Bite Incident



Ask yourself why accident happened, what can be done to avoid similar occurrence

Always ensure Occupational Health is informed so that records can be updated and advice given as appropriate.

Ensure you are up to date with all vaccination recommended by Occupational Health

7.3 Safe use and Disposal of Sharps References

- Ayliffe GAJ et al. (2000) Control of Hospital Infection: a practical handbook (4th edition). London: Arnold
- DH (2006) HTM 07-01 Health Technical Memorandum (*Safe Management of Healthcare Waste*)
- Department of Health (1999) guidance for clinical health care workers- protection against infection with blood-borne viruses. UK Health departments
- Department of Health (2006) Essential steps to safe, clean care. Reducing healthcare-associated infections in Primary care trusts; Mental health trusts; Learning disability organisations; Independent healthcare; Care homes; Hospices; GP Practices and Ambulance services. DOH: London
- MDA (2001) SN2001 (19) Safe Use and Disposal of Sharps
- NHS National Institute for Clinical Excellence (2003) Infection control: Prevention of healthcare associated infections in primary and community care.
- Pratt RJ, Pellowe CM, Wilson JA et al (2007) epic2: National Evidence- Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England. *The Journal of Hospital Infection* 65, S1-S64
- RCN (2005) Good Practice in Infection Control: Guidance for nursing staff. London: RCN

8 Management of Used Linen

8.1 Introduction

The term laundry and linen is used interchangeably.

It is important to ensure that no member of staff is put at risk of infection or any other form of injury during the handling or laundering of used linen. In accordance with Health and Safety, steps should be taken to avoid the risk of infection during the handling of such linen.

Linen can become contaminated with microorganisms when soiled by blood, excreta or other body fluids and from patients with infections.

The use of a colour coded bag system ensures that used linen is categorised appropriately and can be identified on arrival at the laundry, enabling specialised laundry processes where necessary.

8.2 Definitions of categories of laundry

The NHS Executive recommends three categories of used laundry:

Used (soiled or foul) – Used linen includes all linen used by a patient, whether soiled with blood, excreta or body fluids or not, except for linen that is infected or heat labile

Infected- Linen from patients with specified infection with potential to infect other patients and staff.

Heat-labile – Fabrics that are likely to be damaged by heat disinfection

8.3 General Laundry Principles

- All linen should be placed in the appropriately colour coded bag (Table1)
- All linen bags must be securely fastened before being transported to the laundry and should not be more than $\frac{3}{4}$ full.
- Always ensure an adequate supply of linen bags available.
- Staff should ensure they wear personal protective equipment (PPE) when handling used or infected linen and cover all lesions with a waterproof dressing.
- Always wash hands after handling used linen and removing (PPE)
- Ensure that there are no foreign objects or sharp instruments placed in linen bags
- Clean linen must be stored separately from used linen in a clean dry area off the floor. Excess storage of linen is generally unnecessary.

Table I Procedures for Handling Used Linen

Type of Linen	Type of Inner bag	Type of Outer Bag
Used (soiled and foul) linen- <u>includes</u> all linen used by a patient, whether soiled with blood or body fluids or not. <u>Excludes</u> linen that is infected or heat labile	White plastic bag	White nylon or polyester laundry bag
<u>Used</u> Not contaminated with blood, excreta or other body fluids	Not normally required	White nylon or polyester laundry bag
<u>Used</u> Contaminated with excreta or body fluids	white plastic bag	White nylon or polyester laundry bag
<u>Infected</u> For example: - -Diarrhoea of infective cause -Blood –borne viruses -Other infections as advised by ICN	Red water soluble bag	Red nylon or polyester laundry bag

Table II Patient Own Clothing going out to Sunlight laundry

Type of Linen/laundry	Type of Inner bag	Type of Outer Bag
All infected clothing	Red plastic bag	Blue laundry bag
All soiled clothing	White plastic bag	Blue laundry bag
<u>Non</u> -infected/soiled personal clothing/linen are washed at PMH own on site laundry	None needed	Place in the patient curtain bags provided.
Please note this table only relates to patient personal clothing. An inventory of all items placed in the blue bags must be completed on the ward and the white copy accompanies the bag and the pink and blue copies are kept for ward and patient records.		

If you have any queries regarding processing of used laundry/linen to go to Sunlight Laundry or about washing of patient's personal clothing you should contact the Linen Supervisor or Hotel Services Manager at Princess Marina or St.Mary's hospital.

