Northern Ireland Ambulance Service
Health and Social Care Trust

SHARPS PROCEDURE

PROCEDURE FOR THE SAFE USE & DISPOSAL OF SHARPS AND THE MANAGEMENT OF SHARPS INJURIES AND BLOOD EXPOSURE INCIDENTS

February 2012

Version 1.0

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1.0 INTRODUCTION

This procedure should be read in conjunction with the Clinical Waste and Sharps Policy. The procedure covers operational and practical applications and contains guidance and advice on these issues.

2.0 SAFE PRACTICE

Under the Health & Safety at Work Act (NI) 1978, Trust employees have a responsibility to be aware of and adhere to the safe systems of work contained within NIAS Clinical Waste and Sharps policy and this procedure. They also need to be aware of the need for immunisation against Hepatitis B. All health care workers in hospital and in the community should be informed and educated about the possible risks from occupational exposure and should be aware of the importance of seeking urgent advice following any needlestick injury or other occupational exposure. Training should ensure that everyone knows to whom to report (Guidance on HIV – management of HIV Infection and Post Exposure Prophylaxis dhsspsni.gov.uk)

This procedure is designed to ensure the safety of employees, patients and other health care staff who may come into contact with:

- Sharps
- Blood
- Body Fluids; or
- Those who may be exposed to a human bite or scratch.

By adhering to the following procedures, the possibility of injury or infection will be minimised.

Only Health Profession Council (HPC) Registered Paramedics or staff undergoing this training are authorised to use sharps equipment defined as *needles, syringes, Cannulae, butterflies, Mini-Jet systems and Interosseous needles*. This also includes other staff appropriately trained who are required to assist their paramedic colleagues and will be responsible for sharps from time to time including *(Scissors, Giving sets, Blades, Lancets and Drug Ampoules).*

As part of the Paramedic training programmes staff receive training and instruction in the safe use, management and disposal of sharps equipment. This procedure emphasises the avoidance of occupational exposure to HIV by adherence to safer working practices and use of personal protective equipment as appropriate. It highlights the actions to be taken following possible exposure including immediate first aid. Clear information is provided to ensure all staff are aware of where emergency advice and assessment can be obtained. Staff should also be aware of the importance of reporting all percutaneous and other potentially significant occupational exposures according to arrangements contained in this procedure.

Staff must practice these safe principles at all times ***(refer to Paramedic Training Manual Ref: Section 10, and Ambulance Service Basic Training Manual -assisting the Paramedic section 19.1, 19.3, and 19.5).***
Staff undergoing Paramedic training must only use sharps equipment under the guidance and/or authority of a Qualified Paramedic Tutor.

It is recognised that there is also a potential for a sharps injury from certain patients ***(e.g. Hypoglycaemic Diabetic, illegal drug user).*** An injury could result from searching patients to establish identity, particularly an unconscious patient. Staff are trained ***not to blindly*** put their hands into the pockets of a patient. If a patients clothing must be searched, the contents of pockets should be exposed by pulling the lining of the garment in order to extract the contents.

3.0 THE SAFE USE AND DISPOSAL OF SHARPS

All sharps are for single patient use only and must be stored at all times in their designated containers on the vehicle or in the Paramedic/Responder bag.

- Disposable gloves ***MUST*** be worn at all times when working with sharps equipment.
- The sharps container must be taken to the point of use of the sharp instrument(s).
- Used syringes and needles must never be resheathed, bent or broken prior to disposal.
- The disposal of the sharp is the responsibility of the ***user*** and therefore must not be handed to anyone else for disposal. Sharps must be disposed of in an approved sharps bin (never in the clinical waste bag or in the ordinary refuse).
- Never rush the procedure or take shortcuts. Always keep safety in mind for yourself, your colleagues, your patients and others.

4.0 CORRECT USE AND DISPOSAL OF SHARPS BINS

- Sharps bins must conform to ***UN 3291 (1997) / BS 7320 (1990)***
- Sharps bins must be assembled correctly and in accordance with the manufactures instructions. New bins must be labelled with the identity of the station and the date of first use – this is the responsibility of each Technician / Paramedic.
- When not in use sharps bins must be left with the lid closed and in a location where it will not cause harm to patients, other staff members or the public.
- Sharps bins when two-thirds full, should be locked, tagged and disposed of in accordance with NIAS Clinical waste policy. This allows for the identification of any offending container to be determined.

