National Ambulance Service (NAS)

Policy

Control & Infection & Communicable Diseases

<table>
<thead>
<tr>
<th>Document reference number</th>
<th>Document developed by</th>
<th>Revision number</th>
<th>Document approved by</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASPO01</td>
<td>John Marshall, Operations Resource Manager</td>
<td>3</td>
<td>NAS Leadership Team</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval date</th>
<th>Responsibility for implementation</th>
<th>Approval date</th>
<th>Responsibility for review and audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th June 2012</td>
<td>Quality, Safety &amp; Risk Managers</td>
<td>31st December 2020</td>
<td>Operational Support &amp; Resilience Managers</td>
</tr>
</tbody>
</table>

Responsibility for review and audit

Operational Support & Resilience Managers
Table of Contents:

1.0 Policy 3

2.0 Purpose 3

3.0 Scope 4

4.0 Legislation/other related policies 4

5.0 Glossary of Terms and Definitions 4

6.0 Roles and Responsibilities 4

7.0 Procedures 6

8.0 Education 21

9.0 Incident Reporting and Investigation 21

10.0 Implementation Plan 21

11.0 Revision and Audit 22

12.0 References 22

13.0 Appendices 22
1.0 POLICY STATEMENT

1.1 The National Ambulance Service (NAS) is committed to providing the resources and support systems required to promote quality patient care and provide a safe environment for staff, patients, visitors and others affected by the work of the Service. This commitment is endorsed by the introduction of this policy.

1.2 Control of Infection

1.2.1 This policy provides guidance on best practice in the control of transmissible infections.
1.2.2 In situations where people live together, the risks of both acquiring infection from others and spreading infection can be high.
1.2.3 Many diseases are infectious before symptoms appear, and contact with a sick person before a final diagnosis is made is common. It is essential, therefore, that NAS staff maintain a high standard of personal hygiene at all times. It should be remembered that the prevention/ control of infection is dependent on the application of procedures that will reduce the likelihood of errors, and resultant risk, to staff, patients, relatives and others.
1.2.4 Most infections will not transfer to healthy staff and nearly all personnel will be immune to the common childhood infectious diseases. The risk is minimised by appropriate immunisation and good hygiene techniques.
1.2.5 It is important to realise that patients can be placed at risk from transmission of infection from NAS staff, as many patients will already have a lowered resistance to infection.
1.2.6 If staff consider that they or their colleagues present such a risk, they should discuss the matter with the relevant Manager or Occupational Health Service as appropriate.

2.0 PURPOSE

2.1 To provide advice for NAS staff to help minimise the risk of the spread of infection
2.2 To provide contact names and telephone numbers, see Appendix II, should more detailed advice be needed on communicable diseases or infection prevention/control matters
2.3 To provide specific information and guidance on the recognition and management of some common communicable diseases, see Appendix III
3.0 SCOPE

3.1 This Policy applies to all NAS staff
3.2 This Policy does not encompass specific guidance relating to a possible Swine Flu Pandemic.

4.1 LEGISLATION/OTHER RELATED POLICIES

A. National Ambulance Service Staff Induction Process
B. National Ambulance Service Parent Safety Statement
C. PHECC Training and Education Standards
D. Safety, Health and Welfare at Work Act 1989 and 2005
E. Safety, Health and Welfare at Work (General Regulations) 2007
F. NAS Guidelines for Situations Associated with Biological Threats
G. Policy - NASP003 - Dress and Personal Appearance at Work
H. Procedure – NASOE001 – Personal Protection Equipment Kit
I. Procedure – NASOF002 – Daily Vehicle Inspection and Inventory Check
J. HSE Infection Control Guideline Manual 2010
K. HSE Policy for the Prevention and Management of Latex Allergy 2011
L. HSE Waste Policy 2010
M. HIQA Infection Prevention and Control Standards 2009
N. SARI Hand Hygiene Guidelines 2009
O. HPSC TB Guidelines 2010
P. HPSC C.Diff Guidelines 2009
Q. SARI/RCPI MRSA Guidelines
R. Immunisation Guidelines for Ireland RCPI 2008
S. Procedure – NASCG014 - Transportation of Patients with Suspected or Confirmed Viral Haemorrhagic Fever

5.0 GLOSSARY OF TERMS AND DEFINITIONS

Leading EMT—Supervisor (Paramedic/Advanced Paramedic)

6.0 RESPONSIBILITIES

6.1 The Operational Support and Resilience Manager has executive responsibility for implementation of this possibility.
6.2 The Quality, Safety and Risk Manager in each NAS Area is the lead Manager for Infection Control and is responsible for the ongoing development of Infection Prevention/Control processes within the NAS and accountable for ensuring best practice regarding infection prevention/control and control of communicable diseases.
6.3 Quality, Health and Safety Committees (QHSC) in consultation with the Infection Prevention/Control Service will be responsible for strengthening infection control procedures within the NAS. The QHSC will ensure that infection control procedures are in place and working effectively.

6.4 It is the responsibility of all Managers to ensure the implementation of this policy throughout their areas of responsibility. Particular attention must be shown to the implementation of effective infection prevention/control techniques, including vehicle cleanliness and infection control issues surrounding the use of medical devices.

6.5 It is the responsibility of the Education and Competency Assurance Team to ensure that all records relating to training resulting from this Policy are maintained and available for internal and external review.

6.6 It is the responsibility of a designated Supervisor in each Ambulance Station to undertake a monthly Quality Audit in each vehicle and submit the appropriate records.

6.7 It is the responsibility of every Supervisor to ensure that supplies of the following are accessible to each Station for issue to vehicles:

   A. Yellow Waste Bags (Healthcare Risk Waste)
   B. Personal Issue Sharps Containers
   C. Sharps Container for Vehicle use
   D. Infection Control Packs/Spills Kits

6.8 Disposal of Health Care Risk Waste and Locked Sharps Containers is carried out as required or at least once per week.