8.4 On Site Laundry

Where laundering is carried out on site such as in the LD homes and rehabilitation units, the following key principles apply:

- Washing machines must be capable of withstanding recommended temperatures (65⁰C for 10 minutes and 71⁰C for 3 minutes) and must have a pre-wash/sluice cycle
- Laundering area kept separate from kitchen and other clinical rooms
- Laundry room should be cleaned daily and kept clean.
- Clean laundry should not be left in the laundry room.
- Laundering area to allow proper segregation of clean and dirty laundry
- Protective clothing available for staff
- Suitable receptacles/containers for clean/dirty linen
- Domestic washing machine should only be used for bed linen if the temperature can achieve proper heat disinfection as above
- Do not overload washing machines.
- **NO** manual sluicing of items should take place. Use pre/wash or sluice cycle on the washing machine.
- All washing machines and driers should be subjected to a planned programme of service and maintenance as part of the quality assurance programme

- Where patient/residents are encouraged to undertake their own laundering, staff should ensure that this is done safely in accordance with this policy. Therefore supervision of some patients undertaking laundry process may be necessary. Patients with infection should not be allowed to undertake their own laundry without supervision to ensure that the machines and laundry room is cleaned after their use.

8.5 Management of Used Linen References

- Ayliffe GAJ et al. (2000) Control of Hospital Infection: a practical handbook (4th edition). London: Arnold
- Department of Health NHS Executive (1995) Hospital laundry arrangements for used and infected linen. HSG (95) 18 London: HMSO
- Wilson J (2000) Infection Control in Clinical Practice (2nd edition) London: Bailliere Tindall

9 Dealing with Blood and Body Fluid Spillage

For the purpose of this policy, a spillage, however it occurs, is defined as a leak or spill of blood or other body fluid from a patient, equipment, specimen or a container. All such spillages present a potential infection hazard so must be dealt with promptly to minimise the potential transmission of blood borne viruses and other pathogens.

9.1 Responsibility

It is the responsibility of all clinical nursing staff to deal with any blood or body fluid spillage in all wards, clinics and patient care areas. Spillages that occur outside of these areas such as waiting/reception areas, public and staff toilets, public corridors etc are the responsibility of the hotel services staff. Co-operation and communication between clinical and hotel services staff is necessary for the safety of everyone. Materials for dealing with spillages should be readily available. All managers should ensure that their staff attend infection control training and are familiar with the policy and procedure for dealing with spillages and know where the materials for dealing with spillage are stored. For most spillages routine PPE (gloves, plastic aprons and goggles) is all that will be necessary and managers should ensure that these are always available. However if managers feel that in their area there is a need for additional PPE, such as waterproof overshoes and overalls then they should ensure they have a small central supply of these.

9.2 Spillage kit

The methods of cleaning up different types of body fluid spillages as detailed below should be adhered to.

Commercial spillage kits containing all the equipment for dealing with a blood spillage can be purchased via Purchasing Department and is recommended. However as an alternative, clinical areas can make up their own spills kit, which should contain as a minimum the following:

- Disposable plastic apron
- Disposable latex gloves (vinyl gloves should also be available in case of latex sensitivity)
- Small clinical waste bag
- 2 strips of rigid cardboard
- Chlorine releasing tablets (e.g. Haz-tab or Presept)
- Chlorine releasing granules (e.g. Haz-tab or Presept)
- Disposable paper towels
- Disposable cleaning cloth
- Measuring jug to make up chlorine solution according to manufacturer's instructions on packet

Spillage kits whether commercial or put together in - house should be stored under COSHH regulations as they contain chemicals.

9.3 Chlorine Releasing Agents

Chlorine releasing agents fall into two groups:

- 1) Sodium dichloroisocyanurates (NaDCC) e.g. Haz-Tab, Sanichlor, Presept
- 2) Sodium hypochlorite- e.g. Milton, Domestos

The use of the NaDCC is primarily recommended for spillages because it is more effective in presence of organic matter, less corrosive and has a longer shelf life.

Spills of blood or body fluid visibly stained with blood should be treated with chlorine releasing solution or granules. The following are important safety measures.

- To avoid skin contact with chemicals gloves and apron should always be worn for preparing and using these agents. A visor should be worn if there is a risk of splashing into face.
- Any skin splashes should be washed with cold running water immediately
- Chlorine agents must NOT be placed directly onto urine as they can release a toxic fume
- Any unused solution must be discarded immediately
- Dilute to appropriate concentration for use (see below)

CHLORINE CONCENTRATIONS:

10,000 parts per million (ppm) - For use on spillages of blood or body fluids visibly stained with blood.