- Sharps bins must ***NOT*** be placed in clinical waste bags.
- Sharps bins on vehicles which are infrequently used, should be discarded after two months, regardless of whether they are two-thirds full.
- All sharps must be disposed of by incineration through the Trust's approved contractor.

5.0 PROCEDURE FOR STAFF FOLLOWING A NEEDLESTICK OR SHARPS INJURY.

An accident to a member of staff or patient which results in a sharps injury must be reported immediately to your line manager and control. If the incident occurs at night then contact control.
A member of staff who sustains or suspects he/she has sustained a sharps injury should immediately commence First Aid action (see Figure 1).

1. ***Encourage the wound to bleed (<u>DO NOT</u> SUCK).***
2. ***Wash with soap and water.***
3. ***Dry and apply waterproof dressing.***

Following appropriate First Aid, staff must be referred to and attend the Occupational Health Department (during normal working hours) for further management, (within the hour). If this is not possible or the incident occurs out of hours, staff must report to an A&E Department and inform casualty staff of the precise circumstances as to how the injury occurred.

The Control should also contact the relevant A&E Department to ensure that, as far as is practical, the injured member of staff is attended to immediately on arrival in the Department.

Contact with the;

Occupational Health Department,
Royal Victoria Hospital,
Grosvenor Road,
Belfast.

Phone: 02890 240503

A call **must** be made as soon as possible after the incident has occurred. OH practitioners may choose to refer exposed staff to other specialist departments for follow up.

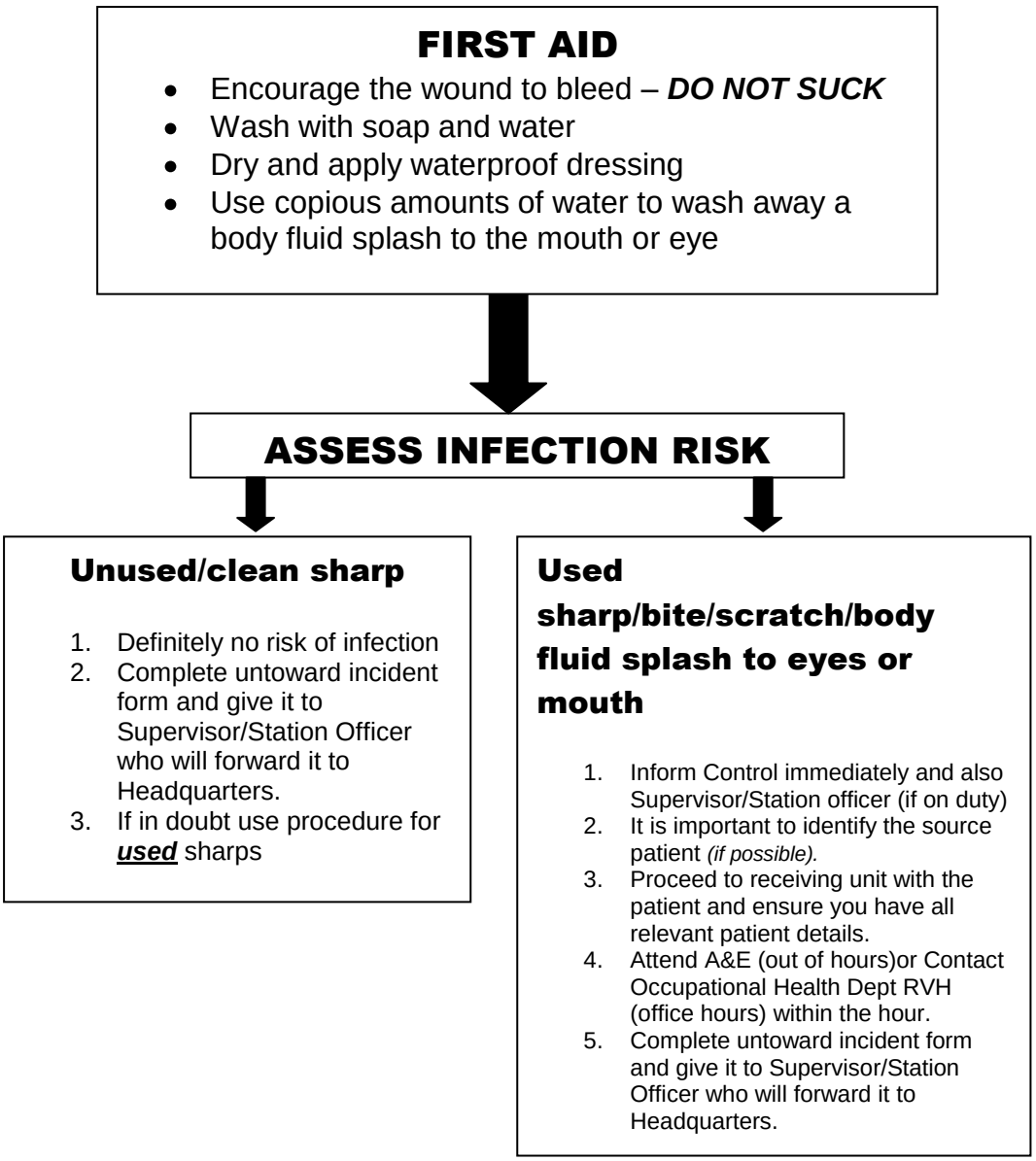
Post Exposure Prophylaxis ***(PEP)*** may be required; even necessary and the decision to proceed with this treatment will be as a result of an informed risk assessment taking account of **<u>all</u>** the circumstances leading to the injury.