6.9 All staff of the NAS are accountable for adhering to this policy in the execution of their duties.

7.1 PROCEDURES INFECTION CONTROL PROCESS Safe Working Practices

7.2 Basic Principles

7.1.1 General principles in infection prevention/control are based on the use of practices and procedures that prevent or reduce the likelihood of infection being transmitted from a source of infection (e.g. person, contaminated fluid, equipment etc) to a susceptible individual.
7.1.2 The following principles form the basis of this policy:

A. All NAS staff attend for a pre-employment occupational health assessment prior to employment which includes appropriate vaccination and screening where applicable.
B. All NAS staff are offered and encouraged to take the annual flu vaccination.
C. All NAS staff received infection prevention and control training on induction and on a regular basis thereafter.
D. Apply good basic hygiene practices with appropriate thorough hand hygiene.
E. Uniform should be fit for purpose and washed regularly with detergent as per labelled instruction; soiled uniform should be changed as soon as is practical.
F. Cover existing wounds or skin lesions with waterproof dressings.
G. Avoid contamination with body fluids by using appropriate protective clothing based on a risk assessment.
H. Apply only approved procedures for the decontamination of instruments and equipment.
I. Apply good basic environmental cleaning procedures.
J. Clear up spills of blood and other body fluids promptly.
K. Ensure safe disposal of contaminated waste in appropriate receptacles.
L. Ensure safe disposal of sharp items.
M. Ensure all staff are aware of, understand and adhere to infection prevention/control policies and procedures.

7.2 Standard Precautions

7.2.1 Rationale for standard precautions:

A. Effective control and prevention of healthcare associated infections (HCAI) should be.
B. Included into everyday practice and applied consistently by all NAS staff.
C. Standard Precautions are a group of infection prevention and control practices and measures that apply to all patients/clients at all times regardless of suspected, confirmed or presumed infectious status, in any setting in which healthcare is delivered.
D. Standard Precautions are based on the principle that all blood, body fluids, secretions, excretions (except sweat), non-intact skin and mucous membranes may contain transmissible infectious agents.
E. Transmission-based precautions (airborne, droplet and contact) are used for patients who are known or suspected to be infected or colonised with infectious agents, including certain epidemiologically important pathogens which require additional measures to Standard Precautions to effectively prevent transmission (see section 7.11).
7.2.2 The aim of standard precautions is to protect both NAS staff and patients from the transmission of infection during routine care and hazardous procedures where the risk is known and unknown. These precautions minimise the risk of infection without the need to divulge information that may be confidential.

7.2.3 Standard Precautions are summarised in this document but staff should ensure that:

A. Cuts and grazes are covered with waterproof dressings on commencement of duty
B. Hand decontamination should be undertaken:
   ➢ Before touching a patient
   ➢ Before a clean or aseptic procedure
   ➢ After body fluid exposure risk immediately after removing gloves
   ➢ After touching a patient
C. Wear disposable gloves if handling or likely to handle blood, body fluids, secretions, excretions (except sweat) non-intact skin or mucous membranes. These should be single patient use and hand hygiene must be performed immediately on removal of gloves.
D. Wearing a mask, eye protection and a plastic apron if spraying or splashing of blood or body fluids possible
E. Disposable items soiled with blood or body fluids should be bagged in clinical waste yellow plastic bags prior to disposal
F. All blood, faeces and vomit spills must be cleaned up promptly following the guidance in Section 7.8.2 of this policy
G. Urine spills should be cleaned up promptly using a solution of general purpose detergent and hot water

7.2.4 Sharps injuries must be dealt with immediately and following the guidance in Section 7.6.3 of this policy

7.3 Hand Hygiene

7.3.1 Hand hygiene is the single most important means of preventing the spread of infection.
7.3.2 Hands become contaminated with a variety of organisms, which are picked up by touching people and objects.
7.3.3 There are 2 methods to clean your hands:

A. Hand washing using soap and water must be used if hands are visibly soiled or if managing a patient with Clostridium Difficile or unexplained diarrhoea. Where soap and water are unavailable Alcohol gel or detergent wipes should be used.
B. Hand decontamination using alcohol hand gels/rubs are the preferable option for all other hand hygiene opportunities.
7.4 Hand Protection

7.4.1 All cuts and abrasions on hands must be covered with a waterproof dressing to provide protection from the blood and body fluids of others and to protect patients from HCW blood and body fluids.

7.4.2 Fingernails should be short, clean and free from nail polish.

7.4.3 Jewellery, such as bracelets and rings except wedding rings should be removed.

7.4.4 There is a potential minor risk of infection to the patient from the wearing of wristwatches by NAS staff as appropriate compliance with hand hygiene is reduced. To minimise this possible risk of infection, only non-cloth strapped watches can be worn by NAS staff whilst on duty.

7.4.5 Hand Hygiene must be Completed:

Before –

Eating
Taking a break / going home
Before touching a patient
Before a clean or aseptic procedure
Putting on gloves

After –

After touching a patient
Going to the toilet
Cleaning equipment / environment
Cleaning up spills
Handling dirty linen or waste
Removal of gloves or apron
Performing dirty tasks
Eating

7.4.6 The following Procedure should be followed when Washing Hands:

A. Wet hands under lukewarm running water
B. Apply sufficient soap and rub hands to make a lather
C. Wash hands vigorously for 15 - 30 seconds paying particular attention to finger tips and between the fingers
D. Rinse hands well under warm running water and dry thoroughly with good quality paper towels that are absorbent. Dispose of the paper towel using the foot pedal on the dustbin.
7.4.7 Procedure for Antiseptic Hand Hygiene with Alcohol Gel

E. Hand hygiene is indicated on the visibly clean hands
F. Apply sufficient alcohol gel/rub (2 doses) to the cupped dry hands.
G. Using alcohol hand rub technique, vigorously rub gel/rub into both hands up to the wrists for 30 seconds.
H. Perform the movements of each step five times.
I. Ensure that the hands remain moist throughout the rub time.
J. Allow hands to dry thoroughly by evaporation.
K. An emollient hand cream should be applied regularly to protect skin from the drying effects of regular hand decontamination.

