Waste Management

Expected Outcome

Assured ongoing cost efficient and effective Waste Management practices through the commitment to waste minimisation, safe handling, environmentally sound disposal and staff education.

Background

In accordance with NSW Department of Health Guidelines issued August 1998, Liverpool Health Service maintains its commitment to the effective management of Waste by following recommended strategies utilizing:

- Waste management committees, plans and waste audits
- Waste minimisation, avoidance, segregation, recycling and re-use
- Waste labeling and containment
- Proper waste handling, storage and transport
- Correct waste treatment / disposal

(Waste Management Guidelines, Department of Health NSW. August 1998.)

Policy Statement

- All employees of the health service will ensure that all activities pertaining to the management of waste reflect Liverpool Health Services' commitment to the safe, efficient and environmentally sound and ecologically appropriate practices in the segregation, handling, disposal, recycling, reuse and minimisation of waste products.
- General Services are responsible for waste management across the campus and are to be contacted for additional or revised services or other problems
- All staff are to receive education to ensure compliance
- Tracking mechanisms are in place for costing some categories of waste to the users
- Spill procedures may be found in the relevant manuals:
  see Infection Control Manual sect C6, OHR&S Manual sect 11.7, General Services Manual, Radiology Dept, etc.

1. Waste Streams and Disposal

1. Clinical
2. Cytotoxic
3. Pharmaceutical
4. Chemical
5. Radioactive
6. Recyclable
7. Liquid
8. Organic
9. General
10. Paper

1.1 Clinical Waste

This is waste , which has the potential to cause sharps injury, infection, or could be considered to be grossly offensive. When packaged and disposed of appropriately there is virtually no public health significance. Clinical waste contains the following:

- sharps
- gummed addressograph labels
- human tissue (excluding hair, teeth & nails)
- bulk body fluids and blood
- visibly blood stained body fluids, disposable material and equipment
- laboratory specimens and cultures
- animal tissues, carcasses or other waste arising from laboratory investigation or for Medical or Veterinary research **unless treated by an approved method.**
- **body parts**

Dressings materials
Used swabs and soiled dressings are to be disposed as clinical waste. Packaging, instruments, trays, unused material is to be disposed of as general waste unless contaminated with visible blood.

DISPOSAL

Containers or bags are YELLOW with black lettering for all clinical waste with the exception of body parts.
For body parts, containers are BURGUNDY.
Double bagging is required if there is outside soiling
Bags are not to be filled more than two thirds
Bags are to be sealed with tape
Bulk blood and body fluids may be carefully poured down a sewer drain unless vacuum sealed
Any staff member who sustains an injury whilst handling clinical waste MUST wash the affected area immediately and report the incident for management and follow up
See Occupational Exposure to Blood and Body Fluids Policy, Infection Control Manual *Sect C06.06*
Waste treatments currently available are autoclaving, microwaving, mechanical-chemical disinfection and incineration. Body parts are incinerated at 1100^{c}.

1.2 Cytotoxic Waste

Material contaminated with residues or preparations containing materials toxic to living cells, principally through action on cell reproduction. This includes any residual cytotoxic drug, and any discarded material used in the preparation or administration of cytotoxic drugs.

DISPOSAL

Containers or bags are **PURPLE** with purple lettering and identified by the telophase symbol
Destroyed by incineration at 1100^{c}.

1.3 Pharmaceutical Waste

Consists of pharmaceuticals or other chemical substances specified as regulated goods in the *Poisons and Therapeutic Goods Act 1966.* Pharmaceutical waste includes expired or discarded pharmaceuticals and filters or other materials contaminated by pharmaceutical products.

DISPOSAL

Containers vary dependent on the type of waste
See Pharmacy Policy Manual

1.4 Chemical Waste

Chemical wastes included in the *"Dangerous Goods Regulations and Poisons and Theraputic Goods Act '"* are included in this stream, and include mercury, cyanide, azide, formalin and gluteraraldehyde, which are subject to special disposal requirements.

