



Procedures for Infection Prevention and Control:

Managing Healthcare Associated
Infection & Control of Serious
Communicable Diseases

(Infection Control Policy and Strategy)

Version:	1
Ratified by:	Clinical Effectiveness Committee
Date ratified:	10/04/2007
Name of originator/author:	Clinical Effectiveness Manager East
Name of responsible committee/individual:	Clinical Effectiveness Committee
Date issued:	10/04/2007
Review date:	09/04/2008

Obtaining Urgent Infection Control Advice

Expert infection control and prevention advice is available to staff 24hrs, 7-days a week. Requests for advice must be made via Ambulance Control, who will contact the appropriate service. Non-urgent enquiries should be directed to the Clinical Effectiveness Manager in the first instance.

In-Hours

The Control Officer/Duty Manager should initially attempt to contact the Clinical Effectiveness Manager via mobile telephone. If un-available, the on-call microbiologist at the hospital concerned should be contacted. The Health Protection Agency are also available to provide specialist advice (01202 851300), with their website (www.hpa.org.uk) providing a particularly useful and authoritative source of information.

Out-of-Hours:

Out-of-hours advice is available by calling Poole General Hospital switchboard (01202 665511) and asking for the On-call Microbiologist.

Contents

Obtaining Urgent Infection Control Advice	2
1 Policy Statement	5
2 Introduction	6
3 Management of Sharps	8
4 Cleaning & Decontamination	10
Cleaning and Disinfection Solutions	10
Routine Cleaning and Disinfection (Solution 1)	10
Body Fluid Management (Solution 2)	11
Spillage Management	12
Sterilisation	12
5 Management of Linen	14
General Disposal of linen	14
Staff Uniforms	14
6 Management of Clinical Waste	16
Categories of Clinical Waste	16
Handling of Waste	17
Disposal of Clinical Waste	18
7 Care of the Deceased	19
Handling and Transport	19
8 Care of Infected Patients	20
Categories of Infectious Diseases	20
Control of Infestations	20
9 Care of Infestations	22
10 Biological Warfare Agents	24
11 Suppliers and Contractors	25
12 Infection Control Strategy	26
Internal Accountability and Responsibilities	26
Organisational Framework	27
Risk Assessment	28
Education and Training	28
Implementation Measures and Performance Monitoring	29

Appendices

Appendix 1 Microbiology & the Spread of Infection	30
Pathogenic Organisms	
The Chain of Infection	
Appendix 2 Personal Protection	33
Standard Principles (Universal Precautions)	
Hand Washing and Skin Care	
Hand Washing Technique	
Personal Protective Equipment (PPE)	
Appendix 3 Occupational Health	39
Standard Health Checks	
Additional Checks for Serious Communicable Diseases	
Immunisation	
Staff Sickness and Reporting	
Accidental Expose to Blood & Body Fluids	
Post-Exposure Prophylaxis	
Appendix 4 Specific Cleaning Procedures	49
Ambulance Stations and Trust Buildings	
Vehicle Cleaning	
Helicopter Cleaning	
Decontamination of Equipment	
A-Z of Equipment Care and Cleaning	
Cleaning of Equipment Prior to Inspection, Service or Repair	
Certificate of Equipment Decontamination	
Appendix 5 Category One Diseases	59
Appendix 6 Category Two Diseases	62
Appendix 7 Category Three Diseases	67
Transportation of Non-Isolator Patients	
Appendix 8 - Clinical Hub Contact Tracing	70
Clinical Hub Contact Tracing	

1. Policy Statement

1.1 Healthcare Associated Infections

1.1.1 There is a national drive for improved infection control within the NHS, with the Department of Health promoting evidence based guidelines and frameworks for assessment. Greater emphasis is being placed on encouraging better use of infection control to prevent infections, rather than relying on antibiotics when infections occur. Healthcare acquired infections cause serious problems for the NHS. Infections can complicate illnesses, cause distress to patients and family, and in some cases may even lead to patient death. It is estimated that healthcare acquired infections kill around 5,000 people a year and contribute to 15,000 more. Around 100,000 people acquire a healthcare associated infection each year, with 30% of these being preventable.

1.2 Commitment to Infection Control

1.2.1 South Western Ambulance NHS Trust is committed to creating robust systems of infection control, based on a comprehensive infection control policy. The annual infection control audit allows areas of good practice to be promoted, whilst systematically identifying areas where improvements are necessary. Significant progress had been made in the two former Trusts, with all clinical staff being issued with personal alcohol handrub dispensers, and infection control training continuing to be an integral part of the annual recertification program. New ambulance vehicles have been designed to minimise the accumulation of infectious agents, and to facilitate effective cleaning.

1.3 Sustaining Progress

1.3.1 Infection control measures have been independently evaluated over the past year. Both former Trusts were awarded CNST level three status in an assessment which included infection control, and was giving a green rating as part of the Governments Winning Ways infection control framework. The Trust embraces the principles of the new Hygiene Code and is fully committed to infection control; committed to creating a safer environment for both staff and patients.

Ken Wenman
Chief Executive

Gillian Bryce
Medical Director

2. Introduction

2.1 The infection Control policy has been revised to ensure that local procedures are inline with the recommendations of the Ambulance Service Association. These guidelines have been developed to aide staff to minimise the risks of transmission associated with infectious diseases. This process is dynamic, particularly in situations faced by ambulance staff daily. Safe practice can be achieved by ensuring staff:

- Are supported by management to deliver recommendations within these guidelines;
- Have received infection control training;
- Understand and can apply the principles of risk assessment to minimise the risks of transmission of infectious diseases;

2.2 Safe infection control practice requires:

- A knowledge of micro-organisms;
- The diseases they cause;
- An understanding of how they spread between humans

2.3 A useful website to learn about micro-organisms is <http://www.antibioticresistance.org.uk/>

2.4 These guidelines acknowledge that provision of a limited list of diseases may well inhibit the ability of staff to properly risk assess situations and utilise appropriate personal protection. For this reason, in addition to appendix 1, guidance for individual infectious diseases should be obtained via the Health Protection Agency: www.hpa.org.uk. The infectious disease section, whilst not exhaustive, is regularly updated by national experts and should provide a framework for risk assessment, based upon establishing:

- What the organism/disease is;
- How is it spread?
- How can staff protect themselves from transmission?

2.5 Standard principles should be applied for all patients. These have been developed and provide protection for patients and healthcare workers. The use of standard principles is supported by the National Institute for Clinical Excellence. The full NICE guidelines can be accessed via: www.nice.org.uk. External expertise can be accessed through the Health Protection Agency, Royal Bournemouth Occupational Health Service, NICE, National Patient Safety Agency and the Joint Royal Colleges Ambulance Liaison Committee (JRCALC).

2.6 The Trust is committed to tackling the risks involved and reducing the impact of healthcare associated infections on patients, staff and the organisation. Infection Prevention and Control should be integral to the

role of all operational ambulance staff and should reflect their commitment to the provision of a safe environment for patients and staff.

Page 6 was kindly provided by Anne Smith, Health Protection Agency.

3. Management of Sharps

3.1 Sharps include needles, scalpels, stitch cutters, glass ampoules, sharp instruments, razors, and broken crockery and glass, i.e. any article that can cut or puncture the skin by having a fine edge or point. Sharps must be handled and disposed of safely to reduce the risk of exposure to blood borne viruses. Always take extreme care when using and disposing of sharps. Avoid using sharps whenever possible.

3.2 All clinical procedures involving the use of sharps must only be practised by staff who have received the appropriate training and as a result are duly authorised to perform such tasks. Training should include the safe handling and disposal procedures for the sharps involved.

- Clinical sharps should be single use only and must be stored at all times in their designated containers on the vehicle or in response bags.
- Procedures involving sharps should only be attempted in the vehicle when it is stationary and extreme care must be exercised when treating restless or aggressive patients. The needle should only be removed from its sheath once the patient has been prepared.
- It is the personal responsibility of the individual using the sharp to dispose of it safely in a properly assembled sharps container provided. (BS 7320:1990 / UN 3291 standards)
- Disposable gloves should be worn when handling sharps.
- Sharps must not be passed directly from hand to hand and handling should be kept to a minimum.
- Needles and cannulae's should not be resheathed.
- Discard sharps directly into a sharps container immediately after use and at the point of use. NEVER leave clinical sharps lying around.
- Sharps should be discarded using a single handed technique. Do not hold the sharps container in the other hand. Do not ask someone else to hold it.
- Needles must not be bent or broken prior to use or disposal. Needle and syringes must not be disassembled.
- Sharps containers should be placed on a level, stable surface. They should not be placed on the floor or above shoulder height. Wall mounted boxes should be used in vehicles.
- When commissioning a new sharps container, a start date and proposed disposal date (three months after commissioning) should be entered on

the label at first usage. The container should be disposed of either when 2/3 full or at the disposal date, whichever is sooner.

- Training centre sharps containers do not contain blood products, they may therefore be disposed of when they become 2/3 full, regardless of the date.
- Sharps containers should not be filled more than 2/3 full. They should be fully closed and labelled with the fleet number or station. 'DAT' should be clearly written on the label to identify the origin of the container as South Western Ambulance Service.
- The aperture to the sharps container must be closed, but not locked, when carrying or if left unsupervised, to prevent spillage or tampering.
- Under no circumstances should a sharps container be emptied of its contents or attempts be made to retrieve items from it.
- Sharps containers should be disposed of safely in accordance with local procedures.
- Used sharps containers that become damaged should be placed into a larger secure container with the outer compartment appropriately labelled. They must not be placed into a clinical waste bag.
- Incidents where adequate and appropriate measures have not been taken to dispose of sharps, thereby putting others at risk of injury, should be regarded as adverse incidents and reported using the incident reporting system.

3.3 Guidance on needle-stick injuries can be found in appendix 3.

4. Cleaning and Decontamination

4.1 The maintenance of high standards of cleanliness on all surfaces and equipment is a crucial factor in the prevention and control of infection. Whilst all dust, dirt and moisture can harbour infection, the key risks are associated with contamination arising from contact with blood and body fluids, mucous membranes or damaged skin. In all cases the surface or equipment must be thoroughly cleaned and disinfected in order to destroy any pathogenic micro organisms.

4.2 South Western Ambulance NHS Trust has selected the following cleaning and disinfectant products:

Product	Details	Uses
Solution 1- Chlor-Clean Tablets	Tablets containing the disinfectant NaDCC (1,000ppm) together with an anionic detergent.	Routine vehicle cleaning and disinfecting.
Solution 2- 10,00ppm NaDCC tablets	Concentrated 10,000ppm NaDCC disinfectant tablets.	Cleaning body fluid spills.
Absorbent Granules	Absorbent granules combined with 10,000ppm NaDCC.	Cleaning body fluid spills
Alcohol Surface Wipes	70% Alcohol surface wipes.	Cleaning of equipment where NaDCC and water cannot be used e.g. Defibrillators, pulse-oximeters.
Single Use Spill Pack	Single use spill kit, containing absorbent granules, 10,000ppm NaDCC tablets, gloves, apron and scoop.	Cleaning body fluid spills when re-usable infection control kit is not available (e.g. PTS vehicles, response cars).

4.3 The products should be stored on each vehicle as follows, and must be checked during the vehicle daily inspection (VDI). Spare stocks must be available in all station stores.

Product	Station	A&E Ambulance	PTS Ambulance	Response Car
Chlor-Clean Tablets	Yes	No	No	No
Chlor-Clean 2 litre diluter	Yes	No	No	No
10,00ppm NaDCC tablets	No	Yes	No	No
10,00ppm 1 litre diluter	No	Yes	No	No
Absorbent Granules	No	Yes	No	No
Alcohol Surface Wipes	No	Yes	Yes	Yes
Single Use Spill Pack	No	No	Yes	Yes

4.4 Routine Cleaning and Disinfection (Solution 1):

4.4.1 Cleaning is a process which physically removes contamination, but does not necessarily destroy micro organisms. Disinfection is required to reduce the number of viable micro organisms. During routine cleaning, all surfaces should be both cleaned and disinfected. Chlor-Clean tablets contain a disinfectant (NaDCC, 1,000ppm) together with an anionic detergent. A solution strength of one tablet per one litre of water should be used to ensure a concentration of 1,000ppm. Chlor-Clean tablets will be stocked at all stations for routine surface cleaning.

4.4.2 Cleaning Procedure:

1. Fill the Chlor-Clean diluter with 2 litres of water.
2. Add two Chlor-Clean tablets.
3. Wait 2-3 minutes to dissolve.
4. Apply solution using a cloth or mop.
5. After cleaning, surfaces should be thoroughly dried.

4.4.3 Within the service, mop heads are colour coded for use in specific areas:

Red:	Toilets, showers and sluice
Green:	Garage areas
Blue:	Ambulance vehicle interior
Yellow:	Changing areas, kitchen, corridors, other general areas

4.4.4 Any remaining solution must be disposed of using the normal drainage system. To reduce the risk of cross-contamination, mops, disposable cloths and buckets should not be used or transferred between different areas. Cleaning equipment must be stored clean and dry between uses. Preferably use single use, non-shredding cloths rather than re-usable cloths. Do NOT store brushes or mops in disinfectant solution.

4.5 Body Fluid Management (Solution 2):

4.5.1 Disinfection is a process used to reduce the number of viable micro organisms and can apply to hand washing, skin preparation and equipment. South Western Ambulance Trust has chosen a 10,000ppm NaDCC solution (solution 2) for this purpose. NaDCC tablets and a diluter will be kept in the infection control box in each A&E ambulance, and a smaller stock will be contained in the single use spill kit kept on all other vehicles. The solution should be made up as and when required. Where possible, water should be obtained from an ambulance station or hospital. However, in the absence of an available water supply, the bottles of sterile water kept on all ambulances for irrigation should be used.