7.5 Personal Protective Equipment

1. Personal protective equipment in relation to infection prevention/control is worn to prevent the wearer from coming into direct contact with the blood and body fluids of others which may contain harmful infectious agents that could either be picked up by the person or passed on to others.
2. PPE consists of: gloves, aprons/gowns, eye protection (e.g. goggles with top and side shields), nasal and mouth protection (e.g. surgical face mask).
3. NAS staff should select the appropriate PPE based on a risk assessment including the following:
   A. The nature of the anticipated patient care interaction and procedure
   B. The risk of exposure to blood, body fluids, secretions, excretions and the infectious agents
   C. The risk of contamination of the skin or clothing

4. To minimise the risk of contamination, PPE should be removed in the correct sequence (see donning and removing posters in Appendices IV and V)

7.5.1 Gloves

1. Gloves are a barrier and prevent contamination of the hands with blood and body fluids non-intact skin, mucous membranes secretions and excretions (except sweat)
2. Choose a glove of the correct size, which should be latex free
3. Gloves should be worn:
   A. For any contact with the inside of the body (including inside of mouth)
   B. before contact with a wound

4. before carrying out an activity that might lead to contact with blood or body fluids, non-intact skin, mucous membranes secretions and excretions (except sweat)
C. or with sharp or dirty instruments

5. Gloves should only be worn once. Gloves must be changed between caring for different patients and between different care or treatment procedures for the same patient. Hand hygiene must be preformed following glove removal.

6. It is recommended that a pair of disposable gloves should be carried in the uniform pocket at all times for emergency use

7.5.2 Plastic Aprons

1. Plastic aprons are water repellent and may protect clothing from microorganisms. They should be worn whenever it is anticipated that uniforms will become soiled with blood, body fluids or other contaminated material

2. Plastic aprons are single use items. They should be discarded after use if soiled with body fluids as healthcare risk waste.

3. After removal of apron, perform hand hygiene

7.5.3 Face and Eye Protection

1. Fluid repellent surgical masks are generally ineffective against airborne infection. However, they offer protection against splashing of the mouth and face.

2. Protective goggles or glasses should be worn when there is a risk of splashing blood or body fluids into the eyes. Following their use, goggles / glasses should be cleaned in hot soapy water, dried and stored ready for re-use

7.5.4 Patient Handling

1. Do not breathe over the patient’s face

2. Where there is a risk of contact with blood, body fluids non-intact skin or mucous membranes secretions or excretions (except sweat) in handling patients / bodies for any purpose use protective equipment as detailed above

7.5.5 Mouth to Mouth Resuscitation

1. The use of mouth-to-mouth resuscitation is not recommended. Each member of staff should be issued with a Pocket Mask to prevent the necessity for mouth-to-mouth resuscitation.
7.6 Sharps Handling & Disposal

1. Safe handling and disposal of sharps is vital to prevent the risk of blood borne virus transmission. A sharp is defined as any item that is capable of penetrating the skin and may be contaminated with blood or other body fluids e.g. hypodermic needles, blades or glass ampoules.

2. The person using the sharp is responsible and accountable for handling the device in a safe manner and for its safe and appropriate disposal.

3. The following guidelines should be followed:

   A. Prepare for and undertake the procedure carefully
   B. Gloves are advised when carrying out venepuncture
   C. Never re-sheath needles or cannulae
   D. An approved sharps container must be available at point of sharps use
   E. It is the responsibility of the user to place the sharp item into a sharps container immediately after use. It is strictly forbidden to place a sharp anywhere other than in a sharps bin.
   F. Dispose of syringe and needle as one unit.

7.6.1 Emergency Care

Inoculation Injury (Sharps Injury)

   A. Make it bleed
   B. Wash well under running water
   C. Cover with a waterproof dressing
   D. Report to nearest Emergency Department (ED) for treatment, on the same day of injury

Contamination Injury

   A. Wash with copious amounts of water
   B. Report to nearest Emergency Department (ED) for treatment, on the same day of injury
7.6.2 Action in the event of a sharps injury

1. Report to an ED for treatment on the day of injury
2. If at all possible, attend the same ED to which the source patient was transported. This will facilitate blood sampling from the source, which may avoid the need for Hep B treatment or HIV PEP (if source patient negative)
3. A sample of blood will be taken by ED staff and referred to the laboratory, or held for storage as appropriate
4. Complete an Incident Report Form
5. Follow the HSE Policy Guidelines

7.6.3 Health Care Risk Waste Management

1. There is a legal requirement for waste to be properly handled, segregated and disposed of. There may be criminal implications for the creator of the waste (i.e. the Paramedic/Advanced Paramedic or other Employee) for failure to appropriately handle waste.
2. Healthcare risk waste is categorised as waste, which is potentially hazardous to those who come in contact with it, by nature of its infectious, biological, chemical or radioactive content, or by being categorised as a sharp. All items contaminated with/containing blood or body fluids come under this category.
3. It also includes Sharps waste, as mentioned in Section 7.6.

7.7.1 Health Care Risk Waste Segregation

1. Health Care Waste must be placed in yellow healthcare risk plastic bags.
2. Yellow Bins for clinical waste bags must be accessible to all clinical areas, have a close fitting lid and be foot operated. The Bin holder should be washed and dried, inside and out, when necessary
3. Each bag must be filled to no more than three quarter’s capacity.
4. The bag must be sealed by use of a HSE identifying plastic tag
5. Follow the guidelines as per Waste Poster.
7.7.2 Health Care Risk Waste Storage

1. Health Care Risk Waste must be stored in a designated area prior to collection
2. Health Care Risk Waste must be kept separate from domestic waste at all times
3. The storage must be inaccessible to unauthorised persons, vermin free from infestation and locked

7.8 Cleaning of Equipment

7.8.1 The following tasks should be completed on a daily basis:

A. Ambulance interiors should be damp dusted daily. Floors should be cleaned using a mop and bucket using detergent and hot water
B. Water containers should be cleaned, and the water changed
C. Equipment should be checked to ensure that the shelf life dates have not expired, and seals and packages are intact
D. The walls, ceilings and the inside of cupboards should be periodically cleaned to remove dust and dirt
E. Stretcher mattresses and chair covers are clean and free from rips and tears.
F. It is the responsibility of Supervisors/Managers to ensure that the actions described in this policy are conducted.