1,000 ppm - For disinfecting surfaces or equipment following contamination with body fluids after they have been cleaned.

To make the above concentrations you should follow the manufacturer's instructions depending on the product you are using and strength of the tablet.

Hypochlorite (e.g. Domestos)

For use in service users home or in LD homes if Haz-tab, Sanichlor or Presept tablets not available

Remember that brands of bleach varies, but generally:

10, 000ppm dilute 1:10 parts water (i.e. 10mls of bleach in 100mls of water). Always add the bleach solution to the water and not vice versa.

1, 000ppm dilute 1: 100 parts water. Always add the bleach solution to the water and not vice versa.

Following a risk assessment and depending on the products available, blood spillage may be dealt with using either of the following methods detailed below: (see also Table 1)

9.4 Blood Spill - Liquid Method of Clearance

- Disposable powder-free gloves and aprons must be worn
- Use eye protection if there is a risk of splashing.

- Ensure good ventilation of the area if possible.
- Soak up as much of the spill as possible with disposable paper towels then gently pour NaDCC chlorine releasing solution or hypochlorite (10,000ppm) solution (e.g. Milton, Presept, Haz-Tab or Sanichlor) over fresh paper towels and leave for 2 minutes.
- After 2 minutes discard the paper towels into clinical waste bag.
- Clean contaminated area with warm water and general purpose detergent (GPD) solution and dry thoroughly.
- Discard everything used including PPE into a clinical waste sack but if reusable i.e. mop heads, should be sent to laundry in red bag and mop buckets should be thoroughly cleaned with the chlorine solution followed by detergent and water and dried.
- Wash hands.
- Minor drips or splashes of blood on inanimate surfaces should be wiped up using a paper towel soaked with NaDCC or sodium hypochlorite 10,000ppm solution (e.g. Milton, Presept, Haz-Tab or Sanichlor). After which the area should be washed with warm water and GPD and dried well.
- Discard everything used including PPE into a clinical waste sack but if reusable i.e. mop heads should be sent to laundry in red bag and mop buckets should be thoroughly cleaned with chlorine solution followed by detergent and water and dried.
- Wash hands.

9.5 Blood Spill - Granule Method of Clearance

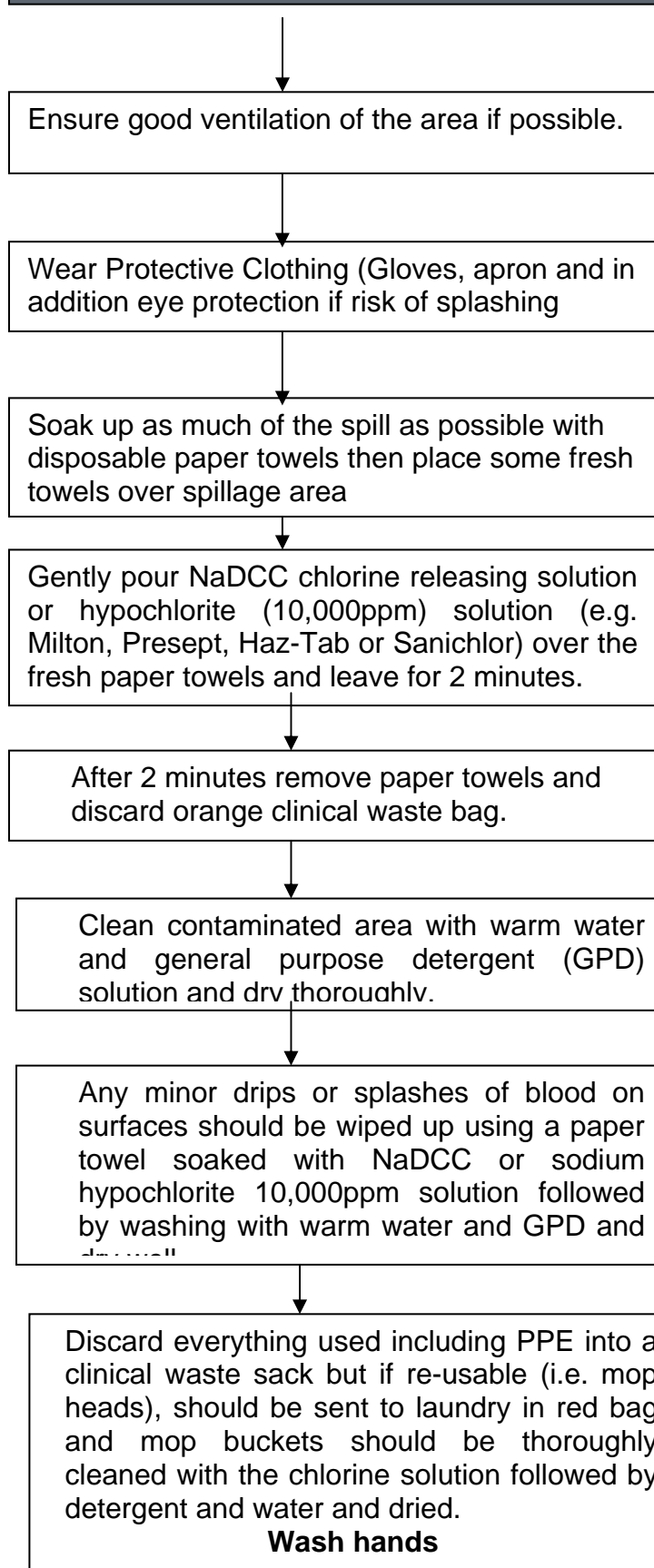
Larger spillages can be treated with absorbent NaDCC chlorine-releasing granules e.g. Haz-tabs, Sanichlor or Presept, which will ensure that the active disinfecting agent comes into contact with any micro-organisms throughout the spillage and will also limit the spread of the blood. If using one of the commercial spill kits, follow instructions on card inside. But generally:

