Northern Ireland Ambulance Service
Health and Social Care Trust

NORTHERN IRELAND AMBULANCE SERVICE

WASTE MANAGEMENT STRATEGY

Version 1.0

December 2014

Contents

Title:	**Waste Management Strategy**		
Purpose of Strategy:	To set out NIAS vision on the management of Waste. To promote the reduction, reuse, recycling and as a last resort the disposal of waste.		
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Circulation List:

This Policy was circulated to the following groups for consultation.

- Staffside
- Executive Directors and Senior Managers
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Following approval, this policy document was circulated to the following staff and groups of staff.

- All Trust Staff
- Trust Internet Site/ Intranet Site

1. Introduction

NIAS was established on the 1 April 1995 under the Health and Personal Social Services (Northern Ireland) Order 1991 and the (Establishment) Order (Northern Ireland) 1995, thereby becoming a regional service.

The mission of the service is to "provide safe, effective, high quality, patient-focused care and services to improve health and well being by preserving life, preventing deterioration and promoting recovery". Annual Report 2012/13

The ambulance service is managed on a regional and a divisional basis. There are currently 5 operational divisions coterminous with each existing Health and Social Services Board Area. The Eastern area is served by two NIAS Divisions i.e. Belfast City and South East Divisions.

NIAS responds to the need of over 1.8 million people across an area of 5,450 square miles in a pre-hospital, inter hospital and post hospital environment within Northern Ireland. It employ in excess of 1100 operational staff who are deployed across 62 properties including stations and deployment points, an emergency ambulance control, a non-emergency ambulance control, a Regional Training Centre and Headquarters. There is a Resource Management Centre which houses Resource Management, the Fleet Section and other support functions. NIAS also has a garage at Broadway undertaking fleet maintenance, basic repairs and servicing and includes the stores section for the service.

The Northern Ireland Ambulance Service (NIAS) and staff produce clinical and domestic waste during the course of their work. There are 63 locations with 37 ambulance stations, 23 deployment points and 3 miscellaneous properties including Headquarters. These locations produce different types and varying volumes of waste that needs to be channeled into an appropriate waste stream.

2. Background

In June 2011, the Minister for Health, Social Services and Public Safety, Edwin Poots, MLA, announced that a Review of the Provision of Health and Social Care (HSC) Services in Northern Ireland would be undertaken. The Review, known as 'Transforming your care', was to provide a strategic assessment across all aspects of health and social care services, examining the present quality and accessibility of services, and the extent to which the needs of patients, clients, carers and communities are being met.

NIAS will need to take the 'Transforming your care' into account in shaping the future of its estate. The report states that it is estimated that the demand for services could grow by around 4% per annum by 2015. Examples of the potential consequences without other change are listed below:

23,000	extra hospital admissions;
48,000	extra outpatient appointments;
8,000	extra nursing home weeks; and
40,000	extra 999 ambulance responses.

NIAS provides a regional professionally managed ambulance estate which is acquired, maintained and repaired in order to provide and support a safe, reliable customer-focused service at all times.

NIAS will need to makes changes to accommodate this increase in projected demand. The service will endeavour to meet this extra call on resources by considering the effect and seeking to make appropriate adjustments to the level and distribution of staff, fleet and estate.

A by-product of the service provided is the amount of clinical and normal waste that will accumulate at the 63 various locations across Northern Ireland. As demand increases and more clinical interventions are completed the amount of clinical waste in particular will increase. It is intended in the future to 'Treat and leave' more patients in their homes rather than transport them to hospital. NIAS therefore has to have a waste management strategy in place to meet the current and future need. NIAS is spread across Northern Ireland and the strategy has to apply to all our properties.

2.1 Aims

The aim of this strategy is to set out how NIAS can reduce, reuse, recycle, recover and dispose of waste according to the waste hierarchy. This Waste Management Strategy seeks to set the goals and targets to enable NIAS to follow best practice.

If waste cannot be prevented from arising then it should be reduced, reused, or recycled before disposal is considered.

Any residual waste that has not been reused or recycled should be treated so that further value can be recovered and so that the impact of final disposal is minimised.

Through the collaborative efforts, of partnership with HSC Trusts and other bodies, a significant amount of waste will be recycled by 2019. Growth in waste production will be in decline and all NIAS staff will be taking responsibility for the waste they produce.