7.8.2 The following tasks should be completed after a contamination incident:

All blood and body fluids should be considered as potentially infectious and spillages should be cleaned up at the earliest opportunity using the following method:

**Blood Spillage's and Body Fluid Spills (blood, vomit, and other body fluids)**

1. Cover the spillage with NaDCC e.g. Precept granules and leave for no longer than two minutes
2. Clean the area thoroughly using a detergent solution
3. Utilise the Infection Control Pack if necessary
4. When time allows, upon completion of the patient journey or arrival at the hospital, the area should be cleaned thoroughly using detergent and hot water followed by disinfection 1. Norovirus or patients identified with transmissible organisms e.g. Precept 2.5gx 2 tabs dissolved in 2.5 litres of water. 2. Blood spillage/soiling of surfaces, 10,000-PPM available chlorine, Precept 2.5g x 7 tabs dissolved in 1 litre of water.

5. Wear gloves, and use paper towels to clean the area.
6. Allow the area to dry

7. Urine spills should not be treated with a NaDCC product but initially wiped up with paper towelling and the area cleaned with detergent and hot water

7.8.3 Management of Linen (Blankets where disposal linen not in use)

1. Used blankets should be changed after each patient
2. Blankets contaminated with blood or body fluids should be placed directly into an alginate bag and placed inside a red laundry bag for collection, if blanket is of disposable type it should be disposed of appropriately.
3. Blankets should also be changed following the transport of patients with communicable or suspected communicable diseases, infestations or where advised. These blankets should be placed into alginate stitch laundry bags
4. Please note that bags must not be more than three quarters full, to meet safe practice guidelines.

7.8.4 Use of Laundry Areas

1. If an on site laundry facility is available for laundering uniforms the following is recommended:

A. The laundry area should be sited in a designated area (not in a general storage area)
B. Preferably an automatic washer / drier should be available
C. The washing machine must have a sluice or pre-wash facility. (Laundry must not be manually sluiced)
D. If the machine is not a washer / drier then a tumble drier should also be available
E. A hand wash basin must be sited in the laundry area
F. Uniforms should be capable of meeting the decontamination standards and should be washed on the hot wash cycle (60°C)
G. All laundry must be dried in the drier. (Laundry must not be hung over radiators or on clothes lines etc).
7.8.5 Equipment Decontamination / Reprocessing

Cleaning - The removal of accumulated deposits by washing with detergent and warm water. It is a pre-requisite of all decontamination methods.

Objective - To give a preliminary reduction in numbers of organisms and remove dirt, grease and organic matter that might protect organisms from disinfection and sterilisation processes.

Disinfection - A process that removes some of the pathogenic organisms (not spores) that results in a partial reduction in total numbers of organisms present.

Objective - To reduce the number of organisms to a safe level (below that required to cause infection).

Sterilisation - The complete removal of all organisms including spores.

Objective - To render an object safe for use in aseptic (sterile) procedures.

7.8.6 Decontamination Guide for Reusable Equipment

Item Method of Decontamination

Spinal Board
Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).

Carrying Chair
Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).

Glide and Lock sheet
Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).

Handling Belt
Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).
Head Immobilisers
Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).

Pillows
Must be encased in an intact waterproof cover at all times. Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).

Pulse Oximeter
Clean reusable probes with an alcohol wipe between uses.

Scissors
Clean procedures – Wash in a solution of hot water and detergent, rinse and dry thoroughly.

Spencer Wells Forceps
Clean procedures – Wash in a solution of hot water and detergent, rinse and dry thoroughly. Sterile procedures – must be sterile at point of use. Use single use disposable or sterile pack.

Suction Unit
Use single use disposable catheters. Clean outer casing with a detergent wipe. Dispose of disposable liner in clinical waste.

Trolley Stretcher
Clean with a solution of general-purpose detergent and water (or detergent wipe between uses).

All other equipment
E.g. Blood Glucose Meters, Stethoscopes, etc. should be cleaned regularly using detergent wipes.

7.8.7 Electrical and Mechanical Patient Use Equipment

1. Equipment needing repair should be accompanied by a Vehicle/Equipment Defect Report Form, which states what, if any, decontamination procedure has been carried out.
2. Items marked single use or disposable should only be used for the treatment of one patient.
3. Equipment designed to be reused, if contaminated with body fluids should be washed in hot water and detergent and thoroughly dried.
4. Equipment contaminated with body fluids that cannot be washed as above should be wiped with an alcohol wipe.
Remember Alcohol wipes do not work on organic material

7.8.8 Respiratory Hygiene and Cough Etiquette

1. To minimise the spread of respiratory infections, measures should be taken to contain respiratory secretions.
2. When coughing and sneezing patients and staff should:
   - Turn away from others
   - Use a tissue to cover the mouth and nose (if no tissue, use sleeve to contain secretions)
   - Dispose the tissue in a waste bin
   - Decontaminate hands using alcohol gel or soap and water for at least 15 seconds

3. During periods of increased prevalence of respiratory infections in the community (e.g., when influenza is circulating in the community) offer surgical masks to coughing patients and other symptomatic persons (e.g., persons who accompany ill patients) if tolerated. If patient is unable or unwilling to wear a surgical mask, NAS staff should wear a fluid repellant surgical mask during the transport journey. Annual flu vaccination is the most effective means of preventing influenza and NAS staff should be encouraged to take the vaccine.

7.8.9 Aseptic Non-Touch Technique

1. Asepsis is defined as the absence of pathogenic organisms and very challenging to achieve in the pre-hospital environment.
2. Aseptic technique is a method used by clinicians to keep wounds, other susceptible body sites and sterile instruments free of microbial contamination by adopting a non-touch technique.
3. Aseptic technique should include:
   A. Keeping the exposure of susceptible sites to a minimum (e.g., keeping wounds covered)
   B. Ensuring appropriate hand decontamination prior to the procedure
   C. Additional hand gel application during activities when hands or gloves have handled non-sterile items (e.g., opening a packet)
   D. Using gloves where appropriate, and changing them if they become contaminated
   E. Ensuring that all fluids and materials used are sterile
   F. Checking that all packs used are sterile and show no evidence of damage
G. Ensuring that contaminated and non-sterile items are not placed in the sterile field or 'clean area
H. Handling sterile items with confidence and not touching 'key parts' (i.e. parts which come into contact with broken skin or are placed inside the patient)

4. Key Parts include:

A. Needle shaft
B. Cannula tubes (any part beyond the winged area over the needle)
C. Leur loc connections on all infusion lines and devices
D. Tip / male leur part of syringes
E. Spike of infusion sets
F. Endotracheal tubes (any part below the point which will lay at the patient's lips)

5. Any area of dressings that come in direct contact with damaged skin / puncture sites on patients

7.9 ACTION TO BE TAKEN WITH CATEGORY III PATIENTS

Patients under Category III will require some specialist preparation and precautions.