DISPOSAL

Controlled by means of the *OH&S (Hazardous Substances) Regulation 1996* and the *Dangerous Goods Act 1975.*

1.5 Radioactive Waste

Material contaminated with radioactivity may be included in the body waste of patients. It is initially stored within lead shielding and allowed to decay. After it has decayed to a safe level, it is no longer deemed to be radioactive waste and is disposed of as clinical waste. Some radioactive wastes are classified as Hazardous Waste in the Waste Regulation.
(Refer: Radiation Control Act 1990 and Radiation Control Regulation 1993)

DISPOSAL

Containers are RED with black lettering
Managed by Nuclear Medicine staff under the Waste Regulation guidelines
Refer queries to Radiation Safety Officer

1.6 Recyclable Waste

Items which are composed of materials capable of being remanufactured or reused. Items are considered recyclable if facilities are available to collect and reprocess them. **See also** Paper Waste below.

DISPOSAL

Containers are marked with labels for the specific type of recyclable material.
Paper (non-confidential) collected by contractors
Confidential paper - charged per bin by contractors and destroyed with signed witness

1.7 Liquid Waste

These wastes include grease trap waste, used lubricating oil and waste normally discharged to the sewer

DISPOSAL

In accordance with Waste Regulation, pollution control licence or sewerage authority requirements.

1.8 Organic Waste

This includes wood, garden, food, vegetable and natural fibrous material waste which are biodegradable.

DISPOSAL

Engineering department for other than food waste
Food waste to general waste

1.9 General Waste

Any waste **not included** in other categories and which is not capable of being composted recycled, reprocessed or re-used. This stream includes incontinence pads, drained peritoneal dialysis wastes, sanitary waste (other than bloodstained sanitary napkins), disposable nappies and food.

DISPOSAL

Clear bags

1.10 Waste Paper

- **General** to regular flip top tidies and wheeled bins
  Includes candy and foil wrappers, glossy or waxed paper, gummed labels, lunch bags, milk cartons

- **Clean recyclable** to office cardboard collecting trays and containers, or regular wheeled bins marked Paper for Recycling

- **Locked bins for confidential material** are located in bay areas such as Employee Services, Clinical Information and other areas as required.
  Alternatively, confidential material may be shredded and placed in bins for recyclable paper

- **Clinical waste** for gummed addressograph labels - to be torn from page which may then be shredded or placed in bin for recyclable paper

2. Waste Minimisation

Strategies

1. Waste avoidance
2. Waste reduction
3. Cost reduction
4. Re-use
5. Recycling
6. Cost effectiveness

2.1 Waste Avoidance

- Manufacturers, suppliers and/or Sterile Services department requested to remove unnecessary materials supplied in sterile procedure packs, and reduce unnecessary packaging. For example, replacement of polystyrene foam with recyclable or biodegradable fillers.

2.3 Waste Reduction

- Product Evaluation Committee to consider product substitutions or modifications, and procedural changes to ensure less toxic or hazardous materials are selected. For example, biodegradable cleaning compounds and safer chemicals.

- Limit amount of material and equipment to what is actually needed for a procedure
- Remove excess material from trays and set-ups prior to use, for resterilisation or re-use.
- Appropriately located colour coded containers close to the point of use for ease in segregating recyclable material
- Regular review of waste collection, and the size and location of waste containers.

2.4 Re-Use

- Re-usable items preferred to disposable whenever clinically appropriate, environmentally sound, practical and cost effective.
- Choose items, which may be re-used such as washable nappies, crockery and cutlery.
- Encourage staff to bring in their own coffee mugs.

However, the cleaning and reprocessing of all reusable items must be considered.

2.5 Recycling

- By separating recyclables, waste volume going to landfill is reduced by up to 60%.
- As disposal volumes decrease, cost savings should increase.

2.6 Cost Effectiveness

- Waste costs can be measured against an activity level. For example occupied bed days, numbers of admissions/separations or kilograms per patient day.

For full information on Waste Management, see General Services Policy Manual.

Policy Author: Manager General Services
Policy Reviewer/s: Manager General Services, Safe Work Practice & Environment Committee