2.2 Objectives

The purpose of this waste management strategy is to set targets that are a focus for activity, are relevant for individuals and groups and are a means for measuring performance.

1. To manage materials in accordance with the Waste Management Hierarchy - in order of preference, prevention or reduction, re-use, recycling, recovery, disposal - except where costs are prohibitive, or where the environmental consequences can be demonstrated to be negative;

2. To deliver services which offer quality and value for money overall, in the long term as well as the short term;

3. To ensure that services are flexible enough to allow new technological developments and new legal requirements to be accommodated, and to ensure that the desire to move waste up the Waste Management Hierarchy is not compromised;

4. To work together with HSC Trusts and other bodies to research and develop co-ordinated services and infrastructure for waste collection, treatment, transfer and disposal;

5. To manage residual waste, at point of origin, using the proximity principle and manage the rest at the nearest appropriate facility by the most appropriate method or technology;

6. To work with others, in particular on the issue of waste prevention, including commercial, statutory, non-governmental, academic and community based or not-for profit organisations in pursuit of the vision of sustainable waste and resource management;

7. To set an example, as an Ambulance Trust, by preventing, re-using and recycling our own waste and use our buying power to positively encourage sustainable resource use.

It is the role of the Waste Group to introduce a waste reduction strategy and to evaluate the potential for recycling different waste streams throughout the Trust. The Chief Executive is responsible for agreeing waste reduction targets as specified in the Strategy. Applicable waste streams include: cardboard, glass, plastic, metal, printer cartridges, fluorescent tubes etc. The Waste Management Group on NIAS behalf will implement initiatives to further the Trusts commitment to waste reduction.

A record of waste arising across NIAS will be maintained in the Finance Department and will be incorporated in the annual review.

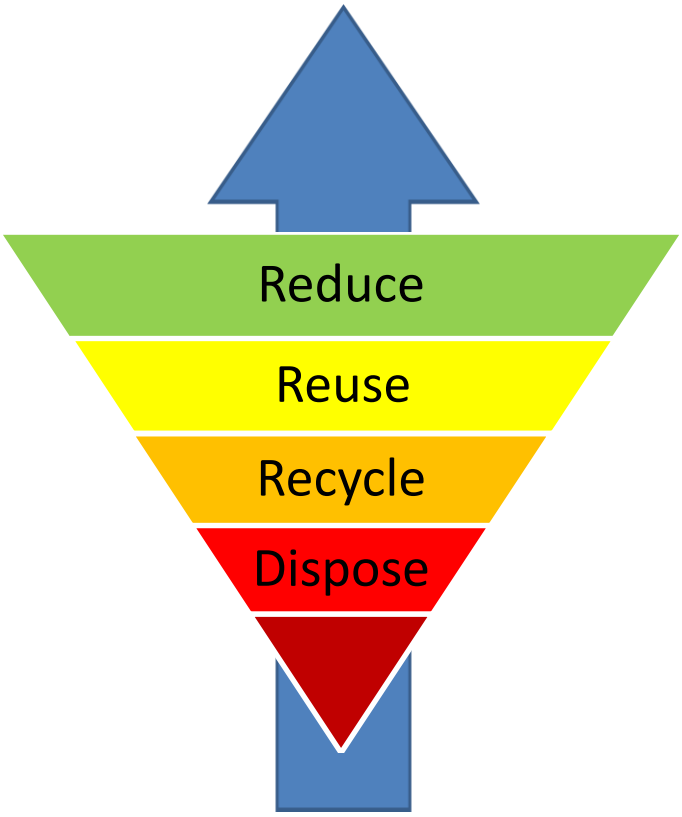
The Waste Management Hierarchy is at the centre of European waste management policy. The hierarchy indicates the relative priority of different methods of managing waste, and provides instruction to waste management policy and planning initiatives on how to progress towards

more sustainable waste management practices. NIAS needs to adopt this hierarchy in managing the waste we produce.

The cone is inverted to indicate that the proportions of waste in each segment should reflect the quantities of waste treated and the method of processing it.

The Hierarchy illustrates the principle that an organisation should start by preventing waste in the first place. However it is more realistic to reduce the amount of waste produced already. Waste that is produced should be reused where possible. If the item or material cannot be reused then it should be recycled. If recycling is not practicable or economically viable then the final option of disposal has to be used.

The Waste Reduction Hierarchy



3. The current situation

3.1 The legislation and definitions regarding waste.

The Legislation around Waste.