Upon return to station the staff member must complete an Untoward Incident Form and give this to their line manager who will, in turn, send a copy to the Risk Manager at Headquarters.

6.0 ACTION TO BE TAKEN IN THE EVENT OF A NEEDLESTICK / SHARPS INJURY

The following guidance also applies to a human bite or scratch and to a splash of blood or body fluid to the eyes or mouth.

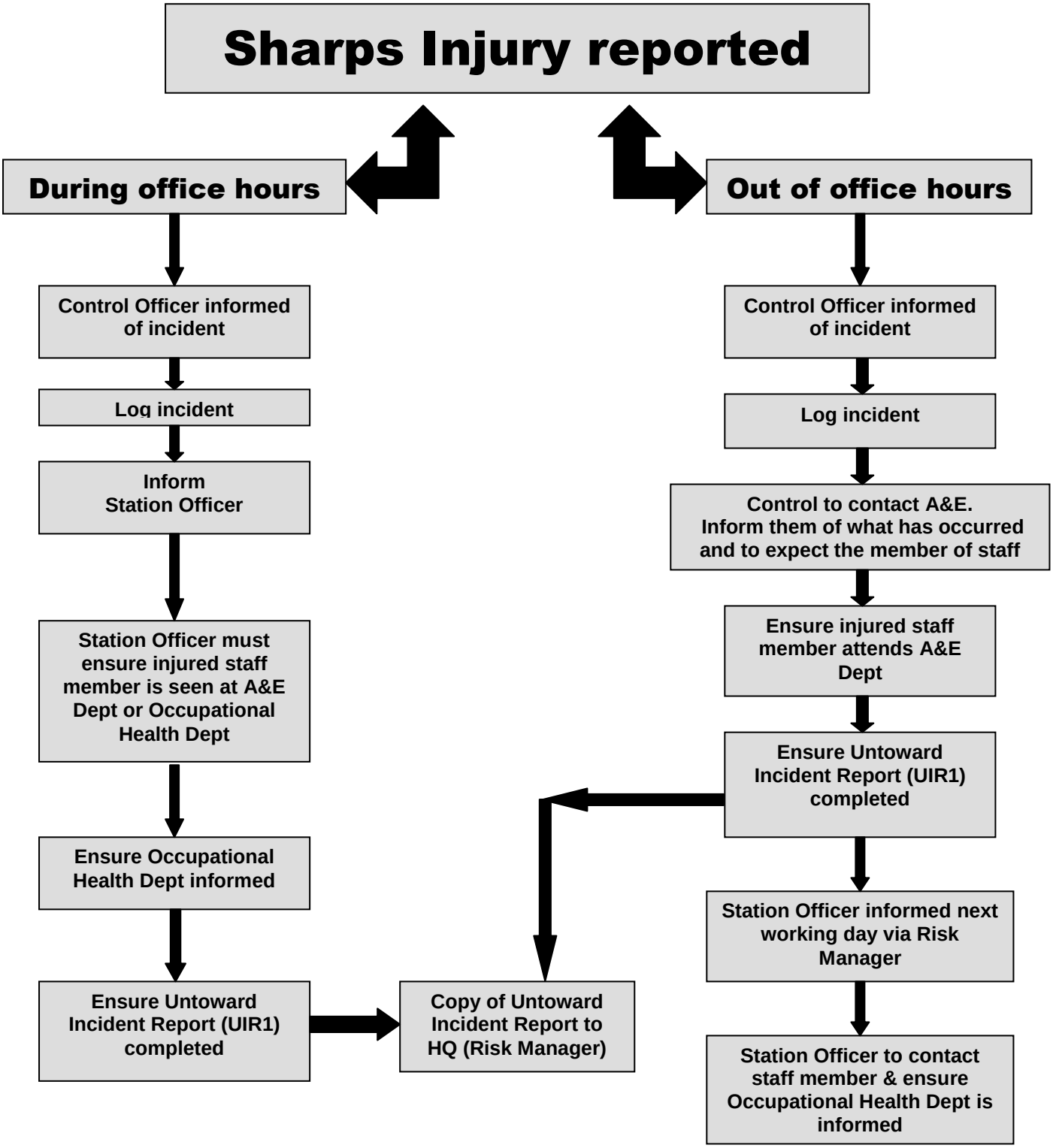
Figure 1



7.0 Action by Duty Control Officer/ Station Officer

Action by

Duty Control Officer/Station Officer



8.0 Hepatitis B, Hepatitis C and HIV

The Trust advises all operational staff that they must receive immunisation against Hepatitis B infection. Hepatitis B is one of the medical conditions that can be encountered following a needlestick injury. Staff should also be aware of Hepatitis C and HIV.

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, needlestick injury) or by contamination of the mucous membranes.

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 healthcare workers. Around 5500 new cases are reported each year in the UK.

The average incubation period is 60 – 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 effective vaccine is available for Hepatitis B protection and is provided for all operational staff. This is arranged through the Occupational Health Department, RVH, Belfast.

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.

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 or as a result of a needlestick injury. 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 - 40years and of these 1% will progress to Liver Cancer each year thereafter.