- Wear protective clothing
- Cover spillage with NaDCC chlorine releasing granules
- Leave for 2 minutes
- Prepare bucket with warm water and GPD solution
- Scoop up the spillage with paper towels or scoop and discard as clinical waste
- Clean area with warm water and GPD using disposable cloths, rinse and dry
- Clean bucket in fresh water and GPD, rinse and dry
- Discard everything used including PPE into a clinical waste sack but if reusable i.e. mop heads should be sent to laundry in red bag and mop buckets should be thoroughly cleaned and dried.
- Wash hands
- Replace spills kit.

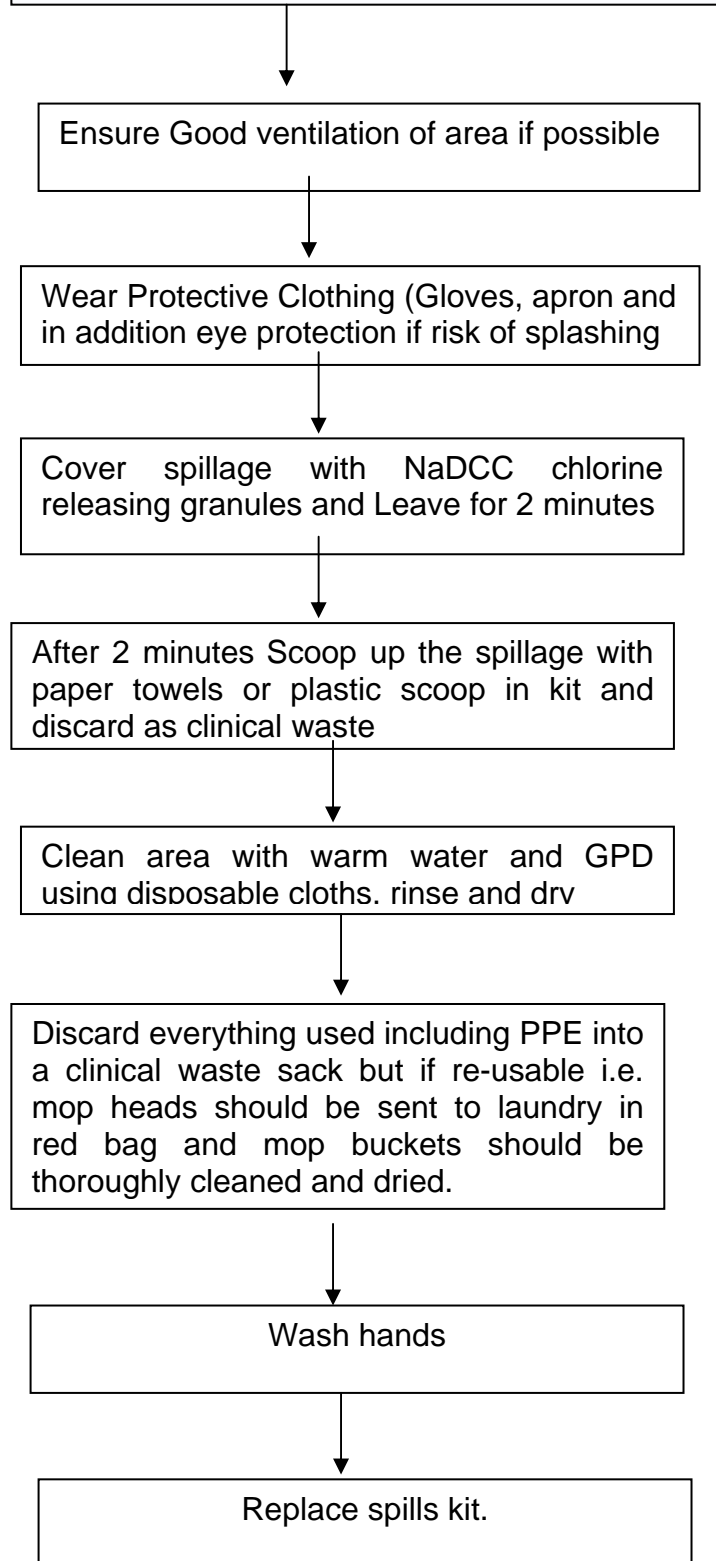
If spillage contains glass or other sharps these should be carefully picked up with forceps or between two pieces of rigid cardboard and put into sharps box.

