# Clinical and related waste guidance

Supplement for Capital Health Care Pty Ltd employees



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## Introduction

### Who should read this booklet?

Healthcare staff who handle clinical waste in their day-to-day work.

### What is this booklet for?

This booklet is a user-friendly guide to supplement the EPA's *Clinical and Related Waste – Operational Guidance document* (IWRG612).

It provides a simple and practical decision-making process that will help you identify whether items are clinical and related wastes, landfill waste, or can be recycled. It also addresses some common misunderstandings regarding what is and is not clinical and related waste.



### Why is clinical waste management important?

Hospitals, and their staff, are responsible for ensuring the safe and correct storage and handling of clinical waste.

Sorting clinical waste correctly can have a wide range of positive consequences including:

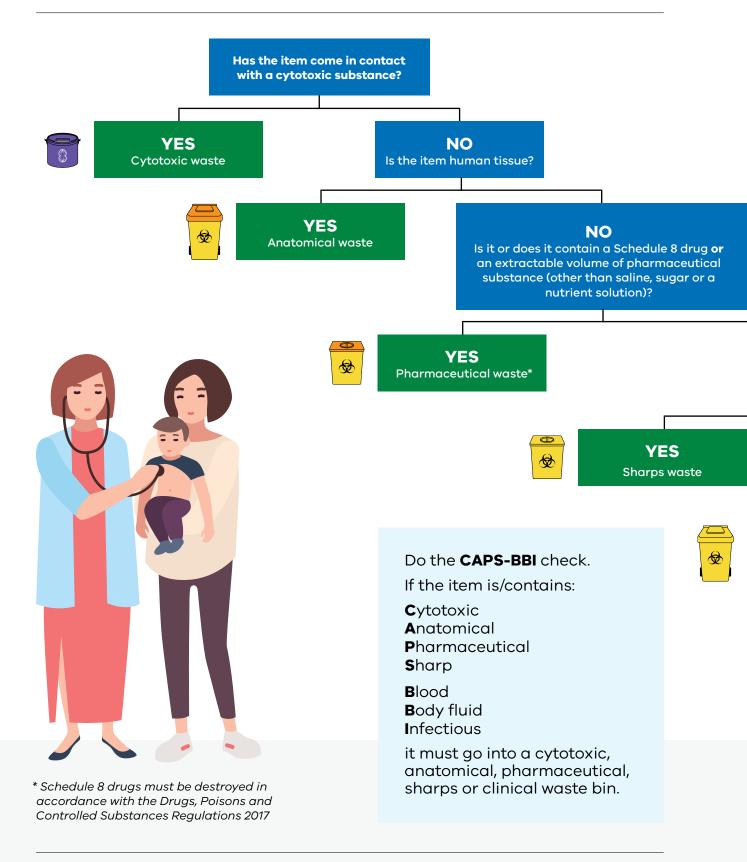
- reduced risk of anti-microbial contamination and reduced risk of introducing of anti-microbial resistance into the environment
- reduced incidence of needlestick injuries
- lower infection risk for staff
- reduced damage to the environment such as reduced water table contamination and carbon emissions
- reduced waste management costs for hospitals
- compliance with EPA and WorkSafe regulations.

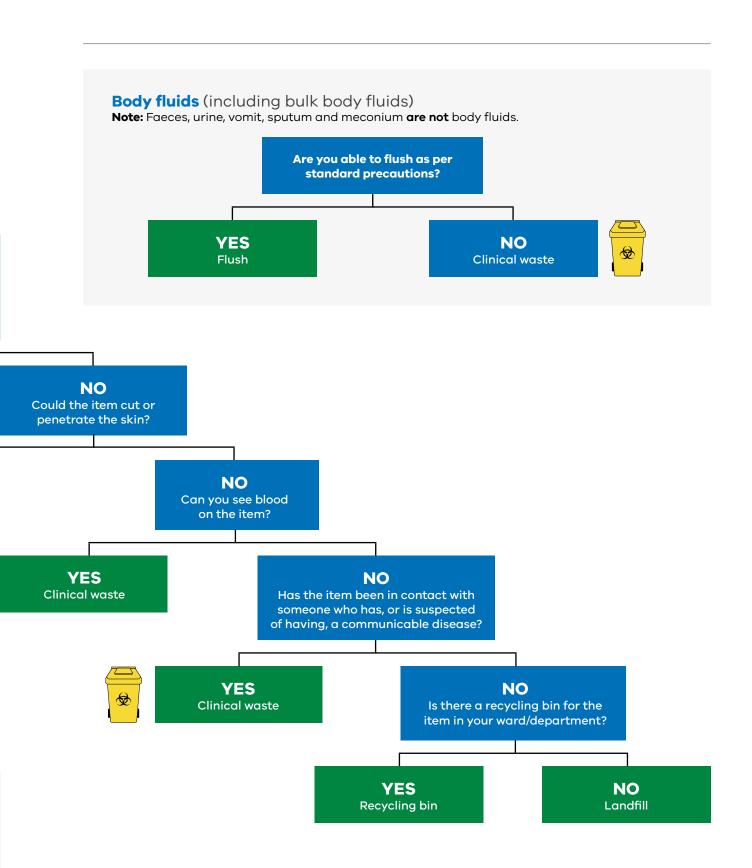
This booklet, as well as the guidelines themselves, should be read in conjunction with your health service's healthcare protocols. If specific questions are not answered in this booklet seek clarification with your health service.

