

INFECTION CONTROL POLICY

VOLUNTEER AMBULANCE UNITS

IRISH RED CROSS

Contents

1.0 POLICY STATEMENT

1.1 The Irish Red Cross (IRC) is committed to providing the resources and support systems required to promote quality patient care and provide a safe environment for its volunteers, patients and others affected by the work of its volunteer ambulance Units. This commitment is endorsed by the introduction of this policy and its implementation by volunteers & officers.

1.2 Control of Infection

1.2.1 This policy provides guidance on current 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 IRC volunteers maintain a high standard of personal hygiene at all times, in carrying out duties. 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 volunteers, patients, relatives and other persons.

1.2.4 Most infections will not transfer to volunteers and nearly all personnel will be immune to the common childhood infectious diseases. The risk is further 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 our volunteers, as many patients will already have a lowered resistance to infection.

1.2.6

If volunteers consider that they or their colleagues present such a risk, they should discuss the matter with the Unit Officer or ADU as appropriate.

2.0 PURPOSE

2.1 To provide advice for IRC volunteers to help minimise the risk of the spread of infection.

2.2 To provide contact reference post holders, 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 I.

3.0 SCOPE

3.1 This Policy applies to all IRC volunteers / staff who are engaged in clinical patient care.

3.2 This Policy does not encompass specific guidance relating to a possible Swine Flu Pandemic.

4.1 LEGISLATION/OTHER RELATED POLICIES

- A. IRC Unit Induction Process
- B. PHECC Training and Education Standards and relevant CPGs.
- C. Safety, Health and Welfare at Work (General Regulations) 2007
- D. Unit Regulations and Unit Standard Operating Procedures.

5.0 GLOSSARY OF TERMS AND DEFINITIONS

U.O. – Unit Officer

AAOO – Area Ambulance Operations Officer

ADU - Area Director of Units

RDU - Regional Director of Units

NMO – National Medical Officer

NDU - National Director of Units

6.0 RESPONSIBILITIES

6.1 The ADU has responsibility for the implementation within his or her Area of this policy.

6.2 The NDU or his/her designate is in charge of Infection Control and is responsible for the on-going development of Infection Prevention/Control processes within the IRC and accountable for ensuring best practice regarding infection prevention/control and control of communicable diseases. This aspect will involve periodic policy review with the NMO.

6.3 The IRC Health and Safety Committee in tandem with the NDU will be responsible for promoting infection control procedures within the IRC. This will ensure that infection control procedures are working effectively and that feedback on policy enhancement is supported.

6.4 It is the responsibility of all ADUs / RDUs 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 NDU / RDUs / ADUs and designates to ensure that all records relating to training resulting from this Policy are maintained and available for internal review.

6.6 It is the responsibility of a Unit Officer / ADU to undertake an Audit at least annually in each vehicle and submit the appropriate records to RDUs. RDUs will randomly audit also.

6.7 It is the responsibility of every Unit Officer, in partnership with their Branch Committee, to ensure that supplies of the following are accessible to each Branch 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.

6.9 All IRC volunteers and staff engaged in clinical patient care 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 IRC Volunteers are encouraged to take the annual flu vaccination.
- B. All IRC volunteers received infection prevention and control training on induction and on a regular basis thereafter.
- C. Apply good basic hygiene practices with appropriate thorough hand hygiene.
- D. 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.
- E. Cover existing wounds or skin lesions with waterproof dressings.
- F. Avoid contamination with body fluids by using appropriate protective clothing based on a risk assessment.
- G. Apply only approved procedures for the decontamination of instruments and equipment.
- H. Apply good basic environmental cleaning procedures.
- I. Clear up spills of blood and other body fluids promptly.
- J. Ensure safe disposal of contaminated waste in appropriate receptacles.
- K. Ensure safe disposal of sharp items.
- L. Ensure all volunteers are aware of, understand and adhere to infection prevention/control policies and procedures.

7.2 Standard Precautions

A.2.1 Rationale for standard precautions:

- A. Effective control and prevention of healthcare associated infections (HCAI) should be included into everyday practice and applied consistently by all IRC volunteers.
- B. 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.
- C. 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
- D. 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 IRC volunteers 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 volunteers should ensure that:

- A. Cuts and grazes are covered with waterproof dressings on the commencement of a duty.
- B. Hand decontamination should be undertaken:

- Ø Before touching a patient
- Ø Before a clean or aseptic procedure
- Ø After body fluid exposure risk immediately after removing gloves
- Ø 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 IRC volunteers as appropriate compliance with hand hygiene is reduced. To minimise this possible risk of infection, only non-cloth strapped watches should be worn by IRC volunteers while 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 fingertips 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. IRC volunteers 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 II and III)

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 performed 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 reuse.

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 direct mouth-to-mouth resuscitation is not recommended on Unit duties. Each volunteer should be issued with a Pocket Mask/face shield to prevent the necessity for mouth-to mouth resuscitation. Pocket Masks and BVMs must also be carried on all IRC ambulances.

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/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 cannulas.

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 and return to Head Office via their line manager.