The Controlled Waste and Duty of Care Regulations (Northern Ireland) 2013 sets out the requirements under legislation that NIAS must comply with. Waste in Europe is categorised using the European Waste Catalogue (EWC). This has been included in the List of Wastes Regulations (Northern Ireland) 2005. The aim of the EWC is to provide a precise and uniform European-wide definition of hazardous waste and to ensure the correct management and regulation of such waste. The EWC is intended to be a catalogue of all wastes, grouped according to generic industry, process or waste type.

The Definition of Waste

The definition of waste has been in use in its current wording for over three decades and it is now embedded in the 2008 Waste Framework Directive (Directive 2008/98/EC). This set of guidance provides a legal analysis of Article 3(1) which defines "waste" as:-
"…any substance or object which the holder discards or intends or is required to discard…"
An accepted definition of the legal status of **clinical waste** is:

a) Any waste which consists wholly or partly of human or animal tissue, blood or other body fluids, excretions, drugs, or other pharmaceutical products, swabs or dressings or syringes, needles or other sharp instruments being waste which unless rendered safe may prove to be hazardous to any persons coming into contact with it.

b) Any other waste arising from medical, nursing, dental and veterinary, pharmaceutical or similar practice, investigation, treatment, care, teaching or research, or blood from transfusion, being waste which may cause infection to any persons coming into contact with it.

The Duty of Care

The "Duty of Care" enshrines in law the requirement for all who import, produce, collect, carry, keep, treat, dispose of, broker in, deal in and process controlled waste, to manage that waste correctly by storing it properly, transferring it only to the appropriate people and ensuring that when it is transferred it is sufficiently well described to enable its safe recovery or disposal without endangering human health or harming the environment.

3.2 Waste Streams produced by the NIAS Trust include:

Domestic, Clinical/Infectious/Sharps, Confidential Waste, Cardboard, Aluminium cans, Glass, Kitchen waste, Fluorescent tubes, Electrical equipment, Pharmaceutical, Waste fuel oil and Batteries

The types of waste produced by NIAS include

Clinical

This waste is a mixture produced in the course of treating patients prior to and during their transport to hospital including sharps, soiled bandages etc. Clinical waste is "any waste which consists wholly or partly of human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, or syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it."

Paper

Documents, Records, reports and other types of hard copy produced in quantities during the course of business. Some of these are kept and stored for differing periods of time. When the time for disposal arrives the paper is generally recycled.
These documents are produced as a consequence of the administration of the ambulance service. They have various life cycles depending upon the information contained in them.

Confidential

Confidential waste is generated when documents too sensitive to recycle or put into the waste stream is set aside for secure disposal or shredded depending upon the risk to the Trust. These confidential documents would contain sensitive data such as personal details, medical information and organisationally specific facts or figures that should be restricted to authorised personnel only. Some of these documents will be held for a specified time and then either shredded or sent for secure disposal.

Domestic

The normal contents of waste produced by staff in the process of cooking, feeding, snacking and the general administration and occupation of the station. This solid waste comprises of garbage and rubbish such as bottles, cans, disposables, food packaging, food scraps, newspapers and magazines and office papers.

Electrical (Disposed off under WEEE conditions)

Electrical appliances and equipment need to be disposed of under Waste Electrical and Electronic Equipment (WEEE) conditions. Recycling of WEEE is a specialist part of the waste and recycling industry for waste electrical and electronic equipment. WEEE includes most products that have a plug or need a battery. There are ten broad categories of Waste Electrical and Electronic Equipment outlined within the WEEE Regulations, namely:

- Large household appliances e.g. fridges, cookers, microwaves, washing machines and dishwashers
- Small household appliances e.g. vacuum cleaners, irons, toasters and clocks
- IT and telecommunications equipment – e.g. personal computers, copying equipment, telephones and pocket calculators
- Consumer equipment e.g. radios, televisions, hi-fi equipment, camcorders and musical instruments
- Lighting equipment e.g. straight and compact fluorescent tubes and high intensity discharge lamps

- Electrical and electronic tools – e.g. drills, saws and sewing machines, electric lawnmowers
- Toys, leisure and sports equipment e.g. electric rains, games consoles and running machines
- Medical devices e.g. (non infected) dialysis machines, analysers, medical freezers and cardiology equipment
- Monitoring and control equipment e .g. smoke detectors, thermostats and heating regulators
- Automatic dispensers e.g. hot drinks dispensers and money dispensers

NIAS would dispose of many items within a good number of the categories outlined above each year.