4.5.2 Solution Preparation Procedure:

1. Use PPE (goggles, aprons and gloves).
2. Ensure that the area is ventilated.

3. Fill the Haz-Tab diluter with one litre of water (from tap or sterile irrigation bottle).
4. Add four (4.5g) Haz-Tab tablets.
5. Wait 2-3 minutes to dissolve
6. After cleaning is complete, discard remaining solution.

4.5.3 Cleaning is an essential prerequisite of equipment decontamination to ensure effective disinfection or sterilisation can subsequently be carried out. When cleaning by hand, a sink is needed which is deep enough to completely immerse the items to be cleaned. Precautions must be taken to prevent splash and injury. Scrubbing can generate aerosols which may convey infective agents. If scrubbing is necessary it must be carried out with the brush and item beneath the surface of the water.

4.6 Spillage Management:

4.6.1 Effective management of blood and body fluid spillage is a crucial factor in controlling the spread of infection. Exposure to any such fluid constitutes a risk to all staff and others within the immediate environment. These risks can be minimised by dealing promptly with the spillage by appropriate cleaning and disinfection.

4.6.2 In general, the volumes of most blood or body fluid spills that occur are not excessive, e.g. blood smeared on a sharps box. They can be managed by wiping with a detergent wipe. In the event of a larger spill where this method would not be sufficient, the use of absorbent powder from a spillage kit should be used.

1. Use PPE (goggles, gloves, and apron).
2. Ventilate area if possible.
3. DO NOT pick up any broken glass, even with gloved hands.
4. Use two pieces of rigid card, or a scoop & scraper, and place broken glass into the sharps container.
5. For large spills in excess of 10-20mls absorbent granules should be applied liberally to the spill. The granules will absorb the spill, and contain a 10,000ppm NaDCC disinfectant to inactivate the pathogens in the fluid.
6. The surface should then be cleaned using solution 2.
7. Discard protective clothing and materials as clinical waste.
8. Wash hands.

4.7 Sterilisation

4.7.1 Sterilisation is a process used to render the object free from viable microorganisms, including spores and viruses, but not prions. All clinical instruments and equipment used to surgically penetrate skin, tissue or mucosa - MUST be sterile.

4.7.2 Sterile instruments can be obtained by:

- Purchasing pre-sterilised single use items. These avoid the need for re-sterilisation and are a practical and safe method. They must be stored using a stock rotation system in accordance with manufacturer's recommendations.
- Using a sterile supplies department (SSD). Sterilisation can only be undertaken by specialist Sterile Supplies services. There needs to be a specific contract specifying the responsibilities of both parties.

4.7.3 Sterilised equipment should be kept in their wrapping until the moment of use. Excessive handling should be avoided before application. If the outer wrapping is damaged, do not use, as it will not be sterile.

4.7.4 Specific guidance on cleaning ambulance buildings, vehicles and equipment is detailed in appendix 4.

5. Management of Linen

5.1 Germs in most soiled and fouled linen are unlikely to cause infection in healthy workers provided that care is taken. To further minimise the risk:

- Maintain Standard/Universal Precautions
- Wear an apron and gloves when dealing with contaminated laundry
- Remove any protective clothing and wash hands before returning to other duties
- Cover cuts and abrasions with waterproof dressings

5.2 Disposable Linen

5.2.1 Single patient use linen where available is preferable for use within ambulances. Once used all items are placed into the yellow clinical waste bag.

5.3 Non-Disposable Linen

5.3.1 For laundry purposes linen must be segregated into one of the following groups:

**General used linen,
bed linen, towels etc**



**Put into WHITE nylon
bag**



**Fouled linen
Contaminated with blood or
other body fluids**



**Put into Red soluble
bag inside RED nylon
bag**



5.3.2 Bags should not be filled in excess of two-thirds of their capacity. Particular care should be exercised when handling laundry in case clinical waste or sharps have been accidentally concealed within. Once linen has been placed in a bag for laundry service collection, it must not be handled again.

5.3.3 The Trust utilise external laundry contractors (including hospital facilities) to process and supply linen. All operations both within and outside of the Trust must comply with Health Service Guidance HSG (95)18, Hospital Laundry Arrangements for Used and Infected Linen.

5.4 Staff Uniforms

5.4.1 The majority of bacteria and viruses will not survive away from the host and would not present a high risk of infection transmission on clothing. However, within a mass of body fluid organisms would survive longer. Staff who are at risk of their uniforms becoming contaminated by body fluids should always

change into 'home' clothes as soon as possible – preferably before leaving the workplace.

- 5.4.2 In general, the responsibility for uniform laundering rests with the individual member of staff. Uniforms or other work clothes should be washed as soon as possible and in accordance with the care label instructions – preferably on as hot a wash as the fabric will tolerate.
- 5.4.3 In the majority of cases, staff uniform falls under the category of 'used linen' and should therefore be included as part of the general domestic washing arrangements undertaken by each member of staff.
- 5.4.4 On occasions however, uniforms may be exposed to splashes of blood or body fluids. This should be avoided as far as possible by the use of PPE – aprons. For cases where soiling or contamination is foreseeable, a disposable suit should be worn as an outer garment, in addition to any other PPE items necessary. After use the suit should be disposed of as clinical waste and the uniform checked to ensure it has been fully protected.
- 5.4.5 If, despite all efforts, contamination of the uniform occurs with either blood or body fluids, arrangements should be made for the crew to return to base for a uniform change. All staff should keep at least one complete spare uniform in their station locker. Heavily contaminated uniform should be treated as contaminated linen and placed in a red soluble bag and then into a red linen bag. It is essential that the uniform is clearly labelled using an indelible pen, to identify the owner and their station base/code. A record should be kept on station in the station log book, detailing the date and the item of uniform being sent to the laundry. Equally the process should be monitored and a record made of when the item is returned.

6. Management of Clinical Waste

6.1 The definition of clinical waste is:

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

(Controlled Waste Regulations 1992)

6.2 Clinical waste is categorized by the Health & Safety Executive as follows:

6.3 Group A

6.3.1 Soiled surgical dressings, swabs and all other contaminated waste from treatment areas. Materials other than re-usable linen from cases of infectious disease. All human tissue from hospitals or laboratories, and all related swabs and dressings

6.4 Group B

6.4.1 Discarded syringes, needles, cartridges, broken glass and any other contaminated disposable sharp instrument or items.

6.5 Group C

6.5.1 Microbiological cultures and potentially infected waste from Pathology Departments, Laboratories, post-mortem rooms and other clinical or research laboratories.

6.6 Group D

6.6.1 Certain pharmaceutical and chemical wastes (those falling within the definition of clinical waste). Special care should be taken with any waste that contains mercury or its compounds. Mercury should be recovered whenever possible. In particular, laboratories should remove mercury from aqueous solutions, specimens and the like before these are discharged to sewers.

6.7 Group E

6.7.1 Items used to dispose of urine, faeces and other bodily secretions or excretions not found in Group A. This is to include used disposable bedpans or bedpan liners, incontinence pads, stoma bags and urine containers.

6.8 Segregation of Waste

6.8.1 The key to the safe disposal of waste is the requirement for all staff to conform to the system of segregation shown in the table below. This system enables clear identification of the different types of waste encountered and indicates the disposal procedures that apply to each category.

Type of Waste	Receptacle
Clinical Waste Groups A & E	Yellow plastic bags (225 gauge)
Sharps – needles, blades etc Group B	BS 7320/UN 3291 Approved Sharps Container
General (domestic) waste	Black plastic bags

6.9 Handling of Waste

6.9.1 When handling clinical waste all staff must use personal protective equipment (PPE) the minimum being gloves. Aprons should be considered if leakage is anticipated. All items of disposable PPE become clinical waste once used.

6.9.2 Staff are expected to make every effort to ensure that any waste arising from their activities, clinical and non clinical is disposed of properly. Where this has not been possible and waste is left in a public place or private dwelling they must contact the Control & Command Centre, and arrange for collection.

6.9.3 Any spillage or contamination resulting from the movement of clinical waste must be thoroughly cleaned at the earliest opportunity (see Spillage Management, P17).

- Waste should be segregated at the point of origin
- PPE should be worn
- Clinical waste should be:
 - Correctly bagged in yellow bags of 225 gauge to prevent spillage
 - Double bagged where the exterior of the bag is contaminated or is split or leaking
 - Kept in a rigid-sided holder or container with a foot operated lid, and, so far as is reasonably practicable, kept out of reach of children
 - Only filled to $\frac{3}{4}$ full
 - Securely sealed and labelled with coded tags identifying their source (Service & Station name)
- Clinical waste should not be:
 - Decanted into other bags, regardless of volume
 - Contaminated on the outside
 - Re-used
- Sharps must be disposed of into an approved sharps container that meets BS 7320/UN3291 standard
- Sharps containers should never be placed into a yellow clinical waste bag

6.10 Disposal of Clinical Waste

- 6.10.1 Operational Locality Managers working in conjunction with the Procurement are responsible for organising the collection of waste by approved contractor. Within Dorset, this function will continue to be carried out by the Medical Transport Service.
- 6.10.2 Where contracts are required to move waste, the Trust will require that only road vehicles specifically designated for the task are to be used, they bear a load identification sign and that adequate security procedures and training arrangements exist.
- 6.10.3 A transfer note should be completed whenever waste is handed over to an authorised person and should be signed by all parties. The transfer note should include details of the persons involved in the transfer, relevant licence numbers, time, place and date of transfer and the quantity of waste.
- 6.10.4 All clinical waste in yellow bags must be stored in a locked bin or approved storage container, to which the public have no access. Small ambulance clinical waste bags can be disposed of at any A&E Department, or at any ambulance station.
- 6.10.5 Prior to departure from an incident, crews must make every effort to ensure that no items of waste are left on the scene. Where sharps are used away from the vehicle, the sharps boxes carried in either the Response Bag should be utilised as appropriate, along with clinical waste bags for other contaminated items.
- 6.10.6 Under NO CIRCUMSTANCES should any item of clinical waste be placed in domestic waste bins or abandoned outside designated containers at hospitals or on station, or in the rear of ambulances. Incidents where adequate and appropriate measures have not been taken to dispose of clinical waste or sharps, thereby putting others at risk of injury and cross-contamination, should be regarded as adverse incidents and reported using an incident report form.

6.11 Pharmaceutical Waste

- 6.11.1 Drugs that have been opened and not used or, only part used, should be disposed of in an approved sharps container.

7. Care of the Deceased

7.1 Infection prevention & control procedures must be followed in the event of a patient dying in transit, or in the case of a crew needing to move a deceased patient.

7.2 Diagnosis

7.2.1 The Procedure for 'Recognising Life Extinct in Adults' should be followed to ascertain circumstances in which resuscitation should/should not be carried out.

7.3 Handling and Transport

- The body must not be handled unnecessarily.
- Patients who are contaminated with, or may leak blood / body fluids must be placed in a heavy-duty disposable plastic body bag.
- Protective clothing must be worn at all times – including disposable gloves, and a disposable plastic apron if contamination of uniform is likely.
- If there is any risk of infection, hospital staff must be warned.
- Upon completion of the incident, the vehicle and all appropriate equipment must be decontaminated using detergent.
- All materials used must be disposed of the Clinical Waste bag, which must be sealed and labelled and sent for incineration.

8. Care of Infected Patients

8.1 It is expected that where a diagnosis of a patient's infection is known, staff should be given this information. However, staff are expected to use Standard Principles for infection control so that it is **unnecessary to know** what infection the patient is carrying.

8.2 The medical staff requesting transfer of a patient are responsible for deciding if the patient should be transported singly.

8.3 Classification of Infectious Diseases

8.3.1 Infectious diseases are classified into three categories according to the infection control precautions required. Further information can be obtained from the Health Protection Agency: www.hpa.org.uk.

8.4 Category 1:

8.4.1 These infections pose a minimal or no risk of person to person spread and do not require any special precautions. Standard principles should be applied as normal practice. A brief description of infectious diseases in category one is detailed in appendix 4, together with their mode of transmission between humans and any particular issues that staff should pay attention to during transportation.

8.5 Category 2:

8.5.1 No special precautions are required when transporting patients with these diseases, but universal infection control precautions should be applied as normal practice, unless advised otherwise by the hospital Consultant. A brief description of diseases in category two is detailed in appendix 6, together with their mode of transmission between humans and any particular issues that staff should pay attention to during transportation.

8.6 Category 3:

8.6.1 The transportation of a patient with a Category 3 infectious disease requires special precautions and procedures which are detailed in the IHCD Ambulance Service Basic Training Manual. In the UK, most patients who could have a Category 3 disease are likely to present to Accident and Emergency Departments either directly or via their GP. The patient will present with a pyrexia (fever) of unknown origin (PUO) shortly after having returned from abroad but these early symptoms could indicate any number of far less serious conditions and a positive diagnosis can only be made following extensive tests.

8.6.2 It is therefore likely that A&E staff will already have had contact with such patients before their illness is formally diagnosed. The Advisory Committee on Dangerous Pathogens (ACDP) have issued guidance that most pre-diagnosis

Category 3 patients can be safely managed by following the Universal Infection Control Precautions and the safe disposal of clinical waste. Any resuscitation regime must include the use of either the Bag & Mask, or resuscitation pack. Under no circumstances should any form of direct oral resuscitation be carried out.