7.9.1 Category III Conditions include:

A. Small Pox
B. Rabies
C. Viral Haemorrhagic Fevers i.e. Lassa Fever, Marburg Disease, Ebola Virus / Fever & Crimean / Congo Fever

1. The routes of transmission are from contact with body fluids, blood, urine, faeces and vomit.
2. Any request to carry any of the above conditions will require special arrangements.
3. Ambulance Control must inform the respective Operations Resource Manager, who will arrange for the necessary preparations and protections. Advice should be sought from the relevant Infection Control Manager.
7.9.2 Category III Infectious Disease Transport Action Card

1. Upon receipt of a call to transport a patient with a suspected Category III Infectious disease, the duty Dispatcher will alert the respective Operations Resource Manager.

7.9.3 Activation - Operations Resource Manager

1. Operations Resource Manager will confirm receipt of call by contacting Ambulance Control
2. Contact the hospital / ward for a briefing / update
3. Confirm that the receiving hospital is expecting the patient
4. Arrange for a Supervisor or Manager to follow in accompanying vehicle
5. The crew should be advised to take a meal break, then rendezvous at the nearest Ambulance Station with the Supervisor or Manager to prepare for the journey.

7.9.4 Vehicle

1. The vehicle identified for use must have a closed bulkhead
2. Vehicle should be stripped of all equipment except for:
   
   A. Trolley Cot
   B. Carry Chair
   C. Manual Handling Aids
   D. 3x Blankets / Pillows and cases
   E. 6x Disposable Urine / Bedpan / Vomit Bowls
   F. 6x Plastic bags preferably yellow
   G. 6x Clinical waste bags
   H. 6x Disposable latex free examination gloves / Disposable aprons
   I. 2x Tissue Rolls
   J. 1x Fresh Sharps Container
   K. Sufficient ++ Oxygen for the journey
   L. Resuscitation Kit

Any bulkhead window from the saloon to the driver’s compartment will be sealed with tape.
7.9.5 Crew Preparation

1. Crews should strip and put on protective clothing. The stripped clothes should be bagged and placed in the accompanying vehicle.
2. Theatre clothes from a local hospital may replace personal underwear if time permits.

7.9.6 Protective Clothing

1. Protective clothing for crews is stored each Ambulance Station.
2. Dressing instructions for crews are described in Appendix IV.

7.9.7 Support Vehicle

1. In the event of a breakdown the vehicle will not be repaired or exchanged but towed or transported to the receiving hospital.
2. The crew's clean uniform will be bagged and stored in the support vehicle.

7.9.8 Destination

1. The Gardai must be notified and asked to arrange an escort from a convenient junction to the hospital.
2. Crews will decontaminate / clean, as directed by the specialist receiving team at the hospital.
3. The Supervisor or Manager escorting will remain at the hospital to act as a liaison officer, keeping Ambulance Control appraised and ensuring the safety and welfare of the crews.
4. Patients with confirmed Viral Haemorrhagic Fever (VRF) should be transported to the National Isolation Unit as per NASCG014.

8.0 EDUCATION

8.1 The educational requirements necessary to implement infection control procedures are outlined in the NAS Parent Health and Safety Statement. The provision of any necessary education will be the responsibility of the Education and Competency Assurance Team.

8.2 Adequate educational records will be maintained by the Education and Competency Assurance Team of all education undertaken regarding control of communicable diseases and infection control procedures.
9.0 INCIDENT REPORTING & INVESTIGATION

9.1 Systematic reporting of incidents including near misses is critical. All incidents of contamination injuries should be reported on the incident report forms and forwarded immediately to Quality and Patient Safety as per Policy – OQR006 - Incident Management Policy and Procedure.

9.2 Completed incident report forms will be assessed by an NAS Quality, Safety and Risk Manager and given a risk rating. The NAS Quality, Safety and Risk Manager will then review the completed incident report form in conjunction with the HSE Quality and Patient Safety Directorate so as to ensure consistency and appropriate follow up actions.

9.3 Where appropriate, serious adverse incidents may be investigated and the results reported to Occupational Health and Public Health personnel.

9.4 Specialist advice may be obtained from an Infection Control Manager or Consultant Microbiologist

10.0 IMPLEMENTATION PLAN

10.1 On approval, this Policy will be circulated electronically to all Managers, Supervisors and Staff

10.2 This Policy will be available electronically in each Ambulance Station for ease of retrieval and reference

10.3 Each Operational Support and Resilience Manager will ensure that the Manager/Supervisor responsible for updating Policies and Procedures will return the Confirmation Form to NAS Headquarters to confirm document circulation to all staff.

11.0 REVISION AND AUDIT

11.1 The effectiveness of infection control measures will be monitored by Quality, Health and Safety Committees in consultation with the Infection Control Managers to ensure changing circumstances do not alter risk priorities.

11.2 The NAS Audit Tool (Appendix VII) should be used to conduct an audit in each Ambulance Station on a monthly basis by a designated Supervisor; this should then be reviewed by the Operations Resource Manager each month. These Audit documents should be filed at Station level for review at any time.

11.3 A quarterly audit will be undertaken by the Operations Resource Manager in each Ambulance Station using the National Ambulance Service Audit Tool to ensure standards of cleanliness and waste management are adhered to. Areas of concern in these audits should be actioned by the relevant manager.
11.4 Quality, Safety and Risk Managers or are responsible for ensuring the maintenance, regular review and updating of this policy.