Recyclables

The recyclables produced by NIAS include paper, cardboard, batteries, toner and other sundries. These recyclables are collected by specific recyclers who have arranged with NIAS to collect the items. For example the spent batteries are collected under a Battery Back scheme supported by legislation for the disposal of waste batteries and accumulators.

3.3 NIAS management of waste.

NIAS waste is removed by various means which includes specialist waste contractors, local authorities, recyclers and others for specific items such as electrical equipment.

NIAS Trust recognises the cost, both financial and to the environment, of producing and disposing of waste. It is the responsibility of NIAS staff to monitor and assess waste production figures throughout the Trust. Monthly quantities of clinical, general and hazardous waste should be monitored. On an annual basis the quantities of waste produced should be evaluated and any anomalies investigated.

The cost of removal of the waste is recorded and monitored by the Management Accounts Section of the Finance Department for clinical waste, paper, confidential waste and for normal domestic waste.

The following are instructions for the handling of waste and safety procedures to be followed.

a) Waste Management policy
b) Clinical Waste procedure
c) Sharps procedure
d) Etc

3.4 Who is responsible for managing waste?

There are responsibilities for each stakeholder, throughout NIAS, in the management of waste are as follows:-

a) Chief Executive and Director of Operations

The CEO and Board of Directors are responsible for ensuring that adequate resources are available to allow for the effective management of waste in line with the Health Board's Waste Management Policies and Strategy. This shall include human resource and specialised skills, organisational infrastructure, technology and financial resources.

b) Assistant Director of Operations

The Associate Director of Operations (Estates and Fleet) is the lead for waste management and is responsible for ensuring that a robust management system is in place, which will enable waste to be managed in a safe manner. This includes ensuring that processes are in place to undertake the following:

- Development of a waste strategy, policies and procedures;
- Identification of environmental aspects associated with waste;
- Keeping abreast of changes in legal and other requirements associated with waste;
- Setting objectives aimed at continually improving waste management practices and performance;
- Provision of appropriate resources; process for defining roles and responsibilities;
- Relevant personnel are competent;
- Internal and external communications are managed effectively;
- Related documents and records are controlled effectively;
- Waste procedure in place which accurately transposes the requirements of relevant legal and other requirements and incorporates emergency response;
- Monitoring performance against the requirements of the waste policy and related procedures and objectives (including internal audit) and periodically evaluating compliance with relevant legal and other requirements;
- Effectively managing non-conformances with this policy, and any corrective or preventive actions;
- Periodically evaluating the effectiveness of the waste management processes and reporting on related performance to the Facilities and Support Group.

c) Ambulance Service Area Managers (ASAMs)

ASAMs have a direct responsibility for the management of waste produced in their division, to ensure that it is correctly segregated and safely stored prior to collection, and where appropriate, transported correctly in accordance with NIAS procedures. All ASAMs will ensure that:

- All staff have received appropriate training in waste management policy and procedures.
- All staff are made aware of the significant financial and environmental impacts caused by waste disposal and the steps that should be taken to reduce these impacts in line with the waste management hierarchy.
- Staff are fully briefed on communications via the normal channels.
- Appropriate feedback is provided to all staff following accidents, spillages or other incidents, or following any improvement or deterioration in waste management.

· Staff are provided with adequate Personal Protective Equipment and clothing, where necessary, and equipment e.g. bins.
· Waste is stored safely and securely at all times.
· Issues of concern are reported to the Supervisor through an Untoward Incident Report form.
· Suitable departmental representatives are available to progress initiatives approved by a relevant support group.

d) Station Officers

Station Officers will carry out regular checks to ensure that staff, contractors and other stakeholders are fulfilling their roles in waste management as laid out for the ASAMs.

e) Staff

All staff are responsible for ensuring that:

· Waste production is kept to a minimum.
· Waste is correctly segregated at source in line with the requirements of NIAS policy.
· Waste containers are sealed correctly and never over filled.
· Personal protective equipment will be used where required when handling waste.
· Any incidents or accidents relating to waste are dealt with in line with departmental procedures and that prompt actions will be taken to safeguard individuals from injury or ill health and to protect the environment in the event of an incident.

f) Contractors

Contractors must follow requirements in the contract, specification, service level agreement etc with regard to the collection, transport and disposal of waste.