- 8.6.3 However, should a Category 3 disease be subsequently diagnosed, the attending ambulance crew will be required to undergo surveillance for a period of 21 days from the last possible date of exposure to infection.
- 8.6.4 There need be no restriction on work or movement within the UK, surveillance will simply be the daily monitoring of body temperature and the reporting of any suspicious symptoms. During surveillance those suffering any rise of temperature above 38o will be kept under surveillance at home and, if fever persists for more than 24 hours, advice sought from a consultant in infectious or tropical diseases. Category three diseases are detailed in appendix 7.
- 8.6.5 Patients with a confirmed diagnosis of a Category 3 disease will only be transported by the London Ambulance Service or North East Ambulance Service. In extraordinary circumstances, the Consultant at the Royal Free Hospital may determine that the patient should be transported in an isolator. Although this situation has never arisen before in the UK, crews involved will receive special training and instructions at the time by members of the hospital staff.

9. Care of Infestations

9.1 Ambulance personnel may occasionally come into contact with patients who are infested with parasites. These parasites live on or in the skin.

9.2 There are three types of ectoparasite which crews are likely to encounter:

- Scabies
- Lice (Head / Body / Clothing and Pubic)
- Fleas

9.3 Protective Measures

9.3.1 Standard precautions should be taken if there is any suspicion of infestation, especially hand washing and the use of PPE such as gloves and apron. The use of disposable linen is recommended if available and should be disposed of as clinical waste. If re-useable items are used all items of linen should be red bagged and laundered appropriately. (See Management of Linen, P17)

9.3.2 In general, no specific cleaning of the vehicle is necessary other than close attention to the area immediately occupied by the patient. The trolley, adjacent walls and floor should be washed with general purpose detergent and hot water, or wiped with multi-surface wipes. In cases where there is visible infestation with fleas, crews may wish to request a return to base to change clothing. Any member of staff who suspects they may have become infested should contact the Occupational Health Department or visit their GP for further advice.

9.4 Scabies

9.4.1 *Sarcoptes scabiei* is a human mite which penetrates the outer layer of the skin. The body's immune system reacts to the mite's droppings and saliva resulting in an immune reaction which causes intense itching. Incubation period is up to 8 weeks after contact with an infected person. It may take up to 2 weeks before symptoms present.

9.4.2 Lesions occur mainly on the hands, finger webs, wrists, inside of arms, abdomen / waist, groin and under buttocks. Scabies is spread from person to person by prolonged (5-10 minutes) direct skin-to-skin contact. It can also be acquired during sexual contact. Mites do not survive away from their host as it is too cold for them outside the skin. Scabies presents a low risk for contraction to ambulance crews providing standard precautions are observed, especially hand hygiene.

9.5 Lice

9.5.1 Lice are wingless insects, which are found worldwide as ectoparasites of mammals. They feed by sucking blood from their host.

- **Headlice** – The female louse lives for 2 – 4 weeks and can lay 5 – 8 eggs per day. The eggs are enclosed in tiny sacs, which are attached to the base of the hair and hatch after 7 days. The empty egg cases are called 'nits'. The louse takes 10 days to become mature and in turn then able to lay eggs. These lice are only found on the head. Transmission is via head to head contact (approx 1 minute). They cannot jump, fly or swim. Headlice found on clothing or furniture are either dead or dying.
- **Clothing / Body Lice** - These lice live in the seams of clothing rather than on the skin of the host. They will live for 13 – 30 days if they are able to feed. If unable to feed they will die of starvation in 5 days. Infestations usually affect people with poor personal hygiene, who do not regularly change their clothing.
- **Pubic Lice / Crab Lice** - This louse will infest all coarse body hair. Living on pubic hair, axillary hair, beard, eyebrows and eyelashes. The eggs take 6 – 8 days to incubate and the life cycle is from e.g. to e.g. about 3 weeks.

9.6 Fleas

- 9.6.1 Human fleas are rarely encountered. Animal fleas are host specific, requiring a specific host animal e.g. cat or dog, to breed and complete their life cycle. However animal fleas will feed from any warm-blooded animal. In the UK, fleas are generally not responsible for the transmission of disease.
- 9.6.2 Cat and dog fleas account for 95% of flea problems in the UK. Although they will not remain on a human, the fleas have the ability to jump on to a person and bite before jumping off again.

10. Biological Warfare Agents

- 10.1 These agents include Anthrax, Plague, Smallpox and some of the viral haemorrhagic fevers. Generally these organisms do not survive easily in the general atmosphere and the risk is therefore minimal. None of the diseases present an immediate risk to life and therefore there is time to seek expert medical advice from A&E and subsequently from public health consultants. Staff in the services decontamination team, have been trained to use specialised PPE and decontamination procedures. Only these staff should deal with incidents in which such agents are thoughts to be involved. All other staff should remain at a safe distance and await support from trained staff. Control should be immediately informed, and will initiate the appropriate procedure.
- 10.2 In the event that staff are inadvertently contaminated they should report this to the ambulance incident officer who will arrange appropriate after care and support. Special “pods” are strategically placed throughout the country and are available to assist ambulance services deal with incidents of this nature. Incidents of this nature are normally dealt with by implementation of the major incident plans and all staff should ensure that they are familiar with their contents.

11. Suppliers and Contractors

11.1 Conditions of Contract

11.1.1 The Trust has contracted out the majority of services for the provision of linen and clinical waste disposal. All contracts with NHS providers and external suppliers are subject to the NHS Conditions of Contract for the Supply of Laundry Services and the NHS Conditions of Contract for the Supply of Services.

11.2 Linen/Laundry Services

11.2.1 The Duchy Linen Service, part of Cornwall Partnership NHS Trust, provides a linen wash and return service for ambulance stations within Cornwall. The service provided includes the hire of linen, collection of soiled linen and the delivery of laundered linen to individual stations.

11.2.2 The Royal Devon and Exeter Foundation NHS Trust provide an identical service for stations in Devon and Somerset.

11.2.3 Linen Services in Dorset are provided by the Royal Bournemouth Hospital and Sunlight Services who have an NHS contract and automatically took over the linen service contracts that were previously managed by Dorset County Hospital.

11.2.4 All contracts must comply with Health Service Guidance HSG (95) 18, Hospital laundry Arrangements for Used and Infected Linen.

11.3 Clinical Waste Disposal

11.3.1 Cornwall Healthcare Trust provides a clinical waste collection service for stations throughout Cornwall. A Controlled Waste Transfer Note is provided for each consignment of waste transferred to CHT, waste is then transported by CHT to Peake (GB) Ltd for incineration at licensed facilities.

11.3.2 Clinical waste throughout Devon and Somerset is collected by Viridor who transport the waste to licensed incineration facilities in the area. A Controlled Waste Transfer Note is provided for each consignment of waste transferred to Viridor. Viridor are registered waste carriers.

11.3.3 The Trust has its own collection service in Dorset with each station receiving one clinical waste collection on a weekly basis carried out by the Medical Transport Service (MTS). All clinical waste collected by MTS is transferred to Whiterose Environmental for incineration at licensed facilities.

11.3.4 All clinical waste is handled in accordance with the Controlled Waste Regulations 1991 and the Control of Pollution Act 1989.

12. Infection Control Strategy

12.1 Internal Accountability and Responsibilities

12.1.1 The Trust has a structured infrastructure to manage infection control, with clear lines of accountability up to Board level.

12.1.2 The Board:

12.1.3 Board members are collectively responsible for providing leadership and direction on health and safety matters. Members will have a full understanding of the risks, systems in place for managing the risks and appreciation of the causes of any failures. The Board are responsible for monitoring the effectiveness of infection control measures, through the annual infection audit and report.

12.1.4 Chief Executive:

12.1.5 The Chief Executive has a key role in ensuring that systems are in place and being adhered to, in order to manage any significant risks facing the organisation. The Chief Executive is ultimately responsible for infection control measures, a responsibility which is discharged through the Medical Director.

12.1.6 Medical Director:

12.1.7 The Medical Director has overall day to day responsibility for infection control. For the purposes of the Winning Ways framework, the Medical Director will be considered the Director of Infection Prevention and Control. The Medical Director has responsibility to oversee the local Infection Control Committee and infection control policy. The Director is an integral member of the Clinical Governance Committee and reports directly to the Chief Executive.

12.1.8 Head of Integrated Governance:

12.1.9 The Head of Integrated Governance is responsible for monitoring and managing the risks associated with infection control, in conjunction with the Risk Manager.

12.1.10 Clinical Director

12.1.11 The Clinical Director is responsible for creating the infection control policy, monitoring infection control measures and producing an annual infection control audit and report. The Clinical Director reports directly to the Medical Director, and has the authority to challenge inappropriate clinical hygiene practice.

12.1.12 Head of Education and Professional Development

12.1.13 The Head of Education and Professional Development is responsible for ensuring that all clinical staff receive basic infection control training and that any external training providers are appropriately accredited.

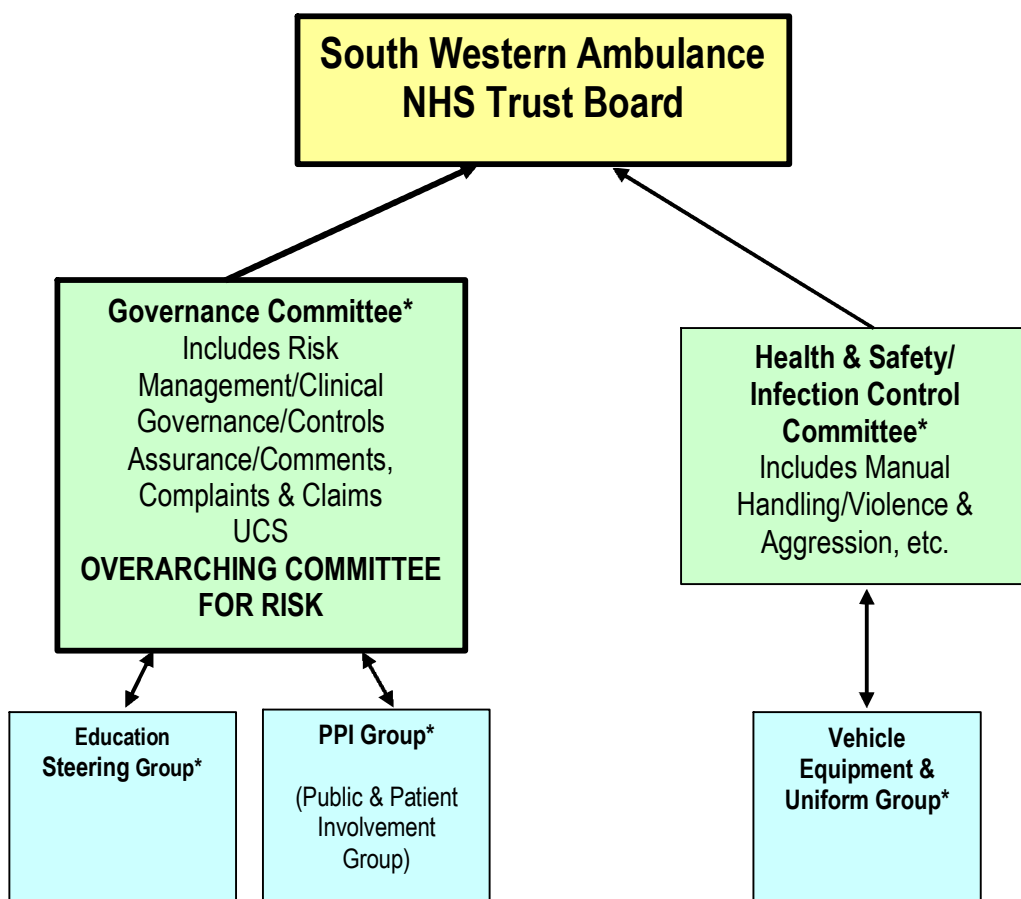
12.1.14 Out of Hours

12.1.15 In the event of an infection control issue occurring out-of-hours, the matter should be reported to the Duty Officer. The Officer will access support from the on-call director and Health Protection Agency as required.

12.2 Organisational Framework

12.2.1 Infection control performance is monitored by the Infection Control Committee and reported to the Clinical Governance Committee and Board. The Vehicle Uniform and Equipment Working Group (VEUWG) are responsible for ensuring that new equipment and vehicle designs take into account infection control measures. Adverse incidents relating to infection control, should be reported using the incident reporting procedure, detailed in the Incident Reporting Policy. Chemical, biological, radiological and nuclear incidents are dealt with separately in the Major Incident Plan.

12.2.2 Figure 1 - Organisational Committee Structure:



* Terms of Reference are available for each committee on the intranet.

12.3 Risk Assessment

12.3.1 Whilst there are various Risk Management Models in existence, the Australian/New Zealand model has led the world by identifying the first Risk Management Standard; AS/NZS 4360:1999. This Standard is gaining worldwide acceptance and has been adopted by numerous international organisations and government authorities, including South Western Ambulance Service NHS Trust. The Trust uses the 5 x 5 matrix, which co-ordinates with the National Patient Safety Agency (NPSA) matrix for risk quantification. Risks in respect of healthcare associated infection and serious communicable diseases, may be identified on an ongoing basis via incident reporting procedures, complaints, claims, infection control audits and risk assessments. These processes are monitored to ensure that any risks are identified and acted upon in a timely manner. All staff receive training in risk management and risk assessment during their induction, and a risk assessment tool is available on the Trusts' intranet site.

12.3.2 Staff undertake dynamic risk assessments as part of their working practice and the Trust will undertake an organisational risk assessment as part of the rolling risk assessment program. The organisational risk assessment will identify any specific roles within the organisation that are at higher risk, and a specific risk assessment will be carried out for these. The organisational risk assessment will assess how likely it is that blood borne viruses or other communicable diseases (e.g. respiratory or gastrointestinal infectious diseases) could cause ill health and decide if existing precautions are adequate. The assessment will consider the following:

- Frequency and scale of contact with blood or other body fluids.
- Number of different persons' blood/body fluids with which contact is made.
- Existing information on injuries/ill health reported in the workplace.
- Impact on the organisation of multiple 'casualties' within staff resources in the event of an outbreak.
- Quality of control measures.