11.5 Revisions, amendments or alterations to the policy can only be implemented after consideration and approval by the Director, following consultation with the National Leadership Team.

11.6 Compliance with this policy will be assessed through the ongoing supervision of staff at all times.

11.7 It is in the interest of all staff members to ensure that this policy is adhered to in order to enhance staff safety.

11.8 Supervisors and Managers will monitor the performance of staff within their areas of responsibility. Every Incident/Near Miss involving Infection Control will be reviewed so as to examine the effectiveness of this Policy and its associated Procedures. Any incident involving a Category III case will undergo a specific review with assistance from the HSE Quality and Patient Safety Directorate and Infection Control Managers.

12.0 REFERENCES

None applicable

13.1 APPENDICES

- Appendix I - Policy – Acknowledgement Form
- Appendix II – Infection Control contacts and reference points
- Appendix III – Medical conditions that may be encountered
- Appendix IV – Infectious Disease P.P.E. Donning/Doffing
- Appendix V – Hand Hygiene
- Appendix VI – Respiratory/Cough Etiquette
- Appendix VII – National Ambulance Service Audit Tool
## APPENDIX II

### INFECTION CONTROL CONTACTS AND REFERENCE POINTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION AND CONTACT DETAILS</th>
<th>REFERENCE POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality, Safety and Risk Manager</td>
<td>Operational Infection Control issues</td>
<td></td>
</tr>
<tr>
<td>Infection Control Managers/Nurses</td>
<td>Specialist Advice</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX III

MEDICAL CONDITIONS THAT CAN BE ENCOUNTERED

Hepatitis B

The Hepatitis B Virus is present in virtually all body fluids of an infected person. Blood, saliva, vaginal fluids and semen have all been found to be infectious to other people. Infection can be transmitted during penetrative sexual intercourse, from an infected mother to her baby during birth, by inoculation through the skin e.g. puncture wound / needle stick injury or by contamination of mucous membranes /broken skin.

The disease occurs globally and in more developed countries is more commonly found in Intra Venous (IV) Drug users, men who have sex with men, heterosexuals who have multiple partners and health care workers. The incubation period is about 40-160 days often about 90 days.

The symptoms of Hepatitis B are:

- Extreme tiredness
- Anorexia
- Joint Pains
- Nausea and Vomiting
- Bloated and tender abdomen
- Stomach cramps
- Dark Urine
- Jaundice

90 - 95% of those who acquire the infection as adults, recover completely from the infection.
5 - 10 % become long term carriers of the infection and may remain infectious to others. A small number of those chronic carriers may go on to develop chronic active Hepatitis, Cirrhosis or Liver cancer.

A safe and effective vaccine is available for Hepatitis B protection and is recommended for all staff with any patient contact. It can be obtained via the Occupational Health Service.

The vaccination regime consists of three doses of vaccine:

- First Dose
- One Month Later Second dose
- Five Months later Third Dose

A blood test is required 2 - 4 months after completing the course, to ensure adequate protection.
Records should be maintained of all staff vaccinations and post vaccination testing for the immune status be easily accessible.

**Hepatitis C**

First identified in 1989 Hepatitis C was previously known as non-A / non-B Hepatitis. A screening test for Hepatitis C became available in 1990 but it does not distinguish between people who have recently become infected and those who were infected many years ago. The virus is usually transmitted by blood-to-blood contact and in people who share needles. Sexual transmission and transmission from mother to baby are considered low risk, as is transmission via a bite. There is no risk from urine and faeces. Hepatitis C is a mild infection and three quarters of those infected have no symptoms. Often the only evidence of infection is elevated liver enzymes on blood tests. Those who do have symptoms as a result of acute infection usually feel off colour for a few days. It is unusual to have jaundice. The incubation period is 1 - 2 months. Of those infected with Hepatitis C, about 80% remain carriers. 10 - 20% of carriers will progress to cirrhosis over a period of 6 - 40 years and of these 1% will progress to Liver Cancer each year thereafter. Currently there is no vaccine available for Hepatitis C and therefore standard precautions should always be followed carefully.

**Human Immunodeficiency Virus (HIV / AIDS)**

HIV Infection is caused by the Human Immunodeficiency Virus that attacks the body’s immune defence system. Those infected with the virus may go on to develop AIDS (Acquired Immune Deficiency Syndrome) in which severe damage to the immune system has occurred and this leads to life threatening infections, Cancers and other illnesses. The incubation period can vary from less than a year to 10 years. Most people with HIV infection have no symptoms and may be unaware of being infected. HIV is usually diagnosed through a blood test. HIV is transmitted (via exchange of blood / body fluids) during sexual contact, sharing contaminated needles, contact with or transfusion of contaminated blood or blood products and from an infected mother to her a baby during birth or breast feeding. Saliva is not a vehicle for transmission.

A reliable test to diagnose HIV has been available since 1985. There is however a window period, usually 3 - 4 months between the time of exposure to HIV and the development of sufficient antibodies for detection by this test.
The role of infection control plays a minor though important part in the care of those with HIV or AIDS. The adoption of standard Precautions ensures that all blood and body fluids are handled safely to protect both staff and patients. If you are exposed you should immediately attend either the Emergency Department or the Occupational Health Service as prophylactic medication may be prescribed.

**Tuberculosis (TB)**

TB is caused by a bacterium that can infect most systems of the body. The lungs are the most common site and the disease usually presents as a chest infection, which persists and is not improved with routine antibiotics.

Symptoms of TB may include:

- Cough with phlegm, which may be blood stained
- Chest pain and breathlessness
- Loss of appetite and weight loss
- Fever with night sweats

The incubation period is between 4 - 12 weeks. Tuberculosis of the lung can become infectious when the disease is advanced. TB bacteria are coughed or sneezed out in the sputum, which others can breathe in. However close prolonged contact is usually required for transmission of infection to occur. TB can be completely cured, although it may take 6 - 9 months treatment. The infection can recur and there is a risk that drug resistance will develop if treatment is not completed properly. A person’s immunity to TB can be checked and Bacillus Chalmette Guerin (BCG) vaccinations given to those who need protection. It is recommended that all NAS personnel are screened and vaccinated.