3.5 Monitoring procedures for waste.

a) Facilities and Support Group and the Environmental Management Group

An Environmental Management Group is in place to ensure action on sustainability issues, including waste management, at a corporate level. The Group reports to the Facilities and Support Group. The deliverables of this group include;

·Approving objectives and targets
·Identifying & allocating resources
·Reporting to the Board and contributing to the Annual Report
·Approving improvement actions based on audit reports, legal and other requirements etc

The Environmental Management group meets around 2 to 3 times per year and the Facilities and Support group meet around 3 to 4 times per year.

b) Assurance Committee and the Trust Board

The Facilities and Support Group will report to the Assurance Committee on waste management bringing to their attention any significant issues or matters that pose a risk to NIAS. The Controls Assurance Standard on Waste Management is a standing item on the Assurance Committee agenda and significant items are brought to the attention of the Trust Board. A significant threat on waste management will be recorded on the Risk Register and will remain on it until the risk has been removed or reduced.

3.6 Documentation around waste management

NIAS will comply with the Waste Regulations (Northern Ireland) 2011 as the Trust is required to fulfil its Duty of Care on Waste. For each of the waste streams described earlier in this document the following documentation must be retained:

- a **Waste Transfer Note**
- a **Consignment Note**
- Copies of **Waste Carrier's Licences**.
- Copies of **Waste Management Licences**

Where licences cannot be provided, contractors are required to provide appropriate exemption certificates (i.e. transfer stations).

To assist future internal and external audits, including those by the NI Environment Agency, the Trust will, where possible, maintain this documentation centrally in the 'Waste File'.

3.6.1 Transfer Notes

Transfer notes must give a description of the waste, state the quantity of the waste, give a description of the containment of the waste and state the time and place of the transfer. It will also state the name and address of the persons transferring and receiving the waste. It will further state whether the person taking the waste is a waste collection authority, holder of a waste management license, a person exempt from such a license or a registered waste carrier. Finally it will give the 6-digit European Waste Catalogue (EWC) code for the waste.

Where the waste type, quantity, source and destination are the same (known as repeat movements) a single waste transfer note may be written to cover all movements within a 12-month period.

Transfer Notes should be retained for a minimum of 2 years.

3.6.2 Consignment Notes

Consignment Notes must be completed in respect of movements of Hazardous Wastes. The Consignment Note must travel with the waste consignment to final disposal.

Consignment Notes should be kept for a minimum of three years.

4. Waste management in the future

4.1 Key issues to be addressed

The first priority for more sustainable waste management is **waste reduction**. Some wastes may be avoided completely, while in other cases they can be minimised.

Examples of this is that some organisations

- do not provide paper hand towels anymore and use air dryers instead
- encourage staff to store files electronically
- eliminate junk mail by using email preferences
- use 'post consumer waste' recycled paper (best recycled)

Current example of NIAS projects

- Outline Business case for the introduction of Electronic Patient Report Forms

After reduction comes **reuse**, that is putting objects back into use so that entry into the waste stream is delayed or avoided. Examples include re-using envelopes and folders.

Current example of NIAS project

- Blankets for patients, (single use v reusable)

The third level of the waste hierarchy is **recycling**, which means reprocessing materials back into new raw materials and products. Examples include recycling items made of cardboard, paper and glass. Used toner cartridges and batteries are also recycled.

Current example of NIAS project

- Battery back recycling receptacles
- WEEE disposal of unwanted electrical and electronic equipment
- Paper, cardboard, plastic and other items are recycled at HQ

Some organisations include **Energy recovery** in the hierarchy. It is used to gain value from waste products by converting them into energy. The major method used is incineration with energy recovery, although other technologies are available. Some items from NIAS are incinerated and while not a significant amount it is still an option we use.

Waste disposal comes at the bottom of the hierarchy and is the least desirable waste management option. The priority for waste disposal is to ensure that it is carried out to a high standard of environmental performance to make it as sustainable as possible.

Current practice in NIAS

- Special contractors collect clinical waste from the stations across NI
- Domestic waste from the ambulance stations is collected regularly

4.2 Actions NIAS must take

NIAS has to abide by certain principles when managing waste and the two below will affect the actions taken to process the waste. These two principles are set out as follows:-

Best Practicable Environmental Option (BPEO) as a concept was introduced under the Environmental Protection Act 1990 and since then has been at the heart of waste management planning decision making in the UK. BPEO entails a systematic and balanced assessment of a

range of different development options, in order to identify the option which provides the maximum environmental, economic and social benefits.