12.3.3 Healthcare associated infection risk assessments will be owned by the Infection Control Committee who will monitor the action plans. The Risk Manager will co-ordinate the risk assessments and monitor progress with reviews. All reviews will be undertaken by the Infection Control Committee. Staff will be made aware of any specific risks via the weekly Bulletin, operational notices, clinical notices or training notices.

12.4 Education and Training

12.4.1 All new employees will be required to fulfil the pre-employment health checks detailed in appendix three (Occupational Health). Before commencing operational duties, all members of clinical staff must

complete basic infection control training. Infection control training, including hand washing, is incorporated in the annual recertification program, detailed in the Trusts Training Prospectus. In addition, all members of clinical staff must complete an e-learning package and online multiple choice assessment. Compliance with training will be monitored as part of the annual personal development review (PDR) process. All members of staff have a personal training record, which is monitored using the training database.

- 12.4.2 Clinical Support Officers are responsible for monitoring compliance with the infection control policy on a daily basis, challenging inappropriate practice. The results of the annual infection control audit and external assessments, will be used to ensure that the training program provides effective focused training. Specific root cause analysis training is delivered to Officers and Managers as required.

12.5 Implementation Measures and Performance Monitoring

- 12.5.1 The annual Infection Control Report sets out the action plan for the forthcoming year, including the annual hand hygiene awareness campaign. The annual infection control audit ensures that the action plans are being fully implemented. The performance of the Trust in relation to infection control measures, will be published annually in the Infection Control Report.

12.6 Document Development and Review

- 12.6.1 The Infection Control Policy (incorporating the Infection Control Strategy) has been developed using the national Ambulance Service Association infection control policy, in consultation with the Infection Control Committee and the Health Protection Agency. The Trust is also a member of the National Ambulance Risk and Safety Forum (NARASF). The policy will be reviewed annually by the Clinical Director and presented to the Clinical Governance Committee, prior to being ratified by the Board.

Microbiology / Spread of Infection

1. What is infection and how does it spread?

1.1 Pathogenic Microorganisms

1.1.1 The term microorganism, or microbe, is used to describe any organism which is too small to be seen with the naked eye. Many microbes normally live inside or on the surface of other organisms. Such organisms living on the human body are called commensals and are generally harmless. Microorganisms capable of causing infection and disease are known as pathogenic. Pathogenic organisms or the toxins they produce, destroy body tissues. The pathogenic process causes signs and symptoms of infection e.g. pain, swelling, fever.

1.1.2 Microorganisms may be classified as follows:

- Bacteria are minute organisms about one-thousandth to five thousandth of a millimetre across. They are susceptible to a greater or lesser extent to antibiotics.
- Viruses are much smaller than bacteria and although they may survive outside the body for a time they can only grow inside the cells of the body. Viruses are not susceptible to antibiotics, but there are a few anti-viral drugs available which are active against a limited number of viruses.
- Pathogenic fungi can be either moulds or yeasts. For example, a mould which causes infections in humans is *Trichophyton rubrum* which is one cause of ringworm and which can also infect nails. A common yeast infection is thrush caused by an organism called *Candida albicans*.
- Protozoa are microscopic organisms, but larger than bacteria. Free living and non-pathogenic protozoa include amoebae and paramecium. Examples of medical importance include: *Giardia lamblia*, which causes enteritis (symptoms of diarrhoea).
- Worms are not always microscopic in size but, pathogenic worms do cause infection and some can spread from person to person. Examples include: threadworm and tapeworm.
- Prions are infectious protein particles. Examples: variant Creutzfeldt-Jakob disease.

1.2 The Chain of Infection

The process through which infection can be spread from one susceptible host to another is known as the chain of infection. If the chain is broken then infection will be prevented.

1.2.1 Infectious Agent:

- Microorganism

1.2.2 Reservoir:

- Patients
- Staff
- Equipment
- Environment e.g. dust, soil
- Animals / insects
- Food / Water

1.2.3 Portal of Exit / Entry:

- In order to cause disease a pathogen must have a way to enter the body – a portal of entry. To transmit to another host it must be able to leave the body via a portal of exit. The route of entry and exit may be different, for example enteric infections enter the mouth and leave in the faeces, or they may be the same, for example, respiratory tract infections.
- Microorganisms use a range of different routes to find new hosts and one microbe may be able to spread by using more than one method.

The Respiratory Tract	through inhalation of organisms (e.g. TB, diphtheria and mumps)
The Alimentary Tract	through ingestion of contaminated food or water (e.g. salmonellosis and dysentery)
The Skin and Mucosa	through damaged skin or by inoculation (e.g. Hepatitis B via contaminated needles)
The Placenta	via transfer of organisms from maternal circulation to the foetal circulation (e.g. rubella, cytomegalovirus and syphilis)

1.2.4 The modes of spread of infection:

- It is important to remember that the one feature that distinguishes infection from all other disease is that it can be spread i.e. one person can 'catch it' from another, or via a vector (crawling or flying insects). Infection can also be caused by the environment, such as tetanus following a gardening accident.
- An infectious disease can be transmitted by:
 - **Direct Contact** – e.g. kissing, sexual contact, physical contact with an infected site, such as contact with discharge from wounds or skin lesions e.g. shingles, impetigo
 - **Indirect** – through sneezing or coughing, or when an intermediate carrier is involved in the spread of pathogenic microbes from the source of infection to another person e.g. hands, insects
 - Fomite: A fomite is defined as an object which becomes contaminated with infected organisms and which subsequently transmits those to another person. E.g. bedpans, urinals,

thermometers, oxygen masks, or practically any inanimate object.

- Hands: The hands of healthcare and social workers are probably the most important vehicles of cross-infection. The hands of patients can also carry microbes to other body sites, equipment and staff.
- Aerosols: Transmission of infection occurs when microbes exhaled or discharged into the atmosphere by an infected person are inhaled by another person e.g. chickenpox, mumps. The common cold and influenza are often cited as examples, but it is likely that hands and fomites are also important in the spread of respiratory viruses.
- Ingestion: Infection can occur when organisms capable of infecting the gastro-intestinal tract are ingested. When these organisms are excreted faecally by an infected person, faecal-oral spread is said to occur. Organisms may be carried on fomites, hands or in food and drink e.g. Hepatitis A, salmonella, campylobacter.
- Inoculation: Infection can occur following a 'sharps' injury when blood contaminated with, for example Hepatitis B virus, is directly inoculated into the blood stream of the victim, thereby causing an infection. Inoculation includes blood splashes to the eye. Humans and animal bites can also spread infection by the inoculation mode.
- Vectors: Any intermediate agent which can carry an infection between humans/other animals. Crawling and flying insects are an obvious example of intermediate carriers and need to be controlled. Insect bites may cause infections such as malaria.
- Absorption: This is not a route of entry for infection, except in some tropical diseases.

1.2.5 Susceptible Host / Person at Risk:

Some people are at increased risk of infection:

- Elderly
- Very young
- Immunocompromised
- Chronic illness
- Receiving certain medications e.g. steroids
- Anyone with a break in the bodies defences e.g. surgical wounds, skin lesions, indwelling devices such as intravenous lines / catheters
- Someone whose behaviour increases their risk for a particular disease e.g. HIV

Personal Protection

2. Personal Protection

- 2.1 Ambulance staff who come into contact with blood or body fluids may be exposed to occupation risk from blood borne viruses e.g. HIV, Hepatitis B (HBV), Hepatitis C (HCV) or other pathogens. The most likely means of transmission of these viruses to ambulance personnel is by direct percutaneous inoculation of infected blood by a sharps injury, or by blood splashing onto broken skin, eyes or mucous membrane.
- 2.2 Body fluids which may contain pathogenic Microorganisms are:
- Faeces
 - Urine
 - Vomit
 - Sputum
- 2.3 In addition, the following may also contain the organisms of HIV, HBV and HCV:
- Blood
 - Blood stained body fluids
 - Semen
 - Vaginal secretions
 - Body tissues
 - Cerebrospinal fluid, amniotic, pericardial fluids etc
 - Unfixed human tissues and organs
 - Exudative or other tissue fluid from burns or skin lesions
- 2.4 It is not always possible to identify people who may spread infection to others, therefore precautions to prevent the spread of infection must be followed AT ALL TIMES. These routine procedures are called Standard Principles or Universal Precautions.
- 2.5 All blood and body fluids are potentially infectious and precautions are necessary to prevent exposure to them. By close adherence to universal precautions, ambulance personnel will reduce the risk of contamination to themselves and others from infected body fluids.
- 2.6 Universal Precautions include:
1. Hand washing and skin care – the skin is a protective barrier, microorganisms can be washed off. Breaks in the skin, cuts and abrasions can provide an entry/exit point for infective microbes and should be covered with waterproof dressings.

2. Protective clothing – reduce the risk of substances contaminating you by placing a barrier between the substance and yourself i.e. clothing, goggles, masks
3. Safe handling and disposal of sharps
4. Spillage management
5. Waste management
6. Linen management
7. Maintaining a safe and hygienic environment – decontamination & cleaning procedures

2.7 Hand Washing and Skin Care

2.7.1 Hand hygiene is the single, most effective method of preventing cross-infection.

2.7.1.1 There are two populations of micro-organisms found on the skin. The resident bacteria live in the deeper skin layers, they are not readily transferred and are usually not harmful. Transient micro-organisms do not normally live on the skin but are both readily acquired and transferred by touch. In clinical settings hands can cause cross infection by transferring these transient micro-organisms between patients but are easily removed by simple hand decontamination procedures. The wearing of gloves is not an alternative to hand hygiene.

2.7.1.2 Hands should be washed:

Before –

- Taking a break / going home
- Undertaking a care procedure
- Putting on protective clothing
- Eating, drinking, handling food
- Smoking

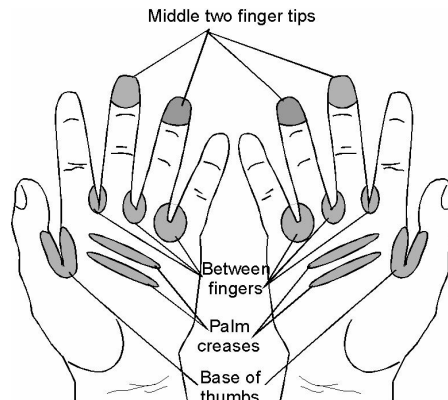
After –

- Going to the toilet, blowing nose or covering a sneeze
- Direct contact with a patient
- Handling contaminated items such as dressings, bedpans, urinals, urine drainage bags
- Cleaning equipment / environment
- Handling dirty linen or waste
- Hands become visibly soiled
- Cleaning up spills
- Removal of gloves
- Smoking

2.7.2 Hand Washing Technique

2.7.2.1 Technique is more important than the solution used. Remove jewellery (rings).

2.7.2.2 When hands are washed in a hasty manner certain areas tend to be missed. The diagram shows the areas of skin that are commonly missed during poor hand washing.



2.7.2.3 Effective hand washing technique involves 3 stages: preparation, washing and rinsing, and drying. Preparation requires wetting hands with water and then applying liquid soap. This should be followed by vigorous rubbing of hands for 10-15 seconds paying particular attention to tips of fingers, thumbs and between the fingers. Hands should be thoroughly rinsed and properly dried using paper towels.



1. Rub palm to palm



2. Rub the backs of both hands



3. Rub palms again with fingers interlaced



4. Rub backs of interlaced fingers



5. Remember to wash both thumbs



6. Rub both palms with fingertips

7. Wash hands under running water using soap, rinse and dry thoroughly.

This handwashing technique is based on a procedure described by G.A.J. Aycliffe et al. J. Clin. Path. 1978; 31: 923
We would like to gratefully acknowledge ICI Pharmaceuticals UK for providing guide drawings.
Copyright ICNA H.G. Wallace Ltd 1991

2.7.3 Hand Washing Facilities

2.7.3.1 Hand washing facilities are available in all toilets and washroom areas of the ambulance station. These should not have a plug and should be fitted with liquid soap dispensers. Nailbrushes should be avoided unless they are single-use / disposable. Disposable paper towels are available for drying.

- 2.7.3.2 Most clinical areas of hospitals have hand washing facilities available and these should be utilised whenever necessary. Hand washbasins are not available on ambulance vehicles. When staff are unable to access hand washing facilities it may be necessary to use other methods to decontaminate the hands. Alcohol handrub can be used effectively, although should not be used as an alternative if a hand basin is available.
- 2.7.3.3 Alcohol gel will not penetrate through soil such as blood or dirt, so hands should ideally be cleaned before gel is applied. If hands are not soiled, gel can be used alone. When using a gel, apply 5 – 10ml to visibly clean hands and rub using the hand washing technique, until the alcohol has evaporated and hands are dry. Only 3 -4 applications of alcohol gel should be used before hands will need to be washed as they will become ‘tacky’.

2.7.4 Skin Care

- 2.7.4.1 A healthy, intact skin provides an effective barrier against infection. It is important to keep the skin in good condition by using the correct hand washing method, drying hands thoroughly and regular use of hand cream.
- 2.7.4.2 All cuts and abrasions should be covered with an impermeable waterproof dressing prior to and during any period of duty. The dressing’s integrity must be checked regularly while on duty and replaced if necessary. Any member of staff with extensive skin lesions must seek advice from the Occupational Health department e.g. eczema. Avoid unnecessarily subjecting skin to laceration in social / domestic activities e.g. DIY or gardening – cover arms and use gardening gloves.
- 2.7.4.3 Moisturiser creams should be used regularly following hand washing. The moisturiser helps to prevent dry skin, which in turn will reduce the risk of lesions developing. Hand cream should preferably not be shared, but used direct from dispensers or tubes for single person use only.

