

# ANNEXURE “U”: WASTE MANAGEMENT AND INFECTION PREVENTION AND CONTROL

## Waste Management Policy

### Introduction

Healthcare waste management (HCWM) legislation surrounds protection of healthcare workers, the public and handlers of waste (Waste Act 2007). A comprehensive programme to manage waste should include the above as well as establishing a cost effective waste handling system.

## Structure for Waste Management

- There should be clearly written policies defining the structure for waste management
- The level of Staff required to handle waste safely with their job descriptions and responsibilities.
- The generation, segregation, transport, storage and safe disposal of all waste.

## Administration

There should be a **designated waste manager** with a job description which includes:

- Ensuring adequate supply of PPE for the waste handlers
- Regular and constant supply of waste containers
- Keeping a log of what goes into which category- usage
- Weight of items sent for land fill, rendering safe or incineration
- Ensuring wards do not send down incorrect items in the wrong coloured bag

The waste manager will work closely and will be supported by the:

- House keeping staff
- Infection control team

### Personal Protective Equipment

- All waste handlers should be supplied with heavy duty domestic gloves, overalls and closed toe shoes or boots.
- There must be facilities for them to wash their hands in their rest areas.

## Occupational Health

Report immediately to OH if any of the following occur:

- Exposure to blood and body fluids either due to a sharps injury or spillage
- Exposure to chemicals, radiation and other noxious substance
- Back injury or physical injury during transportation of waste.

## Waste Classification

Clinical or infectious waste

- Group A: all human tissue, blood and bodily fluids, carcasses, laboratory waste and related swabs and dressings
- Group B: Discarded syringes, needles, cartridges, broken vials and contaminated sharps
- Microbiological cultures and infectious waste from microbiology and pathology
- Pharmaceutical products and chemical waste
- Items used to dispose of urine, faeces, and other bodily secretions or excretions not falling in Group A. Disposable bedpans, liners, incontinence pads, stoma bags

Non-clinical or domestic waste

- Household waste.
- Non-toxic,
- Non-infectious

Special waste

- Pharmaceutical
- Cytotoxics
- Radioactive

## The Waste Process

At ward level, waste should be segregated by its category into the appropriate colour. Sharps containers are specifically designed to be visible, robust and strong to prevent accidental injuries to staff.



**Figure 20: the waste process from ward to final disposal**

Colour coding for source segregation

THIS IS THE MOST IMPORTANT STEP IN WASTE MANAGEMENT. Segregation of waste happens at ward level and is crucial to an effective policy.

The only way to reduce costs, reduce environmental pollution, and minimise risk to self and others is to segregate waste in an intelligent and caring manner.

A universal colour-coding system has been developed which emphasises the linking of a colour to a means of identifying waste and therefore leading to appropriate disposal. There should be clearly visible charts showing what goes into which colour bag or container. If a container and a plastic bag is used then both must be of the same colour.

Clinical waste containers

A **red plastic bag** strong enough to hold the contents (minimum 0.55 microns low density) placed inside a robust solid container (usually cardboard).

This is classified as infectious, hazardous or clinical waste and carries risk of disease.

*Non clinical waste containers.*

**Black bags** (domestic) are used for non-infectious or non-clinical waste. It has little or no risk of infection.

**Sharps container.**

The sharps container is used to discard needles, syringes and other used sharp objects. It is a solid, usually red and yellow, container which is fixed firmly to a surface, within arm's reach of its use. This could be on a procedure trolley, wall mounted or fixed to a flat surface. It should have the following qualities:

- Be made of solid material

- ☐☐ Be designed to fall away from the body when lifted manually
- ☐☐ Have robust handles to ensure there is safe handling
- ☐☐ Have secure lids which do not open once fastened into place
- ☐☐ Be able to withstand hot water wash up to 90oC to maintain cleanliness
- ☐☐ Not require disinfectants to clean it
- ☐☐ Not crack or leak during transportation or handling under any circumstances
- ☐☐ Resistant to dropping (shock) or weights being placed on them
- ☐☐ Take the recommended weight and volume of waste
- ☐☐ Should be replaced at the suppliers cost if damaged or broken
- ☐☐ Should have clear signage indicating use such as *anatomical waste, clinical waste, pharmacy waste, non-clinical waste*.

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#### Non-clinical waste

The waste management system should be a complete system of waste management and therefore should be integral to the specification. All non-clinical waste should be placed in black bags, labelled and sent for landfill. A record of all bags sent should be kept

#### **Recycling of Packaging or paper waste**

All paper and cardboard waste should be recycled as far as possible. This is perhaps where the greatest savings occurs.

## Waste Segregation

Health care waste should be segregated at source (point of generation)

CATEGORY	RECOMMENDED COLOUR CODING	EXAMPLES OF ITEMS
<p><b>Anatomical Tissues</b>  <b>Clinical waste</b>                      Any material which is visibly contaminated with blood or bodily fluid or infectious agents</p>	<p><b>CLINICAL WASTE</b></p> 	Placentae, human limbs and tissue, excision products. Used bandages and dressings, urinary catheter and drainage bags*, intravenous administration set, abdominal swabs, theatre dressings. Infectious disease isolation area – gloves and aprons, linen savers with blood or body fluids
<p><b>Sharps</b>                      Sharp objects that are contaminated with blood or body fluids</p>	<p><b>SHARPS</b></p> 	Hypodermic needles, stiletts, vials, syringes containing blood or bodily fluids, insertion ends of iv administration sets, trochars, cannulae, rigid guidewires
<p><b>Non-clinical waste</b>                      Generated by patients but not contaminated with blood or bodily fluids</p>	<p><b>NON CLINICAL</b></p> 	Items used on patients but not contaminated with blood or body fluids. Examples: used gloves, linen savers, tissues, paper towels, packaging or wrapping from sterile items or processed items. Babies nappies, sanitary towels.
<p><b>Paper and packaging</b>                      Packaging or wrapping, office and administration</p>	<p><b>NON CLINICAL</b></p>	Office paper, wrapping paper from SSD, surgical masks, overshoes, surgical disposable caps and gowns.
<p><b>SSD equipment</b>                      Used single items sent to SSD for sterilization or high level disinfection</p>	<p><b>CLEAR</b></p>	Surgical instruments, vaginal speculae, respiratory equipment, masks etc
Storage of patient articles	<p><b>CLEAR</b></p>	Storage of patient articles

IV fluid and wound drainage bags containing residual fluid should be emptied in the sluice before discarding.

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Figure 21: Chart showing the colour coding and the items that can be discarded for maximum efficiency