Best Available Technology Not Entailing Excessive Costs (BATNEEC) is a principle used to judge the selection of a technology which is considered to be the best at preventing pollution, whilst at the same time being reasonable to implement in financial terms. BATNEEC is typically applied once the BPEO has been determined; for example in choosing which of a range of possible pollution control technologies should be installed at a waste facility.

So NIAS should ensure that in managing waste it

i. "provides the maximum environmental, economic and social benefit."
ii. And that the solutions should be "reasonable to implement in financial terms."

4.3 Targets to support Waste hierarchy

NIAS will reduce the amount of waste produced by reducing the resources used during the course of providing an ambulance service. This will be achieved using the following targets:-

1. The amount of paper used will be reduced by 5% over the next 5 years by
    a. Using the MFDs more effectively
    b. Sending communications electronically
    c. Storing communications and correspondence electronically
    d. Recommend setting email preferences to reduce unwanted or unsolicited mail

2. NIAS will reduce the amount of confidential waste by 10% by using alternative methods of disposal / destruction. In 2013/14 700 bags of waste are disposed of over the year.

3. Eliminating the use of hard copy Patient Report Forms (PRFs) by the introduction of electronic PRFs. In 2013/14 there were approximately 200,000 A3 PRFs and 22,000 Refusal to Travel forms which are both duplicate. These would become electronic in the future when the business case and procurement of ePRFs is complete.

4. NIAS will seek to segregate waste and ensure that less waste makes its way to landfill. NIAS currently use contractors to collect suitable waste which is separated off site.

    NIAS will monitor copier and printer paper usage and the production, collection and disposal of waste. This will be reported to the Facilities and Support Group and retained in the Controls Assurance Standards evidence files to allow revision of this strategy and the associated policy and procedure. An Action Plan will be generated, the outcomes audited and reported to the relevant groups and committees.

4.4 Comparing NIAS performance with others

NIAS will undertake to Benchmark with other ambulance services that service a similar area or a similar population. NIAS will seek to compare how the benchmark partner/s carries out the function of waste management and what documentation is prepared for its regulation and administration.

5. Training and continual improvement

The Trust needs to move towards a culture where Waste Management principles and Recycling become embedded into the delivery of the service. This will be greatly enhanced by identifying training needs and delivering this to the staff in NIAS.

Material will continue to be placed on the Intranet for the staff and relevant information will be disseminated through the normal channels.

NIAS will also endeavour to improve its performance with regard to waste management. This may take the form of targets set nationally or from European directives. The following are some actions that will ensure that NIAS administration of Waste Management will continue to improve.

- Examining and following the audit trail and also looking at the Trusts duty of care in Waste Management
- Monitoring and testing of waste segregation;
- Monitoring and reporting against recycling and recovery performance;
- Testing compliance against UK and European Waste Management legislation and standards (in particular with regards to the Waste Disposal Policy and the handling and final disposal of clinical waste);
- Exploring and celebrating best practice and significant achievements;
- Looking at ways of continual improvement, environmental and financial efficiencies;
- Identifying and delivering against continual training and development needs of staff.

6. Personal Protection Equipment

The Trust's hazardous waste procedure and COSHH assessments will identify the need for personal protection equipment when the hazard cannot be dealt with by any other means. The Trust has a further duty under COSHH to ensure that these items are provided, used and maintained.

General Precautions.

Appropriate training is essential. Basic personal hygiene is important in reducing the risk from handling hazardous waste. Washing facilities are provided for people handling hazardous waste. This is particularly important at storage facilities.

There is a risk of contamination when clearing up body fluids. Disposable gloves and a disposable apron or full length, sleeved disposable gown, and goggles or full a face visor are available and must be worn.

7. Implementation and Review

The Trust is committed to ensuring that all strategies are kept under review to ensure that they reflect the needs of the ambulance service and remain compliant with relevant legislation.

This strategy will be reviewed by the Assistant Director of Operations before it expires or following a high risk incident which requires immediate action. It will also be reviewed subject to any relevant European directives or legislation. Any review will be noted on a subsequent version of this strategy, even where there are no substantive changes made or required.