2.8 Personal Protective Equipment (PPE)

- 2.8.1 The choice of protective clothing selected depends on the anticipated risk of exposure to body fluid during the particular activity. Many clinical activities involve no direct contact with body fluid and do not require the use of protective clothing, for example, taking a pulse, blood pressure or temperature.
- 2.8.2 Staff must use their judgement in determining the likely requirements in each case.

2.8.3 What to Wear When

No exposure to blood/body fluids anticipated \longrightarrow No protective clothing

plastic	Exposure to blood/body fluids anticipated, but low risk of splashing	————→	Wear gloves and apron
apron	Exposure to blood/body fluids anticipated, High risk of splashing	————→	Wear gloves, plastic and eye/mouth/nose Protection

2.8.4 Gloves

2.8.4.1 Rubber Gloves - Rubber general purpose gloves should be worn for any cleaning procedure. After use they should be washed with detergent and water and dried. When dealing with blood/body fluids, or after infected cases, these gloves should be disposed of in the clinical waste.

2.8.4.2 Disposable Gloves -

- Gloves should be seamless, well fitting, powder-free and low in allergenicity, i.e. powder free latex or nitrile gloves.
- Gloves should not be worn while travelling to a call but should be fitted just prior to contact with the patient if contact with blood or body fluids is anticipated.
- Gloves must be worn whenever contact with body fluids, mucous membranes or non-intact skin is anticipated, when dealing with contaminated equipment or with a patient with an infection or suspected infection. However emergency treatment should not be withheld in the absence of gloves but in these circumstances hands should be thoroughly washed as soon as possible
- Choice of size in the selection of gloves should be made on comfort – not too tight as to become restrictive, but also not too loose as to compromise grip and dexterity
- If there is the potential for gloves to become punctured during use, e.g. at an RTA, staff should consider wearing two pairs of gloves as an additional precaution
- Gloves are not worn as an alternative to hand washing. They should be changed after each procedure and hands must be cleaned following their removal.
- Gloves should not be washed because this may affect their integrity.
- Used gloves should be disposed of in the clinical waste
- Any member of staff developing skin irritations on their hands should seek referral to the OH department

2.8.5 Disposable Aprons

2.8.5.1 Water-repellent protection should be worn when there is a possibility that contamination of the clothing with body fluids may occur or when cleaning the ambulance and equipment. Disposable aprons should be used for one procedure only and then discarded in the clinical waste. Staff must always

ensure they have at least one complete spare uniform available for occasions when uniform contamination has occurred.

- 2.8.5.2 Coveralls are not required routinely. However these are provided for use when the risk of contamination or soiling of the uniform is considered beyond the scope of a disposable apron such as when dealing with infections caused by more hazardous organisms or chemical spills.

2.8.6 Visors/Eye Protection

- 2.8.6.1 These are worn when a particular procedure is likely to cause splashing of body fluids, particularly blood or tissue, into the eyes or face (e.g. during intubation). In the case of SARS or Avian Influenza completely sealed 'chemical protection' goggles must be used. Following use, eye protection should be washed in hot soapy water, dried and stored ready for re-use.

2.8.7 Face Masks

- 2.8.7.1 Masks are generally ineffective against airborne infection, however they may offer protection against splashing of the mouth and face. Use of face masks is recommended during procedures when there is likely to be splash of blood or tissue into the mouth, or if the patient is prone to episodes of coughing or sneezing, or during intubation of patients who are suspected to have meningococcal disease, and in cases of suspected TB. Where patients have an uncontrolled productive cough (cannot cough into a tissue), consideration should be given to encouraging the patient to also wear a face mask.
- 2.8.7.2 High efficiency masks complying with FFP3 are recommended when caring for patients suspected to be suffering from Severe Acute Respiratory Syndrome (SARS). Face masks should fit correctly with no gaps at the sides. They must not be touched and should be discarded when wet. They should not be pulled up and down, but renewed after each episode of use. They are for single use only and should be disposed of in the clinical waste.
- 2.8.7.3 Pocket resuscitation masks eliminate the need for mouth-to-mouth contact during resuscitation, when other equipment is not available. Their use will minimise the risk of exposure to infection. These masks are reusable, however the one-way valve is single patient use only. The valve should be disposed of as clinical waste. After use, the mask should be cleaned and disinfected and a new one-way valve put in place.

Occupational Health

3. Occupational Health

3.1 All new employees will be required to attend a health check, which will include a review of the person immunisation status. Prior to the interview, applicants will be sent a copy of the Health Information Letter together with the Immunisation Confirmation Form for completion.

3.2 Standard Health Checks

3.2.1 **Tuberculosis (TB)** - BCG vaccination offers substantial but not complete protection against TB. All operational staff should be made aware of this and of the need to seek medical advice should they develop symptoms compatible with TB. Individuals with previous contact with TB, including living in a country with high TB prevalence, are at increased risk.

3.2.2 **Hepatitis B Immunisation** - it is recommended that all operational staff who have direct contact with patients' blood, blood stained body fluids or patients' tissues, are offered immunisation against hepatitis B and have their response to immunisation checked. Consideration should also be given for other members of staff to receive this immunisation, based on risk assessment e.g. fleet maintenance staff.

The vaccination programme consists of a series of three injections, with the second and third doses administered after intervals of one and five months respectively, following which it is vital that staff attend Occupational Health for a follow up blood test. This is to ensure that adequate levels of antibodies have been achieved. After completion of the initial vaccination programme, a boost injection will then be required at 5 yearly intervals.

Guidance on immunisation for hepatitis B, which includes information about dosage/protocols and supplies, is contained in the UK Health Departments publication Immunisation Against Infectious Disease 1996.

Non-responders – a small number of individuals may not be able to gain immunity through the vaccination programme. Where results indicate a hepatitis B surface antibody immunity level of less than 10miu/ml, despite multiple vaccinations, such individuals are likely to be deemed as 'non-responders'. Staff whose duties include performing exposure prone procedures and either, refuse vaccination or are non-responders will be required to have a six-monthly HbsAg blood test performed.

3.2.3 **Other Checks** – all operational staff, in association with their Occupational Health Department, should ensure that their immunisations status is up-to-date in relation to:

- Poliomyelitis

- Rubella (German Measles)
- Tetanus
- Varicella (Chicken Pox)

Individuals born before 1958 may not have been adequately immunised against Polio. As the vaccine, which is live, is excreted in the faeces, all those coming into contact with infants who have recently been vaccinated need to ensure their own immunity status.

Pregnant staff who do not know if they are immune and believe they may have been in contact with a case of Rubella, Parovirus or Varicella should see their GP without delay and inform Occupational Health.

3.3 Additional Checks for Serious Communicable Diseases

3.3.1 Hepatitis C - Ambulance Technicians and Paramedics will be offered a hepatitis C antibody test (and, if positive, a hepatitis C RNA test) during their health check with the Medical Director, prior to employment within the Trust.

The major risk factors for hepatitis C infection are:

- Receipt of unscreened blood or untreated plasma products
- The sharing of injecting equipment whilst misusing drugs
- Having been occupationally exposed to the blood of patients known to be infected, or deemed to be at high risk of infection, with hepatitis C by sharps or other injuries
- Involvement as a health care worker or patient in invasive medical, surgical, dental or midwifery procedures in parts of the world where infection control precautions may have been inadequate, or with populations with a high prevalence of hepatitis C infection.

3.3.2 HIV - Ambulance Technicians and Paramedics will be offered a hepatitis C antibody test (and, if positive, a hepatitis C RNA test) during their health check with the Medical Director, prior to employment within the Trust.

Ways in which an individual may have been exposed to HIV:

- Engaged in unprotected sexual intercourse between men
- Shared injecting equipment whilst misusing drugs
- Had unprotected heterosexual intercourse in, or with a person who has been exposed in, a country where transmission of HIV through sexual intercourse between men and women is common
- Involvement in invasive medical, surgical, dental or midwifery procedures in parts of the world where infection control precautions may have been inadequate, or with populations with a high prevalence of HIV infection
- Had a significant occupational exposure to HIV infected material in any circumstances

- Engaged in unprotected sexual intercourse with someone in any of the above categories

3.3.3 **Immunisations** - Immunisation is not available against all infections, neither is it guaranteed to be 100% effective. Immunisation should therefore not be regarded as an alternative to practising high standards of infection prevention and control.

South Western Ambulance Service NHS Trust

Health Information Letter

It is a requirement of employment with South Western Ambulance NHS Trust that all staff who will be in regular contact with patients have protection against the following:

- TB
- Tetanus
- Hepatitis B
- Hepatitis C

It is also strongly advised that all such staff additionally have the following inoculations:

- Rubella
- Polio
- Chicken pox

Please provide evidence that you have the appropriate protection. If you do not have suitable paperwork you may instead take the form overleaf to your GP and ask her/him to indicate the date of your most recent inoculation or booster and to sign the form where indicated.

The following may be of interest:

TB lasts for life.

- If you have not had a test (Heaf) then you need one, followed by the vaccination if necessary. This must be done by the Chest clinic in Bournemouth, and most of you will have a scar on your deltoid area on your upper arm, to show you have had a test for TB in the past.

Tetanus: is now combined with Diphtheria vaccine.

- If you have not had a Anti-Tetanus injection for 10 years, or you don't know then you need a booster.
- If you have not had tetanus inoculation at all then you need a course of three injections before taking up your employment.

Hepatitis B: Lasts 5 years so:

- If you have not had an inoculation for 5 years then you need a booster
- If you have never had Hepatitis B vaccination or do not know, then you need a course of 3 injections, one now, one in 4 weeks and then one in 6 months. Three months after your last injection, your GP will take a blood sample and test that you have responded.

Rubella concerns only the women of childbearing age.

- Most of you will have had vaccination either at school or as a child with the MMR scheme.
- If you have not had an inoculation, or do not know, you need one. If you have had one, it lasts for life.

Polio lasts for 10-15 years, and inoculation would be advisable, if in doubt.

If you have not had **Chicken Pox** or Herpes Zoster then a vaccination is now available for this. As is vaccination for Hepatitis C.

The Trust reserves the right to refuse employment or to terminate your contract if you do not have the essential protection

Immunisation Confirmation Form

For all Staff in close contact with Patients

I certify that Mr/Mrs/Ms/Miss
(Block Capitals Please)

Has received **or** is receiving satisfactory immunisation **or** has natural immunity against the following:

Vaccinations:

Tetanus Vaccination Date.....
Rubella Vaccination Date.....
Polio Vaccination Date.....

TB Heaf test Date.....Result: Positive/Negative/N/A
BCG Vaccination Date..... (circle as appropriate)

Varicella Chicken Pox/Shingles Date.....
Varicella Antibody Test Date.....Result: Positive/Negative/N/A
Varicella Vaccination Date..... (circle as appropriate)

Hepatitis C Vaccination Date.....
Hepatitis C Antibody Test Date.....Result: Positive/Negative/N/A
(circle as appropriate)

Hepatitis B Course not Started
Date of First Injection
Date of Second Injection
Date of Third Injection

Hepatitis B Antibody Test Date..... Result: Positive/Negative
(circle as appropriate)

(Please enclose copies of all test results if possible)

Signed:.....
(General Practitioner)

Signed:.....
(Medical Director SWAST)

GP Official stamp/Address

3.4 Staff Sickness and Reporting

3.4.1 It is important for staff to remember that infection can be passed in either direction, i.e. patients to staff or staff to patient and relatives. Staff who suspect they have acquired an infectious illness should seek advice and treatment from their family doctor.

3.4.2 Staff who work in direct contact with patients should follow their local Sickness Reporting Procedures if they develop any of the following diseases, and should contact Occupational Health for advice on when they may report for duty.

- Skin infection on exposed areas or infestation
- Severe respiratory infection (e.g. pneumonia, TB, NOT self limiting viral infections or the common cold)
- Diarrhoea (liquid stool) and vomiting (staff should be 48 hr symptom free before return to work)
- Jaundice
- Hepatitis
- Infectious diseases, such as chicken pox, measles, mumps, rubella or scarlet fever

3.4.3 Staff should refer to the Notification of Absence policy and Management of Sickness Absence Policy, which are available on station, or through the intranet for further guidance.

3.5 Accidental Exposure to Blood / Body Fluids

3.5.1 These guidelines are to be followed in the event of a sharp injury or contamination incident.

3.5.2 These may be defined as:

- Inoculation of blood by a needle or other sharp
- Contamination of broken skin with blood
- Blood splashes to mucous membrane e.g. eyes or mouth
- Swallowing a person's blood e.g. after mouth-to-mouth resuscitation
- Contamination where clothes have been soaked by blood
- Body exudates or secretions through a wound or sore
- Human bites or scratches

3.5.3 The risk of transmission of infection from a needlestick injury is low. When a sharp injury or contamination incident occurs:

3.5.4 Immediately –

1. Encourage bleeding from the wound by gently squeezing (do not suck the wound)
2. Wash the wound in soap and warm running water (do not scrub) or with a disposable wipe if water is not available.

3. Cover the wound with a dressing.
4. Irrigate eye or mouth splashes with plenty of water or saline.
5. Dispose of any sharps involved safely.
6. Report the incident to the immediate a CSO/Paramedic Supervisor and complete an incident report report.
7. If the source of the injury is known document the details of person(s) involved.
8. All incidents must be reported to Control immediately, who will inform the Manager (or Duty Officer out-of-hours).