**Vancomycin Resistant Enterococci (VRE)**

This organism has been identified in the faeces of patients. VRE is not an occupational hazard to staff, provided that standard precautions are followed. Alcohol hand gel must be used when hand-washing facilities are not available.

**Scabies**

Scabies is an inflammatory disease of the skin caused by a mite that burrows into and lives in the superficial skin layers of the infected person. It is transmitted by direct skin contact usually amongst family members or where people live in close proximity to each other.
The rash is a result of an allergic reaction to the presence of the mite under the skin and this may take up to 6 weeks from the beginning of the infection to appear. This means that close contacts could have the infection even though they have no symptoms. As prolonged person to person skin contact is required it is a negligible risk to NAS personnel.

**Meningitis**

Meningitis is inflammation of the ménages, the membrane covering the brain and spinal cord. It can be caused by a number of different viruses and bacteria. Viruses cause most cases of Meningitis.

Viral Meningitis is rarely serious, requires no treatment and is usually followed by a full recovery. Bacterial Meningitis although uncommon is very serious and needs to be recognised and treated urgently with antibiotics to obtain the most favourable outcome. In 10% of cases the disease is fatal; another 14% may be left with a permanent disability such as deafness or brain damage.

Infection is spread to susceptible individuals by direct contact i.e. kissing, household living contact via respiratory droplets from the nose and throat of infected people. The disease may present as Meningitis or Septicaemia.

Signs and symptoms of Meningitis are:

- Fever
- Drowsiness
- Back or Joint pain
- Headache
- Neck Stiffness
- Photophobia (dislike of light)
- Confusion
- Red-purple rash anywhere on the body that does not go pale under pressure of a glass

Care must be taken by NAS staff to avoid droplet / saliva contamination. Do not stand or lean directly into the patients breathing or coughing arch. The further from the patients face, the less chance of cross infection.

**Variant Creutzfeldt-Jakob Disease (vCJD)**

The precise nature of the agent, which causes vCJD, is not known, but the most likely theory implicates an abnormal form of a protein, known as prion. The UK Government’s Spongiform Encephalopathy Advisory Committee (SEAC) concluded that the most likely explanation for the emergence of vCJD was that it had been transmitted to people through exposure to Bovine Spongiform Encephalopathy (BSE).
Available epidemiological evidence suggests that normal, social or routine clinical contact with a patient suffering from vCJD does not present a risk to healthcare workers, relatives or the community. However invasive instruments and equipment used in the care of patients with confirmed CJD of any type must not be reused and must be disposed of by incineration. If patients are suspected of having CJD then instruments should be quarantined pending confirmation of diagnosis. Single use instruments and equipment should be used wherever possible.

**Methicillin Resistant Staphylococcus Aureus (MRSA)**

The risk of the above cross infection to NAS personnel is virtually nil. Most at risk are patients whose immune system is highly compromised i.e. the newborn, infant or the elderly. Standard Precautions particularly hand washing carried out by all personnel is the greatest aid to preventing cross infection.

The following guidelines will also help:

- A blanket placed around the patient will reduce contact with skin
- Latex free examination gloves and a plastic apron should be worn if there is prolonged physical contact e.g. lifting or carrying a patient
- All blankets from stretchers should be changed
- All laundry should be placed in alginate bags to identify contaminated linen. The alginate bag, must then be placed inside a laundry bag to await collection
- The seat occupied by the patient should be cleaned and disinfected.
- Any equipment used directly to care for patients with MRSA should be cleaned using soap and water and disinfected.

**The vehicle does NOT need to be stripped or fumigated, it is operational as soon as it has been damp dusted**

**Clostridium Difficile (C Diff):** is a spore-forming bacterium present in the intestines. It is one of the ‘Normal ‘bacteria found in the gut of many people including children and is kept under control by the other bacteria in the gut. Problems occur when there is an imbalance between the bacteria in the gut which can happen when taking a course of antibiotics.

As Clostridium Difficile forms spores, it can survive for long periods in hospital wards contaminating the environment, equipment and hands of staff and patients resulting in cross infection and outbreaks of infection. Symptoms include watery diarrhoea, abdominal pain and fever. The principal risk is while the patient has diarrhoea therefore the patient must be isolated while diarrhoea persists and for 48 hours after their last episode.
- Standard infection control precautions including the wearing of gloves should be carried out by all Staff
- Wear aprons when handling faeces and bed pans to prevent cross infection between patients.
- Good environmental cleaning is essential. It poses no risk to healthy staff.
- All equipment used in the care of a patient with C Diff should be cleaned using soap and water
- All laundry should be placed in alginate bags to identify contaminated linen. The alginate bag, must then be placed inside a laundry bag to await collection
- All blankets from stretchers should be changed

- **Hand washing with soap and water is essential as alcohol gels or rubs are not effective against spores.**

The vehicle does NOT need to be stripped or fumigated, it is operational as soon as it has been damp dusted.
APPENDIX IV

INFECTIONSDISEASEP.P.E.DONNING/DOFFING

The following steps should be carried out before entering the site of an infectious patient:

- Consult with Clinical Nurse Manager or Infection Control Manager at hospital site as to location of changing room.
- Remove all items of uniform i.e. hi-vis jacket, shirt, tee shirt, trousers, underwear socks, shoes.
- Put on disposable gown or scrubs provided and ensure it is fixed and tied properly.
- Wear protective goggles provided.
- Place a facemask over the nose and mouth.
- Put on Tyvek PRO-TECH suit provided ensuring that the hood is in place and that no hair is exposed.
- Make sure the zip is pulled to the end and that no part of the gown or scrubs is shown.
- Put on shoes and covers provided.
- Wear disposable gloves to prevent contamination.
- Place all other uniform items in your P.P.E. bag as per staff allocation.
- Hand over P.P.E. bag sealed to escorting Supervisor or Manager present.