5. Report to Unit Officer / ADU. The ADU shall inform their RDU of any such incidents.

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 (e.g. the Paramedic/Advanced Paramedic or an EMT) 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 (where provided) 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 plastic tag.

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 area must be inaccessible to unauthorised persons or vermin, be free from infestation and be locked.

7.8 Cleaning of Equipment

7.8.1 Each time after an ambulance has been on duty:

- A. Ambulance interiors should be damp dusted. 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 Unit Officers / ADUs to ensure that the actions described in this policy are implemented.

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.
 - 4.1. Norovirus or patients identified with transmissible organisms e.g. Precept 2.5g x 2 tabs dissolved in 2.5 litres of water.
 - 4.2. 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. Note: 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 disposable/single use linen is 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 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

7.8.5 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

These 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 Glucometers, Stethoscopes, etc. should be cleaned regularly using detergent wipes.

7.8.6 Electrical and Mechanical Patient Use Equipment

1. Equipment needing repair should be accompanied by an 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.

Note: remember alcohol wipes do not work on organic material.

7.8.7 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 volunteers should:

- Ø Turn away from other persons.
- Ø Use a tissue to cover the mouth and nose (if no tissue, use sleeve to contain secretions).
- Ø Dispose the tissue in a waste bin.
- Ø 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, volunteers should wear a fluid repellent surgical mask during the transport journey. Annual flu vaccination is the most effective means of preventing influenza and volunteers should be encouraged to take the flu vaccine.

7.8.8 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 patients 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

IRC volunteers do not deal with treatment / transport of category III patients and volunteers via their line manager should request the services of the National Ambulance Service where a Category III patient needs transport to ED.

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 by the National Ambulance Service.

8.0 EDUCATION

8.1 The design and approval of any necessary education in infection control will be the responsibility of the Training Working Group.

8.2 Adequate educational records will be maintained by the ADU concerning training completed by Unit personnel in their Area. Audits of all education undertaken regarding control of communicable diseases and infection control procedures may be carried out by the NDU or RDUs.

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 ADUs.

9.2 Completed incident report forms will be assessed by National Unit Management and the IRC Health and Safety Committee. The Health and Safety Committee will then review the completed incident report form so as to ensure consistency and appropriate follow up actions.

9.3 Where appropriate, the IRC Adverse Incident Policy may be the most relevant procedure to use in such cases.

9.4 Specialist advice may be obtained from the IRC National Medical Officer or if necessary (via Head Office) the Health Protection Surveillance Centre.

10.0 IMPLEMENTATION PLAN

10.1 On approval, this Policy will be circulated electronically to all RDU's, ADU's, Unit Officers and Volunteers.

10.2 This Policy will be available electronically in each Unit for ease of retrieval and reference.

10.3 The NDU will ensure that this IRC Infection Control Policy and any future amendments therein are circulated to RDUs, ADUs and UOs by email. It will be posted on the IRC Volunteer Resource page on the IRC platform and will be reinforced in Unit in service training.

11.0 REVISION AND AUDIT

11.1 The effectiveness of infection control measures will be monitored by both National Unit Management and the IRC Health and Safety Committee in consultation, where necessary, with the NMO, to ensure changing circumstances do not alter risk priorities.

11.2 The IRC Ambulance Audit Tool should be used to conduct an audit in each Unit on at least an annual basis by an ADU, AAOO or their designate; this should then be reviewed by the RDU. These Audit documents should be filed at Area level for review at any time.

11.3 An annual audit will be undertaken by the ADU in each Unit using the IRC 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 ADU and reported to the RDU. In addition the ambulance logbook duty sign in sheet contains a hygiene check item.

11.4 Unit Officers / ADUs are responsible for ensuring the maintenance, regular review and feedback provision to national level on this national IRC policy.

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

11.6 Compliance with this policy will be assessed through the on-going supervision of volunteers at all times.

11.7 It is in the interest of all volunteers to ensure that this policy is adhered to in order to enhance their own safety, and that of the patient and third parties.

11.8 Unit Officers / ADUs will monitor the performance of volunteers 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.

12.0 REFERENCES

None applicable

13.1 APPENDICES

- § **Appendix I** – Medical conditions that may be encountered
- § **Appendix II** – Infectious Disease P.P.E. Donning/Doffing
- § **Appendix III** – Hand Hygiene
- § **Appendix IV** – Respiratory/Cough Etiquette

APPENDIX I

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 volunteers with any patient contact. It can be obtained via the volunteer's GP.

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 volunteer vaccinations and post vaccination testing for the immune status level to 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 volunteers and patients. If you are exposed you should immediately attend either the Emergency Department 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 and prolonged contact is usually required for any 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 Calmette Guerin (BCG) vaccinations given to those who need protection.

Vancomycin Resistant Enterococci (VRE)

This organism has been identified in the faeces of patients. VRE is not an occupational hazard to volunteers, 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 IRC volunteers.