3.5.5 As soon as possible (but within an hour) -

9. Inform your CSO/Paramedic Supervisor.
10. The receiving / nearest A&E department must be informed and blood samples will be taken from the member of staff and patient (providing they give consent).
11. Contact the Occupational Health Department for advice and follow-up on post-exposure prophylaxis, including booster injections. Out of normal hours this advice may be available from the local Accident & Emergency Department.
12. CSO / Paramedic Supervisor should ensure that the injured person receives appropriate immediate assistance from Occupational Health or A&E, and that the relevant details are recorded on an incident report form.

3.5.6 Control Measures

- 3.5.6.1 Any staff working in a healthcare facility that handles sharps or clinical waste should receive a full course of Hepatitis B vaccine and have their antibody level checked. New staff or any existing staff who know they are not already protected should contact the Occupational Health Department to arrange a vaccination without delay.
- 3.5.6.2 Staff who perform Exposure Prone Procedures (see below) need to be aware of their obligations to declare if they know they have been at risk of exposure to a blood borne virus infection (Hepatitis B, C or HIV).
- 3.5.6.3 Exposure prone procedures are those where there is a risk that injury to the worker may result in the exposure of the patient's open tissues to the blood of the worker. These include procedures where the worker's gloved hands may be in contact with sharp instruments, needle tips and sharp bone / teeth inside a patient's open cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times.

3.5.7 Post-Exposure Prophylaxis (PEP)

- 3.5.7.1 Following an exposure incident, staff should be assessed, either by the Occupational Health Department or in A&E.
- 3.5.7.2 Testing the Source Patient

- 3.5.7.3 In some instances it will not be possible to identify the source patient. However, if the source is identifiable and available for testing, a blood specimen should be obtained (with consent) and sent to the microbiology laboratory to test for Hepatitis B and possibly Hepatitis C and HIV testing if clinical circumstances indicate this is warranted. They do however have the right to refuse. Testing can be done on an urgent basis, in consultation with the laboratory. Counselling should be offered to the source patient as well as the member of staff involved.
- 3.5.7.4 In the event that the source patient cannot be tested, management of the member of staff should be based on a risk assessment. Clinical information about the incident and/or the source patient should be reviewed. If the source patient is considered to be 'high risk' then the healthcare worker may be managed as if exposed to a source known to be positive. (Such exposures would normally be limited to sharps injuries contaminated with fresh blood from a known high risk population such as IV drug users).

- Hepatitis B Virus
Staff should be aware of their own Hepatitis B immunity status. Prophylaxis is available through the Occupational Health Department or A&E.
- Hepatitis C Virus
There is no post exposure prophylaxis for Hepatitis C.
- Human Immunodeficiency Virus
The risk of acquiring HIV from single percutaneous exposure is small and on average is estimated to be 0.3%.

The risk of acquiring HIV through mucous membranes exposure is less than 0.1%

A triple drug therapy is available for post exposure prophylaxis.

3.5.8 When to consider PEP

- 3.5.8.1 PEP should only be considered when there has been exposure to blood or other high risk body fluids *known to be or strongly suspected to be* infected with HIV. (These fluids include amniotic fluid, vaginal secretions, semen, human breast milk, CSF, peritoneal fluid, pericardial fluid, pleural fluid, synovial fluid, saliva in association with dentistry, unfixed organs and tissues).
- 3.5.8.2 'Strongly suspected' includes individuals with clinical symptoms highly suggestive of HIV disease or individuals from countries where HIV is highly prevalent who may not yet have had a blood test.
- 3.5.8.3 'Strongly suspected' does not include an injury from an unknown source e.g. an inappropriately discarded needle in the healthcare setting or in a public place, nor an individual with a single life-style factor e.g. IV drug abuser.
- 3.5.8.4 PEP should not be considered following contact through any route with low risk materials e.g. urine, vomit, saliva, faeces, unless they are visibly blood stained.

- 3.5.8.5 If PEP is indicated it should be started as soon as possible after the incident, ideally within one hour of the exposure incident. (The Department of Health recommends it may be worth considering PEP even if 1-2 weeks have elapsed since the incident).
- 3.5.8.6 The individual should attend the nearest A&E department without delay.
- 3.5.8.7 Ongoing advice e.g. regarding return to work, can be obtained from the Occupational Health Department or the individuals GP.
- 3.5.8.8 NB All injuries involving 'exposures' to HIV and Hepatitis B must be reported to the Health & Safety Executive under the Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR) Regulations 1995.

Specific Cleaning Procedures

4. Specific Cleaning Procedures

4.1 Ambulance Stations / Other Trust Buildings

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

- Work surfaces and floors should be smooth-finished, intact, durable, washable and should not allow pooling of liquids or be impervious to liquids.
- Keep mops and buckets clean, dry and store inverted
- Provide single use, non-shredding cloth or paper roll for cleaning
- Keep equipment and materials used for general cleaning separate from those used for cleaning up body fluids
- Use general purpose detergent for all environmental cleaning (following the manufacturers' instructions) unless disinfection is required
- When replacing paper hand towels, these must be put into the holder, and not placed on top. Paper towel and liquid soap dispensers of the cartridge type must be cleaned regularly.
- Vacuum cleaner bags must be changed as necessary and the brush cleaned of hair and fluff before storage.
- Crockery and cutlery should be washed immediately after use in hot water and general-purpose detergent. Wherever possible, dry with disposable paper towels.
- It is usually sufficient to clean floors by removing dust with a properly maintained filtered vacuum cleaner. They can then be cleaned by washing with hot water and general purpose detergent, using mops or suitable scrubbing machine.
- Food preparation surfaces should be cleaned regularly with hot water and general-purpose detergent. These areas should be kept in good repair to facilitate cleaning. Ovens and microwaves must be cleaned after use.
- Hands must be washed thoroughly following any cleaning session. Communal nailbrushes must not be used.
- Refrigerators should be defrosted and cleaned regularly. Should a spillage occur or food become stale, the whole interior of the fridge should be cleaned with hot water and general purpose detergent and dried thoroughly.
- Anti-slip shower mats must be washed with hot water and general-purpose detergent after use. (Cork type shower mats are not to be used).
- Shower rooms and hand basins must be cleaned regularly with a cream cleanser, using a piece of disposable cloth which can be disposed of into a black waste sack.
- Toilets should be cleaned with a toilet brush weekly, more often if soiled, using a toilet de-scaling liquid. Toilet brushes should be cleaned after use in hot water and general-purpose detergent and stored dry in brush holder.

- Waste bins must be cleaned at least weekly inside and outside with hot water and general purpose detergent. Sack holders should also be cleaned regularly as above.

4.1.2 Cleaning staff employed directly or sub-contracted by the Trust must follow the NHS Healthcare Cleaning Manual. The manual details the specific cleaning task that should be undertaken, and the correct methods of cleaning.

4.2 Vehicle Cleaning

4.2.1 It is important to maintain high standards of hygiene within the ambulance to prevent the spread of infection. All staff have an individual responsibility to keep the ambulance clean and thus reduce the risk of cross infection to themselves, their colleagues and their patients. This can best be achieved by all crew members participating in frequent and routine cleaning activities. No emergency or urgent call should ever be delayed as a result of a vehicle being washed or cleaned. Crews must use their judgement in determining the most appropriate time to attend to vehicle and equipment cleaning in order to avoid any disruption to the vehicles deployment.

4.2.2 The Vehicle Exterior

4.2.2.1 The exterior surfaces of all ambulance service vehicles should be maintained in a consistently clean and hygienic condition. Steam pressure cleaners on stations should be utilised as necessary. The use of PPE should also be considered, such as using eye protection when using high pressure washers. Hand protection is important and rubber household gloves, or latex/nitrile gloves should be worn when using vehicle cleaning chemicals.

4.2.2.2 If pressures of operational requirements prevent a thorough cleaning of the vehicle exterior, attention should be prioritised to the relevant safety and legal requirements i.e. windscreen, windows, lights, indicators, reflectors, mirrors and number plates. In addition cleaning should pay particular attention to any areas where dirt is likely to be transferred to the crew's hands e.g. door handles. The usual detergent based cleaning agents are satisfactory for general exterior vehicle cleaning, however, if the exterior has become contaminated with blood or body fluids, the detergent clean should be followed by disinfection to eradicate the potential source of infection. PPE (disposable gloves and apron) should be worn in this case and these items must be disposed of into the yellow clinical waste bag.

4.2.3 The Vehicle Interior– Daily Clean

4.2.3.1 Using the designated blue mop, the floor should be cleaned with a fresh hot water and detergent solution (solution 1) at the end of **every** shift. If the mop becomes contaminated with body fluids, it should be changed immediately. Otherwise, mops should be changed every other week. Furniture and equipment should be washed as above using a disposable cloth and dried thoroughly with a

disposable paper towel. Sensitive equipment should be cleaned with alcohol wipes.

- 4.2.3.2 Clinical waste bags should be placed in a clinical waste bin, at the receiving hospital. Where this is not possible they should be disposed of at the earliest opportunity. At the end of a shift clinical waste bags should not be left on a vehicle, they should be removed, tied and put in the nearest clinical waste bin. Sharps boxes may be left on the vehicle but should be in the closed position. The interior of the vehicle should be checked for sharps and other discarded clinical waste and removed.

4.2.4 Vehicle Interior Cleaning – After Each Patient Journey

- 4.2.4.1 In addition to the above measures, vehicle cleaning should take place after each patient journey. It is good practice to use alcohol wipes to clean all surfaces that may have been contaminated, including stretcher handles and clinical surfaces. This need only take a few minutes.
- 4.2.4.2 Where an ambulance has become contaminated with blood or body fluid, cleaning must take place on completion of the call. Decontamination should normally be carried out where there is access to hot water and cleaning equipment, such as at hospital or on station. However, where the spillage is small this can be dealt with using the decontamination equipment carried by all vehicles (see p18).

4.2.5 Complete Vehicle Cleaning – Every Two Weeks

- 4.2.5.1 All ambulance interiors and exteriors should be subject to a comprehensive clean at least every two weeks. The 'Stocker-and-Washer' will visit station in the Trust on a regular basis to ensure that each vehicle regularly receives a complete vehicle clean. They will bring a fully equipped vehicle for the crew to use during the clean, to minimise operational disruption. The 'Stocker-and-Washer' will liaise with the Emergency Care Centre Manager and station staff to ensure that the cleaning program is conducted efficiently.
- 4.2.5.2 Detachable items should be removed in order that all surfaces can be accessed for cleaning. Ensure that appropriate items of PPE are worn and the vehicle is well ventilated. All walls, ceiling and the inside of cupboards can then be cleaned. Usually a general detergent clean using disposable cloths will suffice, however any areas visibly contaminated with blood or body fluids should be cleaned with the appropriate disinfecting agent. Specialist plastic cleaners should be used to remove stubborn rubber marks. The same procedure should be applied to equipment within the ambulance. The cleaning of specific items of equipment is covered in appendix 2.

4.2.6 Helicopter Cleaning

- 4.2.6.1 The cleaning of aircraft should follow the protocols adopted throughout this guidance for the cleaning of road ambulances. Care should be taken on the

different floor covering of Aircraft and any other issues where the use of water or other cleaning agents may require special care. All cleaning chemicals used within an aircraft need to be approved by the aviation authority. For routine cleaning alcohol wipes should be acceptable. For disinfection, a specific alcohol solution should be used. Solution one or two **must not** be used on aircraft.

4.3 Decontamination of Equipment

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

4.3.2 Certain items of equipment are classified as 'single-use only'.

4.3.3 **Single Use** means that the manufacturer:

- Intends the item to be used once then thrown away
- Considers the item unsuitable for use on more than one occasion
- Has insufficient evidence to confirm that re-use would be safe

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

NB The MHRA (MDA) (2000) guidance suggests that re-processing and re-using such items may pose hazards for patients and staff if the re-processing method has not been validated. Therefore re-use of single use products is not advisable unless the outcomes have been taken into account. The Consumer Protection Act 1987 will hold a person liable if a single use item is re-used against the manufacturers recommendations.

4.3.5 Re-useable equipment, including vehicles, should be appropriately decontaminated between each patient using a risk assessment model.

