Waste Management
Orientation for the handling of waste in a sensitive environment

2017
Brighton Health Campus produces a Waste average of:

- 65 Tonnes of Clinical Waste
- 320 Tonnes of General Waste
- 21 Tonnes of Cardboard
- 14 Tonnes of white paper
- 8 Tonnes co-mix recycling

TOTAL 428 TONNES ! PLUS 4,014 Sharps containers.
Standard Precautions

1. Always wear disposable gloves and other appropriate PPE.

2. Always close the bin liner prior to removing the container.

3. Avoid coming in contact with waste
Waste Management

Collection containers for different waste types are colour coded

- Clinical and related waste
- Cytotoxic Waste
- General Waste
- Recycled Waste
- Confidential Waste
Importance of Waste Management

Importance = Environmental impact / cost

- Preserve Resources
- Protect Staff
- Protect The Environment
- Reducing Risks to Staff, the Environment & the Public
- Effective waste management reduces cost

Clinical & related waste is more expensive than general waste
Clinical and related waste

Collection containers are identified by:
Yellow bin liner, Yellow pedal bin, Yellow wheelie bin.
Definition of clinical and related waste

Waste that has the potential to cause disease
(Free & Flowing Blood & Body Fluids)

Examples of Clinical and related waste

• Discarded sharps, pharmaceutical waste, human tissue waste, laboratory and associated waste directly resulting from the processing of specimens

• Where blood, blood products or body fluids is flowing, dripping, oozing liquid or expressible from material.

• Containers of blood or free flowing body fluids e.g. urine bags, tubing, suction canisters, sputum mugs go into a clinical waste bin NOT down the sink.

• Waste from isolation rooms in use by infectious patients or material mixed with that waste.

Material that is not saturated or dripping blood or body fluid is general waste
Sharps – Collection –

ONLY change containers when contents reach the FULL Mark.

Re-usable containers

Yellow sharps containers with Clinical waste symbol.
Sharps - Definition

An object or device having sharp points, protuberances or cutting edges that are capable of causing a penetrating injury to humans

Sharps pose a serious Health and Safety Risk to other staff and the public if disposed of incorrectly

Sharps are shredded, then autoclaved by steam under pressure then disposed to landfill
Disposal of S4 / S8 Drugs

All unused drugs must go back to the pharmacy.

If this is not possible, Where should they go?
Disposal of Unused Controlled Drugs

Unused Controlled Drugs must be disposed of to prevent unauthorised access to them. Disposal must be by an authorised person and witnessed and signed by second authorised person.

• Part-used ampoules, vials and syringes
  Draw up remaining content into a syringe, squirt the contents down the sink and flush with water. Alternatively, squirt the remaining content into a cotton wool ball and discard in a sharps container.

• Infusions and patient-controlled analgesia (PCA) solutions
  If in an infusion bag, cut the bag open and pour contents down the sink then flush with tap water. If in a syringe, squirt down the sink as above.
  Record the time the infusion was stopped, the reason for stopping the infusion and the precise amount of infusion remaining.

Both authorised persons must sign for the disposal in the Drug Disposal Register.
Disposal of Unused Controlled Drugs

• Transdermal Patches
Remove from the patient’s skin and fold the adhesive sides together. Place in a sharps container. Record the disposal on the patient’s medication chart. Both authorised persons must sign for the disposal.

• Broken or damaged stock
Two authorised persons must identify broken or damaged stock, dispose of in a sharps container and document in the relevant section of the Controlled Drugs Register.
Cytotoxic drugs

- also referred to as anticancer or cancer chemotherapy drugs
- include a wide range of chemical compounds
- extensively used to treat cancer, as they kill tumour cells by interfering with cell division
- actions are not specific to tumour cells and normal cells may also be damaged
- This means potentially serious side-effects in both patients or others if exposed

Cytotoxic preparations

- Mutagenic,
- Carcinogenic
- Teratogenic
Cytotoxic drugs
Remember to use correct PPE.

- Can be goggles, face mask, or shield
- NP95 approved face mask only
- Approved gloves for cytotoxic OR 2 pair gloves
- Non permeable, long sleeved gown with cuffs
Cytotoxic One – FACT Sheet

Read the Cytotoxic FACT Sheet and Complete the Cytotoxic FACT Sheet Staff Training Record.

CYTOTOXIC FACT SHEET

Cytotoxic drugs and related waste are hazardous substances. Staff who manage them may be at risk of adverse health outcomes.

What are Cytotoxic Drugs?
- Chemotherapeutics
- Cisplatin
- Mitomycin C
- Mitoxantrone
- Fludarabine
- Etoposide
- Carboplatin
- Paclitaxel
- Cytoreductive agents
- Corticosteroids
- Mitogens
- Testosterone

How might I be exposed?
- Inhalation
- Injection
- Dermal absorption
- Oral absorption
- Percutaneous route

How do I identify Cytotoxic agents?
- Containers:
  - Labelled as 'Cytotoxic'
  - Labelled as 'Handle with care'
  - Labelled with a symbol of a skull and crossbones
  - Labeled as 'Hazardous'

What is Cytotoxic Waste?
Cytotoxic waste includes:
- Liquids
- Tissues
- Body fluids
- Fluids contained in body cavities

Cytotoxic waste includes:
- Nonivamycin, dapsone, dapsone
- Nonivamycin, dapsone

What do I do if I am personally exposed?
- Clean contaminated skin with soap and copious amounts of water for at least 15 minutes (whenever necessary)
- Isolate contaminated area, mask, and/ or face and hand wash with normal saline for at least 15 minutes
- Manage contaminated clothing as per hospital policy
- Contact the Incident Management Team
- Follow hospital policy and procedure for management and follow up