The following steps should be carried out on completion of the transfer:

- The escorting Supervisor or Manager will consult with the designated team or Infection Control Manager at the receiving hospital as to the decontamination procedures and guidelines to be followed.
- The ambulance crew will be informed of the steps to be taken following the transfer of the patient from the stretcher to the bed.
- Designated changing rooms with shower facilities will be provided.
- Specialised shampoo and soap wash are present.
- On entering the changing room remove all items of clothing and any other items such as goggles.
- Place all items in the clinical waste bags or bins provided.
- Shower thoroughly making sure all the body is washed down.
- When showered the body should be completely dried.
- P.P.E. bag with work uniform will be present in changing room.
- On completion of task please report to the Supervisor or Manager to discuss matters arising from the call.
Putting on PPE

Personal Protective Equipment (PPE)

Select the type of PPE depending on the procedure and risk of exposure to blood/body fluids/non-intact skin/mucous membranes and/or potential exposure to infectious pathogens.

1. Decontaminate hands using soap and water or alcohol gel/rub.

2. Put on disposable apron/gown
   - Apron: Insert head into the opening and tie to the back
   - Gown: Insert arms into sleeves / Tie at neck and waist

3. Put on Face Protection
   - Fluid repellent facemask:
     - Place over nose, mouth and chin
     - Fit flexible nose piece over nose bridge
     - Secure on head with ties or elastic
     - Adjust to fit
   - FFP2/3 mask:
     - Place mask over nose, mouth and chin
     - Fit flexible nose piece over nose bridge
     - Secure on head with elastic
     - Adjust to fit
     - Inhale – mask should collapse
     - Exhale – check for leakage around face

4. Put on goggles/eye shield
   - Goggles:
     - Position over eyes and secure to the head using the ear pieces
   - Face shield:
     - Position over face and secure on forehead with headband

5. Put on gloves
   - Put on gloves last
   - Insert hands into gloves and adjust to fit
   - If wearing a gown extend gloves over cuffs
Removing PPE

---

Removing
Personal Protective Equipment (PPE)

Correct sequence for removing PPE to minimise contamination

1. **Removing gloves:**
   - Avoid touching the outside of the gloves with bare hands.
   - Grasp the outside of the glove with the other gloved hand.
   - Peel off and hold the removed glove in the gloves hand.
   - Slide a finger of the unloved hand under the remaining glove.
   - Peel the glove over the first glove.
   - Discard in an appropriate waste bin.

2. **Removing goggles or face shield:**
   - Ensuring not to touch the face, grasp ear or head pieces with bare hands.
   - Lift away from face and dispose into appropriate bin, or if reusable place into a receptacle for appropriate decontamination.

3. **Removing an apron/gown:**
   - **Apron**
     - Break ties at neck and back.
     - Touching the insides only, pull apron away from body, roll up and discard into appropriate bin.
   - **Gown**
     - Unfasten ties.
     - Ensuring not to touch the outside of the gown, peel away from neck and shoulder.
     - Fold or roll into a bundle.
     - Discard into appropriate bin.

4. **Removing a mask:**
   - Avoid touching the front of the mask, break the ties or grasp elastic ties lift from behind the head and pull mask away from the face.
   - Use ties to discard into an appropriate bin.

5. **Waste disposal.** Discard PPE as healthcare risk waste if contaminated with:
   - Blood
   - Body fluids from patients with suspected or known infection

6. **Decontaminate your hands**

7. **Where should PPE be removed:** Remove gloves/aprons/gowns before leaving patient’s room. Remove respirator (FFP2/3) in ante room or outside room with the doors closed. Ensure hand hygiene facilities are available at the point needed.
APPENDIX V

SARI HAND WASHING TECHNIQUE

SARI Hand Hygiene Technique
ALCOHOL HANDRUB TECHNIQUE

1. Remove hand and wrist jewelry (wedding band allowed).
2. Apply about 3mls of Alcohol and rub into palm of hand.
3. Rub palms to spread alcohol over entire hands and fingers.
4. Rub the back of your left hand with the palm of right hand. Reverse and repeat action.
5. Open fingers and rub the finger wells. Reverse and repeat action.
6. Rub palm to palm with fingers interlocked.
7. Rub thumb of each hand using a rotating movement.
8. Rub the tips of the fingers against the opposite palm using circular movements.
9. Rub wrists of both hands.
10. Allow hands to dry completely.

WHO Glove Use Pyramid
STERILE GLOVES INDICATED

- Any surgical procedure
- Vaginal delivery
- Invasive endoscopic procedures
- Performing vascular access
- Any procedure (central lines)
- Preparing total parenteral nutrition
- Handling chemotherapeutic agents

EXAMINATION GLOVES INDICATED IN CLINICAL SITUATIONS

- Potential for touching blood, body fluids, secretions, excretions and items visibly soiled by body fluids.

  DIRECT PATIENT EXPOSURE: Contact with blood; contact with mucous membrane and with non-intact skin; potential presence of highly infectious and dangerous organisms; epidemic or emergency situations; IV insertion and removal; drawing blood; disconnection of versus line; pelvic and vaginal examination; suctioning non-closed systems of extracorporeal fluids.

  INDIRECT PATIENT EXPOSURE: Emptying enemas; handling cleaning instruments; handling waste; cleaning up spills of body fluids.

GLOVES NOT INDICATED (except for CONTACT precautions)

- No potential for exposure to blood or body fluids, or contaminated environment.

  DIRECT PATIENT EXPOSURE: Taking blood pressure, temperature and pulse; performing B.C. and IM injections; bathing and dressing the patient; transporting patient; caring for eyes and ears (without secretions); any vascular line manipulation in absence of blood leakage.

  INDIRECT PATIENT EXPOSURE: Using the telephone; writing in the patient chart; giving oral medications; distributing or collecting patient dietary trays; removing and replacing items for patient care; placing non-invasive ventilation equipment and oxygen cannulas; moving patient furniture.
Respiratory Hygiene and Cough Etiquette

When coughing or sneezing:

- Turn your head away from others
- Use a tissue to cover your nose and mouth
- Dispose of the tissue afterwards in a waste bin
- Use your sleeve if no tissues available
- Decontaminate your hands after discarding tissue using soap and water or alcohol gel for at least 15 seconds

These steps will help prevent the spread of all respiratory infections