4.3.6 Risk Assessment for Decontamination of Equipment:

Risk	Application of Item	Minimum Standard
Low	In contact with healthy skin, or not directly in contact with patient. E.g. trolley bed handles, side rails.	Clean
Intermediate	In contact with intact mucous membranes, or contaminated with virulent or readily transmissible organisms (body fluids). E.g. Laryngoscope blades.	Disinfect or single-use
High	In contact with a break in the skin/mucous membrane, or introduction into sterile body areas. E.g. Cannulas.	Single-use

4.4 A-Z of Equipment Care and Cleaning

South Western Ambulance Service NHS Trust
Guidance and Procedures for Infection Prevention & Control

Equipment	Recommended Care
Airways	<i>Single use – disposable</i>
Bedpans / Urinals (Disposable)	<i>Single patient use only.</i> Dispose of in hospital macerator, or, after emptying, place in Clinical Waste bag for incineration.
Blood Glucose Monitor	Clean between each use. Refer to manufacturers instructions.
Body Bags (Disposable)	<i>Single patient use only</i>
Buckets	Empty, wash and dry thoroughly after each use. Store inverted
Carry Chair	Check fabric and straps intact. When visibly soiled clean using hot water and detergent, rinse and dry thoroughly, or clean with detergent wipe. If contaminated with blood / body fluids Clean with detergent then disinfect using chlorine releasing agent (e.g. Milton), dry thoroughly
Cervical Collars	<i>Single use – disposable, or</i> Re-usable - after each patient use Ensure material is intact and equipment is functional. Apply detergent and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels. If contaminated with blood / body fluids Dispose of as clinical waste
Defibrillator / ECG	Daily Wipe with alcohol wipes. Straps / Wires Wipe over with damp cloth, detergent and hot water After each patient Decontaminate with disinfectant hand wipe. Dry thoroughly with absorbent towels. If contaminated with blood / body fluids Wipe with a damp cloth, detergent and water (ensuring none enters the equipment), and then disinfect with an alcohol wipe.
Entonox	Must be used with patient air bacterial filter

South Western Ambulance Service NHS Trust
Guidance and Procedures for Infection Prevention & Control

Equipment	Recommended Care
<p style="text-align: right;">After each use</p> <p style="text-align: center;">Following use on known or suspected infectious patient</p>	<p>Apply detergent and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels. Dispose of all materials in Clinical Waste bag.</p> <p>Apply detergent and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels. Dispose of all cleaning materials in Clinical Waste bag.</p>
Forceps, Magills, Spencer Wells	Wash well with hot water and detergent, store dry. Wipe with 70% alcohol wipe.
Hand held Radio	Clean using detergent wipe.
In-line Bacterial Filter	<i>Single patient use only.</i> Dispose of into Clinical Waste bag.
Intravenous Cannulae	<i>Single use – disposable</i>
Lancet holder (for BM Testing)	Wipe with 70% alcohol after each use
<p>Laryngoscope Blades</p> <p style="text-align: right;">Disposable</p> <p style="text-align: center;">Re-usable - after each patient use</p>	<p><i>Single patient use only</i></p> <p>Remove handle and bulb from blade. Apply detergent to blade and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels. Wipe with disinfectant hand wipe.</p>
Linen	Place in appropriate colour coded bag for laundry or disposal
Mops	String mops, which are difficult to dry, can quickly become a source of infection. After use, the mop should be washed in detergent and hot water, wrung out and allowed to stand with head uppermost to dry
Oxygen/Neuliser Masks and Tubing	<i>Single patient use only.</i> If contaminated, dispose of into Clinical Waste bag.
Pillows	Should be encased in an intact waterproof cover. Clean with detergent and hot water – dry. If integrity of cover is breached – dispose of pillow as clinical waste and replace
Resuscitator (Bag and Mask).	<i>Single use – disposable</i>

South Western Ambulance Service NHS Trust
Guidance and Procedures for Infection Prevention & Control

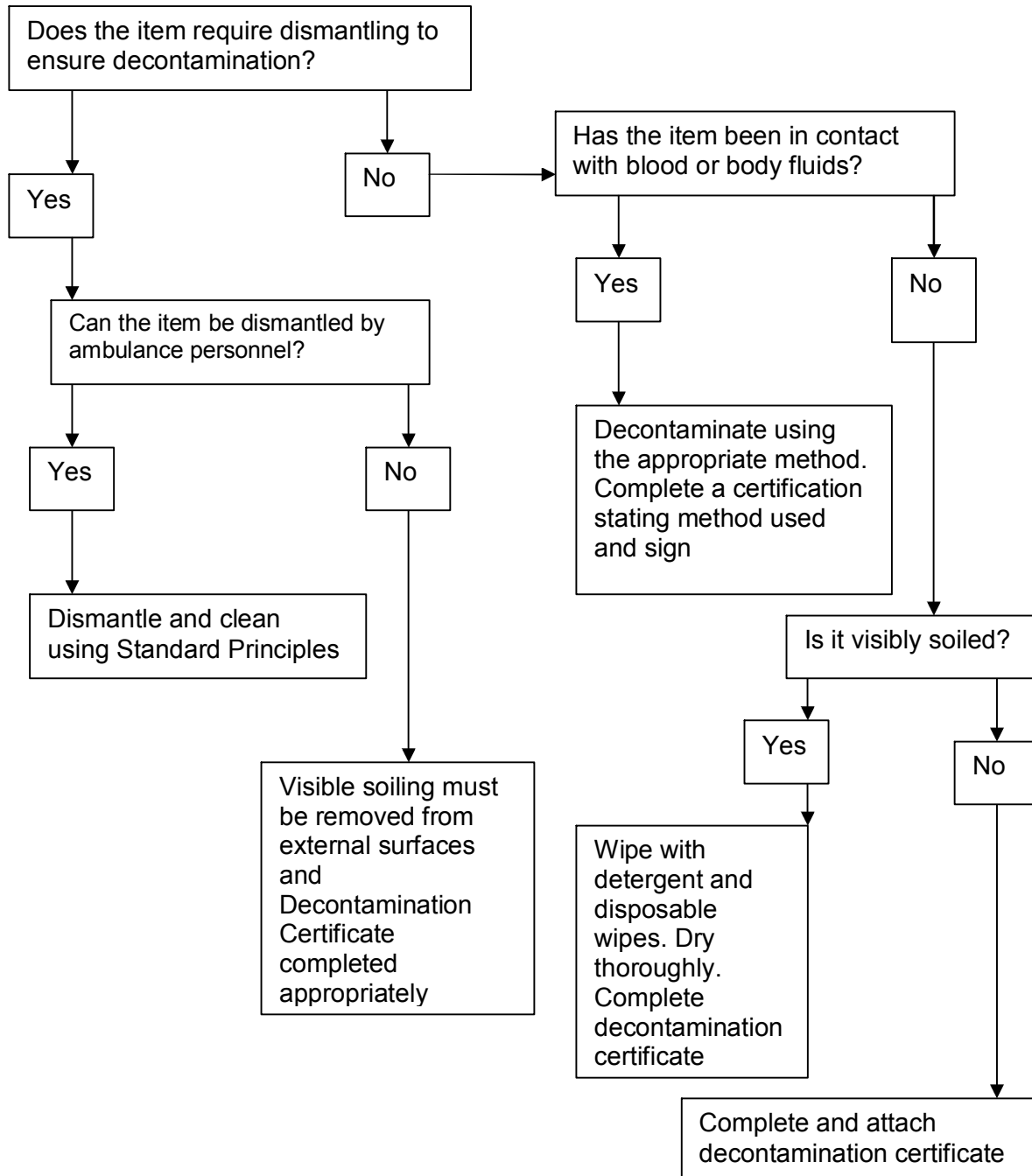
Equipment	Recommended Care
Resuscitator (Pneupac)	Must be used with patient air bacterial filter. Disinfected according to manufacturer's instructions.
Safety Helmet	Check visor, strap and casing intact. Clean using detergent wipe.
If contaminated with blood / body fluids	Use disinfectant then an alcohol wipe
Sphygmomanometer Cuffs After each use Re-usable - after each patient use If contaminated with blood / body fluids	If soiled, apply detergent and leave for 2 – 3 minutes. Dry thoroughly with absorbent towels Ensure material is intact and equipment is functional. Apply detergent and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels. Clean with detergent, then use chlorine releasing agent and dry thoroughly
Stethoscopes After each patient use Stretcher Mattresses	Wipe earpieces and bell with disinfectant wipes. Earpieces must be changed when damaged. Check that cover is intact. At start and finish of each shift and when visibly soiled, clean with detergent and hot water and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels.
Suction Catheter / Tubing Suction (Electronic Unit) Bottle (disposable) Suction (Electronic Unit) Bottle (reusable) Suction Unit (Hand Held)	<i>Single patient use only.</i> Dispose of in Clinical Waste bag. <i>Single patient use only.</i> Dispose of in Clinical Waste bag. Empty in hospital sluice. Apply detergent and leave for 2 - 3 minutes. Dry thoroughly with absorbent towels. Unit is re-useable, but the aspirate bottle is for single patient use. Dispose of aspirate bottle <u>ONLY</u> in Clinical Waste bag.
Thermometers	<i>Single use</i>
Umbilical scissors / clamps	<i>Single use</i>

Equipment	Recommended Care
Vomit bowls (Disposable)	<i>Single patient use only.</i> Dispose of in hospital macerator, or, after emptying, place in Clinical Waste bag.

4.4.1 Cleaning of Vehicles and Equipment Prior to Inspection, Service or Repair

- 4.4.1.1 Equipment requiring repair or servicing must be cleaned of all organic material, by the professional user or other appropriately trained staff, before it is sent away. A decontamination certificate (P46) must be attached to the equipment on dispatch, which states the method of decontamination used, or the reason why it was not possible.
- 4.4.1.2 All reusable medical devices must be decontaminated in accordance with manufacturer's instructions as well as legislative and best practice requirements (see flowchart, 3.5).
- 4.4.1.3 It is also important to ensure that vehicles going for maintenance or repair are sent to workshops, including external contractors, in a state which is safe for non clinical staff to work in. All clinical waste should be removed and the sharps box should either be removed or placed in the closed position. The interior and equipment should be checked for sharps and contamination, and cleaned if necessary. If cleaning and checking of the vehicle has not been possible workshops should be notified of the risk and advised of any precautions to take.

4.4.2 Flowchart for Decontamination Prior to Service or Repair





Certificate of Equipment Decontamination

(Prior to Inspection, Service or Repair)

Make:.....

Model:.....

Description:.....

.....

Serial Number:.....

This item has not been exposed internally or externally to body fluids or other hazardous materials.

This item has previously been exposed to body fluids or other hazardous materials, but has been decontaminated following the Infectious Control Policy.

Please state decontamination procedure used (if applicable):.....

.....

.....

Full Name:.....

Position:.....

Signature:..... Date:.....

This certificate must remain with the equipment at all times

Category One Diseases

5. Category One Diseases

Disease	Mode of Transmission	Particular Issues
Erysipelas		
Bacterial infection of the skin which often blisters and may weep.	Direct contact with skin lesions.	Wear gloves when handling lesions.
Glandular Fever		
Viral infection causing weakness, headache, sore throat and enlargement of the lymph nodes and spleen.	Direct contact with saliva.	Do not use mouth to mouth resuscitation, use a bag and mask.
Viral infection of the respiratory tract. Passed by coughing and sneezing.	Airborne droplets.	None likely to be effective. Vaccinations are available from GP's.
Bacterial respiratory infection which can cause headache, muscle aches, cough, diarrhoea, pneumonia, mental confusion, and kidney or liver damage. A relatively new disease that is originally contracted from airborne droplets but it is known that it cannot be passed on by person to person contact. There is no risk from being in the vehicle with an infected patient.	None.	
Leptospirosis		
Bacterial infection which can cause influenza like symptoms and may lead to jaundice, heart failure or meningitis. Passed to humans by rat urine.	None between humans.	
Leprosy		
Bacterial infection of the skin and nerves causing tissue destruction. Passed by long term, intimate, direct contact.	Long term, intimate direct contact.	

Malaria		
Parasitic infection which causes shaking, headache and red blood cell destruction. Passed to humans via mosquito bites or blood transfusion.	None between humans.	
Methicillin Resistant Staphylococcus Aureus (MRSA)		
<p>Staphylococcus Aureus (SA) is a common bacteria found on 30% of the population as part of their normal skin flora. Most strains of SA have acquired resistance to some antibiotics and MRSA has acquired resistance to the most commonly used antibiotics.</p> <p>In normal healthy people MRSA does not pose a threat to health. Infections are rare but if one does occur the infection is trivial and affects the skin, resulting in infected cuts or boils which are easily treated.</p> <p>In people that are unwell (and therefore already have a reduced resistance to infection) open wounds or invasive procedures such as cannulation, airway intubation or surgery, cause breaks in the skin which can allow MRSA bacteria to enter deep into the body and cause more severe infections which can be difficult to treat.</p>	<p>Direct contact.</p> <p>MRSA does not represent a specific hazard to ambulance personnel or their relatives but is a cross infection risk to other patients.</p> <p>The main mode of transmission to other patients is via handling by healthcare workers and this is usually caused by not disposing of gloves or cleansing hands between handling open wounds on different patients.</p>	<p>Wear gloves when handling open wounds and dispose of them after each patient use.</p> <p>The most important prevention strategy is hand washing with soap and water or if this is not immediately available, cleansing with an alcohol hand rub solution.</p> <p>There is no need for MRSA patients to be transported separately from other patients.</p>
Ophthalmia Neonatorum		
Bacterial infection of the eye. Occurs in new born babies as a result of infection acquired during birth.	Direct contact with exudate.	Wear gloves when handling eye.
Scabies		
<p>Parasitic skin infestation causing intense itching. Passed by intimate direct contact.</p> <p>There is no risk from being in the vehicle with an infected patient.</p>	Intimate direct contact.	Stretcher linen should be removed after journey and placed in an alginate stitched bag, then a red laundry bag.
Tetanus		
Bacterial infection of the nervous	Penetrating skin wounds	Staff are vaccinated

system causing muscle contractions. Gains access to the body by way of penetrating wounds.	only.	by the Occupational Health Department.
Whooping Cough		
Bacterial infection of early childhood causing an exhausting cough. Adults are not normally infected.	Airborne droplets. Bacteria can only live for a very short time once outside of the body.	