Table I Blood Spills Clearance Methods

Blood Spill- Hypochlorite Liquid Clearance Method



Blood Spill Granule Clearance Method



9.6 Spillage in Service users own home (Includes Learning Disability homes)

If you have to deal with a spillage in a patient's home on carpet or fabric covered furniture the use of GPD and water alone is advised to avoid bleaching of carpet or furniture by hypochlorite. Wearing protective clothing, soak up the spill with disposable towels then thoroughly clean the area with GPD and warm water using disposable cloth. Make sure the area dried before use.

Dispose of protective clothing and all disposable equipment into a plastic bag Which should be double bagged in another plastic bag, securely tied and discarded with the household waste. Ensure any re-usable equipment i.e. mop buckets is thoroughly cleaned and dried before storing. Wash hands.

If the spill is blood on impervious (liquid does not penetrate it) flooring you can use a dilution of 1:10 good quality bleach e.g. Domestos. Absorb as much of the spill as possible then cover the area with absorbent paper and gently pour bleach solution and leave for 2 minutes then wipe up with paper towels and discard as above. Clean area with GPD and warm water and dry. Wash hands.

NB: In the Learning disability homes waste from such spillage should not be put in domestic waste but in clinical waste bags.

9.7 Other body fluids visibly contaminated with blood

These include spills of urine, faeces, vomit, and sputum.

- Wearing PPE, soak up the urine as thoroughly as possible with paper towels
- Clean the area with GPD and water. (chlorine solution should not be added to urine)
- The area can then be wiped over with a 10,000ppm chlorine releasing solution. However, if for example the spill is on carpet or fabric furniture where there is a risk of bleaching, then chlorine releasing solution should not be used. Instead, arrange with hotel services for the carpet area to be extractor cleaned. If on furniture the covers should be laundered on hot wash.
- Place all waste material and protective clothing into a clinical waste bag.
- Discard everything used including PPE into a clinical waste sack but if re-usable (i.e. mop heads), should be sent to laundry in red bag and mop buckets should be thoroughly cleaned with the chlorine solution followed by detergent and water and dried.
- Wash hands.

9.8 Spills of body fluids not visibly contaminated with blood

These include spills of faeces, vomit, urine and sputum.

- Wearing PPE, soak up the spill as thoroughly as possible with paper towels.
- Discard the paper towels and any other waste from the spillage into a clinical waste bag.
- Clean the area with GPD and water and dry well.
- The above should normally be sufficient; however if it is felt necessary and spillage is not on carpet or bleachable fabric, the area can be disinfected with a 1 000ppm chlorine solution.

- Discard everything used including PPE into a clinical waste sack but if reusable (i.e. mop heads), should be sent to laundry in red bag and mop buckets should be thoroughly cleaned and dried.
- Wash hands.