What do I do to manage a cytotoxic spill?
- Stay with the spill and get help
- Use Personal Protective Equipment (PPE)
- Follow the spill kit instructions

V01 Effective: 04/2017  Review: 04/2018
Recyclable Waste

- Used toner / printer cartridges
- Mobile phones
- Old computers / faxes etc.
- Glass bottles and jars
- Cardboard
- Polystyrene
- Aluminium & steel cans
- Milk, juice cartons
- Plastics
Confidentiality Examples

- Patient / Staff records
- Pathology Reports
- Medical Reports
- Patient Charts / stickers
- Any correspondence

Confidential Paper Bin
- Contents are shredded, then made into recycled paper

Items like this with patient labels must go to clinical waste
General Waste – Definition
Waste other than regulated waste

- Use only clear bag,
- Green pedal bin or green wheelie bin

General Waste handling procedures

If the bag contains any clinical & related waste, place WHOLE bag into yellow clinical wheelie bin.

If the bag is free of any clinical and related waste, place WHOLE bag in the Green general waste bin.
What NOT to do

CLINICAL WASTE IN A GENERAL WASTE BAG

NEEDLE FOUND IN GENERAL WASTE WHICH CAUSED SHARPS INJURY
What NOT to do

GENERAL WASTE IN A CLINICAL WASTE BIN

SHARPS CONTAINER WITH NON-SHARPS
Hazardous Chemicals

If stored, used or disposed of incorrectly, chemicals have the potential to cause harm to your health, the health of others and the environment.

Here is some basic information that will help keep you, the workplace and the environment safe.

Objectives

- Identify hazardous chemicals
- Legislative requirements
- ChemAlert
- Risk management
- Storage
- Spills
Two chemical classification and labelling systems are currently used in Australia with the Globally Harmonised System (GHS) mandatory from 2017.

Chemicals with Health Hazards can affect human health
Such as those that:
- Are toxic if swallowed or inhaled
- Cause irritation or damage to the skin
- Cause cancer
- Cause respiratory problems

Also know as Hazardous substances

Chemicals with Physical Hazards can cause immediate harm or damage to property as well as people and the environment.
Includes chemicals that:
- Are flammable
- Pressurised gasses
- Corrosives (acids)
- Explosives & oxidisers

Also known as Dangerous Goods
Legislative Requirements

Specific information that must be readily accessible includes:

- Safety Data Sheets (SDS)
- Chemical register of chemicals used

Other information that must be provided includes:

- Labels on all chemical containers including and secondary containers that are used for decanting
- Training and instruction regarding the chemicals, their hazards and how to use them safely

Where can you find your workplace chemical register?
Hazardous Materials Management

About HAZMAT

The HAZMAT area is your portal to ChemAlert which contains Safety Data Sheets and other chemical safety information for the chemicals used throughout Queensland Health.

The HAZMAT area also provides information about chemical, biological, radiological and physical factors such as noise and dust that may affect health and safety in the workplace.

ChemAlert Tips and Information

HAZARDOUS CHEMICALS
Information on Hazardous Chemicals and associated measures

DANGER
Confined Space
Authorized Personnel Only

ENVIRONMENTAL EXPOSURES
Information on Environmental Hazards and Exposures

ChemAlert Login

Go 1. HHS Login

Go 2. SDS & Labels

Go 3. Super Users

Use this option if you want to access your work unit register and risk assessments. Note: Access to secured sites is via Novell ZENworks Application Window.

Product Safety Data Sheet (SDS) and labels Available to all Queensland Health staff.

Update work unit registers or other relevant information. (Needs Write Access)
Exposure and Health Effects

The three main routes of entry for chemicals are:

- Inhalation
- Skin absorption
- Ingestion

Exposure can lead to an acute or chronic health effect

- Acute will occur immediately
- Chronic usually occur after repeated exposures over a long period of time

Risk Management

- Level 1: Eliminate the hazards
  - Highest
  - Most

- Level 2:
  - Substitute the hazard with something safer
  - Isolate the hazard from people
  - Reduce the risks through engineering controls
  - Level of health and safety protection

- Level 3:
  - Reduce exposure to the hazard using administrative actions
  - Use personal protective equipment
  - Lowest
  - Least
Storage - Chemicals must always be stored in a safe and secure manner

Considerations when storing Chemicals

• Type of chemical to be stored
• What are the stored chemicals:
  - Properties?
  - Hazards?
  - Quantity?
  - Compatibility?
  - Ventilation adequate?
  - Containment of spills/leaks?
• What else is being stored in the area? Potential Risks?
• Are containers appropriate? Labelled?
Emergency Spill Kit

Kit contains basics needed for most situations
With Instructions/material safety data sheets with the kit.

CISS Facilities
Each CISS site will have it's own Spill Kit, it is up to you to familiarise yourself with the storage area location for the Spill Kit at the facility that you will be working from.
Please be careful with what you place down the sink

Chemicals and Solvents can be harmful to the Environment and our waterways. If you are not sure please contact the Environment and Waste Department.
Legal responsibilities

This is in accordance with:

- The Workplace Health and Safety Act (2011)


- Waste Reduction and Recycling Regulation 2011

It is every person’s responsibility to ensure that all types of waste are disposed of in the appropriate manner.
Questions?

Thank you for your time and participation