Category Two Diseases

6. Category Two Diseases

Disease	Mode of Transmission	Particular Issues
Anthrax		
Bacterial infection of the skin often causing boils.	Direct contact with exudate.	Wear gloves when handling exudate. Disinfect vehicle after use.
Chickenpox		
Viral infection causing skin rash, spots and blisters. Childhood illness which provides natural immunity.	Airborne droplets. Direct contact with rash.	None likely to be effective and no vaccine is available.
Cholera		
Bacterial infection of the intestines causing diarrhoea, vomiting and severe dehydration, often fatal.	Direct contact with excreta and vomit.	Wear gloves and aprons if necessary.
Diphtheria		
Bacterial infection of the throat causing a membrane like exudate of clotted serum, white cells, bacteria and dead surface tissue cells to form which obstruct the upper air passages and often require a tracheotomy to save life.	Airborne droplets although the bacteria can only live for a short time once outside of the body.	
Dysentery		
Bacterial inflammation of the bowel causing abdominal pain, fever and frequent passage of stools containing blood and mucus.	Direct contact with excreta and vomit.	Wear gloves and aprons if necessary.
Encephalitis		
A viral inflammation of the brain causing fever, vomiting, seizures, mental confusion, coma and death.	Direct contact with excreta and vomit.	Wear gloves and aprons if necessary. Disinfect vehicle after use.
Enteric Fever		
Bacterial infection of the bowel causing	Direct contact with	Wear gloves and

South Western Ambulance Service NHS Trust
Guidance and Procedures for Infection Prevention & Control

headache, fever, loss of appetite, abdominal discomfort and constipation. In severe cases, delirium, diarrhoea, skin rashes and enlargement of the liver or spleen may occur.	excreta and vomit.	aprons if necessary.
Food Poisoning		
Internal disorders caused by bacteria or fungi. Symptoms include nausea, vomiting, loss of appetite, fever, abdominal pain and diarrhoea.	Direct contact with excreta and vomit.	Wear gloves and aprons if necessary.
Gastro-enteritis		
Bacterial or viral inflammation of the intestine and stomach lining causing fever, abdominal pain, diarrhoea and vomiting.	Direct contact with excreta and vomit.	Wear gloves and aprons if necessary.
Hepatitis B		
<p>Viral inflammation of the liver (which can be fatal). 10% of those that do recover become carriers and may develop cirrhosis or cancer of the liver.</p> <p>Four out of five carriers have a very low infectivity, the remainder, and those suffering acute Hepatitis at the time, are highly infectious.</p>	<p>Exchange of blood and blood stained body fluids.</p> <p>The prime risk of infection for ambulance staff is by accidental self inoculation, or the entry of infectious material through broken skin, or the mucous membranes of the eye, nose or mouth.</p> <p>Simple contact between blood and intact skin does not constitute a risk.</p>	Staff are vaccinated by The Occupational Health Department.
HIV / AIDS		
<p>The Human Immunodeficiency Virus (HIV) causes a deficiency in a person's immune system which may render it unable to provide protection against common infections.</p> <p>A person infected with HIV may go on to develop AIDS (Acquired Immuno Deficiency Syndrome) over the following weeks, months or years.</p> <p>An AIDS diagnosis is given when the</p>	<p>Exchange of blood and body fluids but not saliva or tears.</p> <p>The prime risk of infection for ambulance staff is by accidental self inoculation, or the entry of infectious material through broken skin, or the mucous membranes of the eye, nose or</p>	

immune system has been damaged by HIV causing a number of specific infections and/or cancers which may be fatal.	mouth. Simple contact between blood and intact skin does not constitute a risk.	
Infestations e.g. fleas, lice		
Parasitic infestation of the skin causing intense irritation.	Direct contact.	Wear disposable gloves and apron. Disinfect vehicle after use.
Measles		
Viral infection causing skin rash, mouth spots, fever, cough, and conjunctivitis. A childhood infection giving lifelong natural immunity.	Airborne droplets. Direct contact with saliva.	Do not use mouth to mouth resuscitation, use a bag and mask. Vaccinations are available from GP's for the rare adult that escaped childhood infection.
Meningitis and Septicaemia		
<p>Meningitis is a viral or bacterial inflammation of the lining of the brain. Symptoms may include fever, vomiting, headache, stiff neck, aching limbs and joints, a dislike of bright light, drowsiness and a rash.</p> <p>Bacterial meningitis is rare but can cause permanent deafness or brain damage and can be fatal. Viral meningitis is more common but the effects are mild and most people make a full recovery.</p> <p>Some bacteria that cause Meningitis may also cause Septicaemia (blood poisoning) as well. This can develop quickly and is evident from a rash which can be anything from tiny red spots to large blotchy bruises.</p> <p>Both bacterial Meningitis and Septicaemia require urgent treatment.</p> <p>The bacteria which causes meningitis is carried in the nose and throat of 10-</p>	<p>Airborne droplets.</p> <p>Spread during coughing, sneezing and kissing but the germs cannot live outside of the body for more than a few seconds and are not easily passed from one person to another.</p> <p>The prime risk to ambulance staff is by conducting unprotected mouth to mouth resuscitation.</p> <p>There is no risk from merely being in the ambulance with a patient.</p>	<p>Do not use mouth to mouth resuscitation, use a bag and mask.</p>

15% of the general population without any harmful effect at all, it is very rare that they overcome the body's defences and cause meningitis.		
Mumps		
<p>Viral infection causing malaise and fever, and swelling of the salivary glands.</p> <p>A childhood infection giving lifelong natural immunity. In adult men, can cause painful inflammation of the testicles, sterility is very rare.</p>	<p>Airborne droplets. Direct contact with saliva.</p>	<p>Do not use mouth to mouth resuscitation, use a bag and mask.</p> <p>Vaccinations are available from GP's for the rare adult that escaped childhood infection.</p>
Poliomyelitis		
<p>Viral infection causing fever, sore throat, headache, and vomiting.</p> <p>In severe cases stiffness of the neck and back, muscle ache, twitching and paralysis may occur.</p>	<p>Direct contact with excreta and vomit.</p>	<p>Wear gloves and aprons if necessary. Disinfect vehicle after use.</p> <p>Staff are vaccinated by the Occupational Health Department.</p>
Rubella		
<p>Viral infection of the lymph nodes causing slight fever, swollen nodes and a skin rash.</p> <p>If contracted during the early months of pregnancy can lead to congenital heart disease, physical deformities, cataracts, deafness and mental retardation of the foetus. An attack confers lifelong natural immunity.</p>	<p>Airborne droplets.</p>	<p>Staff are tested for natural Rubella immunity and vaccinated if necessary by the Occupational Health Department.</p>
Shingles		
<p>Viral infection caused by the reactivation of an earlier infection with Chickenpox. Symptoms include inflammation of the nerve ganglia near the spinal cord, localised pain and skin rash on the trunk. Severe cases cause a rash around the eye and vision impairment.</p> <p>Contact with shingles may cause</p>	<p>Airborne droplets. Direct contact with rash.</p>	<p>None. Precautions are unlikely to be effective and no vaccine is available.</p>

South Western Ambulance Service NHS Trust
Guidance and Procedures for Infection Prevention & Control

Chickenpox in individuals without natural immunity.		
Tuberculosis		
Bacterial infection usually affecting the lungs but can also affect the bowel, lymph nodes, skin, bones or other vital organs. Symptoms include fever, fatigue, weight loss, night sweats, coughing and blood streaked sputum.	Airborne droplets.	Staff are vaccinated by the Occupational Health Department.
Typhus		
Parasitic infection causing headache, back and limb pain, shivering, cough, constipation, skin rash, delirium, prostration, weakness of the heart action, stupor, coma or death.	Direct contact with saliva, excreta or vomit.	Wear gloves and aprons if necessary. Do not use mouth to mouth resuscitation, use a bag and mask.

Category Three Diseases

7. Category Three Diseases

Smallpox	Mode of Transmission
Severe viral infection causing fever, headache, muscle ache and a blistering rash, often fatal.	Airborne droplets.
Rabies	Mode of Transmission
Viral inflammation of the brain causing fever, headache, neck stiffness, anxiety and disorientation. This progresses to a fear of swallowing, choking, panic, hallucinations, coma and death.	Airborne droplets. Direct contact with rash, saliva, urine and cerebro-spinal fluid.
Viral Haemorrhagic Fevers	Mode of Transmission
Initial symptoms include fever, malaise, headache and muscle and joint pains. Nausea, vomiting and diarrhoea may also occur. Ebola and Marburg often cause a measles-like rash after 4-7 days. Obvious bleeding is a later or terminal event. Pyrexia may last as long as 16 days with temperatures up to 41°, severe cases result in coma and death.	Airborne droplets possibly if patient is suffering pulmonary infection. Accidental inoculation or contamination of broken skin or mucous membranes by infected blood or body fluids.

7.1 Guidelines for Dealing with Category Three Disease

7.1.1 Introduction

7.1.1.1 These guidelines should be read in conjunction with those set out in the Ambulance Service Basic Training (ASBT) Manual on Category III infectious diseases. They should be followed for the conveyance of patients suffering from or suspected to be suffering from highly infectious diseases to the Royal Free Hospital, London Ambulance and Control staff should be aware that special precautions are needed with these types of cases as there is a risk of the spread of infection by contact with infected blood, vomit, excreta and possibly air droplets.

7.1.1.2 Requests for the transportation of a patient to the Royal Free Hospital will come from either the Royal Free Hospital, or the Consultant for Communicable Disease Control. The Physician-in-charge of the Royal Free will inform the Ambulance Control of the level of containment appropriate for the journey required. Where containment requires the use of a Transit Isolator, the Trust will arrange the provision of the isolator and

the transportation of the patient by the London Ambulance Service to the Royal Free Hospital. The South Western Ambulance Service does not have a transit isolator.

7.2 Transportation of Non-Isolator Patients

7.2.1 Action by Control

7.2.1.1 When a request for transportation is received, the Duty Control Manager/Officer must inform the Chief Executive, Director of Operations and Communications Manager. The Duty Control Manager/Officer should be aware that a crew of three is necessary. The third member of the crew will drive the vehicle, but they will not take part in patient handling. The Duty Control Manager/Officer should inform the Police of the impending movement and seek advice on the most suitable routes.

7.2.1.2 Control must log the times when the crew:-

- Leave the station
- Arrive at the pick-up point
- Leave the scene and their expected time of arrival
- Complete the case (i.e. arrive back at their home station)

7.2.1.3 The Duty Control Manager/Officer should arrange an escort through the appropriate Operational Locality Manager or in the absence the Operations Manager. The escort should not come into contact with the patient or crew after contact has been made with the patient but simply follow the ambulance and cope with any unforeseen events.

7.2.2 Action by Ambulance Crew

7.2.2.1 On being notified of an exotic disease case staff should proceed to the agreed ambulance station. The third crew member is required to drive the ambulance and must not take any part whatsoever in patient handling procedures. The vehicle should be prepared in accordance with Section 17.5 of the ASBT manual. The bulkhead door and all windows (if applicable) in the patient compartment must be closed. Where fitted, tape must be applied around both sides of the bulkhead door, to prevent air movement into the cab.

7.2.3 Personal Protection

7.2.3.1 Only staff who have received specific appropriate training can transport infectious cases. Staff should remove all clothing (except underwear) and put on a disposable suit. Contact lenses should not be worn unless essential. If contact lenses are worn during a transfer, they should be removed for disinfection immediately on completion of the transfer and replaced either with spectacles or with clean contact lenses. Watches, rings, etc should be removed and put in a place of safety in the escorting vehicle together with spare uniform/clothing, etc.

- 7.2.3.2 All staff must wear disposal overalls, disposable overshoes, gloves, FFP3 mask and goggles before entering the place from which the patient is to be collected. Whilst it is not necessary for the driver to wear overshoes, eye protection or a mask, they must be available in the cab.

7.2.4 Journey Arrangements

- 7.2.4.1 The route selected should be adhered to, with any necessary diversions reported to Ambulance Control by the escorting vehicle. The escorting vehicle is responsible for keeping Ambulance Control updated on throughout the process.
- 7.2.4.2 If it becomes necessary to stop the vehicle e.g. in the event of a breakdown, remain with the vehicle. The escort vehicle driver will notify Control and may attempt repairs. If repairs are not successful, the escort vehicle will arrange for the vehicle to be towed to its destination or will seek alternative assistance. On arrival at the Royal Free Hospital, the ambulance will be directed to the appropriate area to unload the patient

7.2.5 Disinfection of Vehicle

- 7.2.5.1 After the admission of the patient the crew will remove all disposable items and bedding for incineration as directed by the Royal Free Hospital. The ambulance will be taken to the decontamination area. Any ambulance equipment used on-route should be placed into a sealed clinical waste bag. Unless directed otherwise the vehicle crew will then carry out a thorough disinfection of the interior of the vehicle and its equipment by washing down with a 10,000ppm hypochlorite solution. Disinfection by fogging must not be used.

7.2.6 Personal Decontamination

- 7.2.6.1 Personal decontamination will be undertaken on the directions of the Royal Free Hospital staff and will include disposal of items of clothing and shower and changing facilities.

7.2.7 Medical Surveillance

- 7.2.7.1 Medical surveillance will depend upon the instructions given by the Consultant in Charge of the Royal Free Hospital and the Consultant for Communicable Disease Control on the day.

Appendix 8 – Clinical Hub Contact Tracing:

8.1 Should a patient treated by the Trust subsequently be found to have an infectious disease or illness, it may be necessary for the Ambulance Clinician or Out of Hours staff to be traced. This form should be completed on receipt of a call from an Infection Control Department, Duty Microbiologist, Occupational Health Department or other responsible person.

8.2 Clinical Hub Staff should:

- Know what to advise staff in case of inoculation injury.
- When appropriate, inform operational ambulance personnel about patients who may pose a risk of transmission of infection.

Date call received in ambulance control: ____ / ____ / ____ Time: ____ : ____
Call received from (name and position): _____
Patient's name: _____
Patient conveyed from: _____
Patient conveyed to: _____
Date of journey: ____ / ____ / ____ Incident no: _____
Advice from caller: _____

Contact no. for further advice: _____
Vehicle Call Sign: _____
Trust staff ID/Names #1: _____
Trust staff ID/Names #2: _____
Vehicle Call Sign: _____
Trust staff ID/Names #3: _____
Trust staff ID/Names #4: _____
Information passed to Crew (identify crew #) _____

Date & time information passed to Crew or Senior Officer (detail): _____
Signed (Duty Control Manager): _____
Name (Print): _____

This form should be copied to the Clinical Development Manager - East