9.9 Blood/ Body Fluids References

- Ayliffe GAJ et al. (2000) Control of Hospital Infection: a practical handbook (4th edition). London: Arnold
- Cooper T (1999) Blood spills the evidence. *Nursing Times* 95:65,68
- DOH (1998) Clinical Health Care Workers: Protection Against Infection with Blood-borne Viruses. Recommendations of the Expert Advisory Group on AIDS. London: HMSO
- Wilson J (2000) Infection Control in Clinical Practice (2nd edition) London: Bailliere Tindall

10 Collections and Handling of Specimens

Clinical specimens include any substance, solid or liquid, (e.g. blood, urine or faeces) removed from a patient for the purpose of analysis. Managers are responsible for ensuring that their staff are competent (as guided by this policy) to handle specimens safely. Staff are responsible for ensuring that they are up to date with all immunisations recommended by Occupational Health.

All specimens must:

- Be collected in the correct container
- Have lids securely fastened on its container
- Individually placed into the correct plastic specimen bag
- Pins, staples or paper clips must not be used to secure bags, use integral sealing strip
- For larger specimens such as 24-hour urine containers these can be enclosed in individual clear plastic sacks tied at the neck. Request card should be secured to outside of the sack and not placed inside.
- All specimens should be clearly and correctly labelled with relevant clinical details
- Request form must be in separate compartment to the specimen
- Not be transported in ordinary mail envelopes
- Not be stored where food and drinks are stored or consumed
- Be stored in a dedicated specimen fridge

- Specimens collected in a patient's home should be transported safely in a rigid watertight container
- Reach the laboratory as soon as possible
- Spillage must be dealt with immediately (see spillage procedure)
- Samples tested on site should be disposed of in a sluice or toilet facility, not in a hand wash sink

Staff must:

- Wear disposable gloves and apron when handling blood and body fluids
- Should wash hands before obtaining specimen and after handling specimen
- Not contaminate the outside of the container

10.1 High Risk specimens

Specimens from patients with known or suspected infections are referred to as high-risk specimens, because they are hazardous to lab workers. These include hazard group 3 specimens such as, samples from patients with known or suspected hepatitis B, hepatitis C, HIV/AIDS, viral haemorrhagic fever, sputum from tuberculosis patients, stools from patients with typhoid, paratyphoid, or dysentery.

You should write clearly in red, "Danger of Infection" on the specimen container and the specimen request card, which accompanies specimen from patients thought to be in the high-risk group. To protect patient confidentiality you should ensure the request card contains only the necessary information needed to enable laboratory staff receiving the specimen to know what special precautions are necessary in the laboratory.

Some specimens in hazard group 4 such as Lassa fever and Ebola are not processed by the local laboratory but they will need to handle it therefore the clinician should discuss with the laboratory how such specimens should be packaged, before the specimen is taken.

10.2 Transporting Specimens

The Specimen transport carrier used for carrying specimens to the pathology laboratory must be secure and conform to guidelines set out in the Health and Safety at Work Act (1974). Other regulations that apply are the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and the use of Transportable Pressure Receptacles Regulations 1996

In this Trust all specimens should be transported to the pathology laboratory in the container provided by facilities. These should be cleaned weekly and whenever contaminated.

Staff working on the community who occasionally need to transport a specimen from a patient's home to the central collection point at Princess Marina or St Mary's hospital or the GP surgery should ensure as a minimum, that these are secured in the plastic specimen bag and transported securely in a rigid leak proof container, which should be cleaned with detergent and water and dried after every use.

Table I Specimen/Collection and Storage

SPECIMEN	REFRIGERATE?	CONTAINER	TO LABORATORY
Wound Swab	Yes	Swab containing transport medium	ASAP within 24 hours
Sputum	Yes	Plain universal container	ASAP within 24 hours
Urine	Yes	Universal container with boric acid	ASAP within 24 hours
Faeces	Yes	Stool specimen container	ASAP within 24 hours
Blood Cultures	NO – Send direct to laboratory for incubation	Specific bottles as supplied	Immediately
Blood for routine examination	Send direct to laboratory or refrigerate overnight	Specific bottles as supplied	Direct to laboratory
CSF	NO	Plain universal container	Immediately

10.3 Specimen Collection/Transport References

- Carriage of Dangerous Goods (Classification, Packaging and Labelling) (1996) London: HMSO
- Department of Health (2007) Transport of Infectious Substances: Best Practice Guidance for Microbiology Laboratories. London: DOH
- Health Services Advisory Committee (2003) Safe working and the prevention of infection in clinical laboratories and similar facilities.
- HSE Books.
- UK Health Department (1997) guidance for Clinical Health Care Workers: Protection Against Infection with Blood-borne Viruses London: HMSO
- Wilson J (2000) Infection Control in Clinical Practice (2nd edition) London: Bailliere Tindall