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 IRC volunteers to avoid droplet / saliva contamination. Do not stand or lean directly into the patient's breathing or coughing arch. The further from the patient's 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 IRC volunteers is virtually nil. Most at risk are patients whose immune system is highly compromised i.e. the new-born 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. Gloves should be worn while cleaning oxygen cylinders in ambulances.

Note: 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)

It 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 IRC Volunteers.

§ 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 personnel.

§ 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.**

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

APPENDIX II

INFECTIOUS DISEASE P.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 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 IRC 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.



Putting on 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:
 - Fit check {
 1. Place mask over nose, mouth and chin
 2. Fit flexible nose piece over nose bridge
 3. Secure on head with elastic
 4. Adjust to fit
 5. Inhale – mask should collapse
 6. 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 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 ungloved 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 III HAND HYGIENE – SARI TECHNIQUE

HANDWASHING TECHNIQUE

PREPARATION



Remove hand and wrist jewellery (wedding band allowed) N.B. Keep nails short



Wet hands thoroughly under running water



Apply 5ml of soap/antiseptic soap to cupped hand by pressing dispenser with heel of hand (do not use finger tips on the dispenser)

HANDWASHING - process takes at least 15 seconds



Rub right palm to left palm



Rub right palm over the back of left hand up to wrist level 5 times. Do the same with the other hand



With right hand rub back of left hand up to wrist level. Do same with other hand



Interlock fingers and rub palm to palm



Interlock fingers and rub palm to palm



Interlock fingers and rub palm to palm



Rinse hands under running water to remove soap



Wipe hands using elbow



Wipe hands using elbow



Wash hands in sink

SARI HAND HYGIENE TECHNIQUE – ALCOHOL RUB

ALCOHOL HANDRUB TECHNIQUE



Remove hand and wrist jewellery. (wedding band allowed).



Apply about 3mls of Alcohol and rub into palm of hand.



Rub palm to palm to spread alcohol over entire hands and fingers.



Rub the back of your left hand with the palm of right hand. Reverse and repeat action.



Open fingers and rub the finger webs. Reverse and repeat action.



Rub palm to palm with fingers interlocked.



Rub thumb of each hand using a rotating movement.



Rub the tips of the fingers against the opposite palm using circular movements.



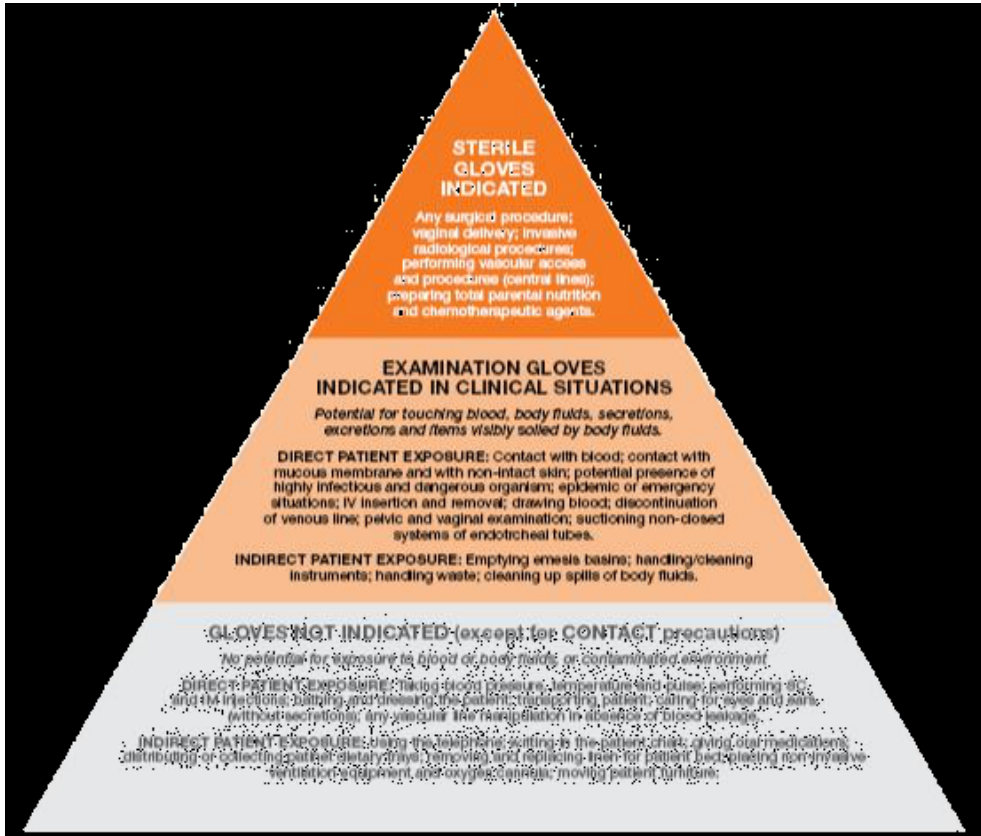
Rub wrists of both hands.



Allow hands to dry completely.



W.H.O. Glove use Pyramid



APPENDIX IV

RESPIRATORY HYGIENE & COUGH ETIQUETTE POSTER



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



Crois Dhearg na hÉireann
Irish Red Cross