Currently there is no vaccine available for Hepatitis C and therefore universal 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 or as a result of a needlestick injury. 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 Universal 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 Casualty or the Occupational Health Service as prophylactic medication may be prescribed.

9.0 References

Reference and Further Reading

Ambulance Service Basic Training Manual, Section 17.3 - 17.5. 19.1-19.5 IHCD, 2003

Guidance for Healthcare Workers, Protection against blood borne viruses Department of Health 1998

Guidance on HIV Post-exposure Prophylaxis – UK Chief Medical Officer's Expert Advisory Group on Aids (EAGA).

Guidelines for Hand Hygiene, Infection Control Nurses Association, 1999

Health & Safety at Work etc., Act 1974

Infection Control Clinical Practice. Wilson J, Bailierre Tindall, 1995

Infection Control Practices for Ambulance Services, Infection Control Nurses Association, 2001

Joint Royal Colleges Ambulance Liaison Committee Clinical Guidelines for UK Ambulance Services Version 5.1 2004

Northern Ireland Ambulance Service Infection Prevention and Control policy and procedures.

Updated Guidance on HIV – Management of HIV Infection and Post exposure Prophylaxis including Sexual Exposure – www.dhsspsni.gov.uk/hss-md-34-2008.pdf

Uk National Guidelines for HIV Testing (2008) www.bhiva.org/documents/Guidelines/Testing/GlinesHIVTest08.pdf