#### Note:

- 1. The treatment and disposal of radioactive waste is not addressed in this document. For guidance on radioactive waste management refer to the *Victorian Radiation Act 2005* and the Department of Health and Human Services *Disposal of Radioactive Material* guidance (see Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)
- 2. Flush refers to the disposal of waste as per standard precautions. Dedicated flush facilities must be used and appropriate personal protective equipment worn (https://www.nhmrc. gov.au/health-advice/public-health/preventinginfection)
- 3. This booklet should not be used by healthcare staff outside of Victoria because the regulations for clinical and related waste differ between states and territories.

## Waste decision tree





## **Clinical waste streams**

### **Treatment:** Incineration

Pharmaceutical, anatomical and cytotoxic waste is incinerated between 900 and 1200° C, denaturing pharmaceutical substances and turning the waste into ash and gases.

#### Cytotoxic waste

Does not apply to Capital Health Care employees.

#### Anatomical waste

- Does not apply to Capital Health
- Care Pty Ltd employees
- •
- •

#### Pharmaceutical waste

Pharmaceutical substances and containers include:

- pharmaceuticals from incomplete infusions
- any Schedule 8 drugs of addiction, including residue or trace
- patients' unused pharmaceuticals
- pharmaceuticals that are unwanted or out of date
- sharps, packages, containers and equipment containing extractable volumes of pharmaceutical substances
- pharmaceutical substances rejected by the manufacturer due to quality control considerations.

This excludes:

- materials where all extractable contents have been removed (other than cytotoxics or Schedule 8 drugs of addiction), such as empty pill bottles
- saline, sugar, nutrient solutions and associated packaging, containers and equipment.

**WARNING:** Unless it is saline, sugar or a nutrient solution, pharmaceutical substances **must not** be flushed, poured down sinks or disposed of directly to the environment.

**Note**: Schedule 8 drugs must be destroyed in accordance with the Drugs, Poisons and Controlled Substances Regulations 2017

#### Receptacle

Purple, punctureresistant, leak-proof container depicting symbol of a cell undergoing telophase



#### Receptacle

Yellow bin with orange lid and depicting the biohazard symbol in black



#### Receptacle

Yellow container with orange lid and depicting biohazard symbol in black



### **Treatment:** Sterilisation

Clinical and Sharps waste is sterilised using a shredding and chemical disinfection process. It is then sent to landfill.

#### Sharps waste

Any item that is able to cut or penetrate the skin.

This includes, but is not limited to:

- syringes with attached needles
- lancets
- scalpel blades
- devices with retractable sharps
- IV spikes

The only exceptions to this are:

- 1. if a health service has an approved single use metal instrument recycling collection in place on the ward
- 2. if the item is cytoxic or pharmaceutical waste, which take precedence over sharps waste disposal.

#### **Clinical waste**

Any item:

- 1. from a patient suspected, or known, to have a communicable disease
- 2. on which you can see wet or dry blood
- 3. containing body fluids (unless able to be flushed as per standard precautions).

### Receptacle

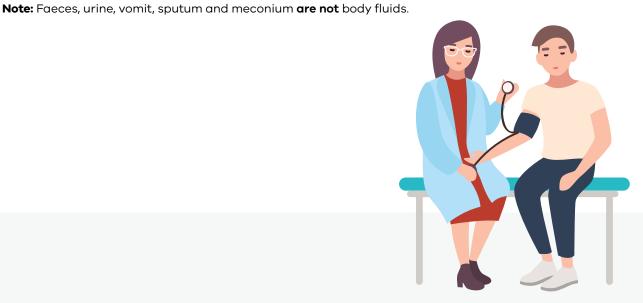
Yellow container and lid depicting the biohazard symbol in black



#### Receptacle

Yellow bag or container with yellow lid, depicting the biohazard symbol in black

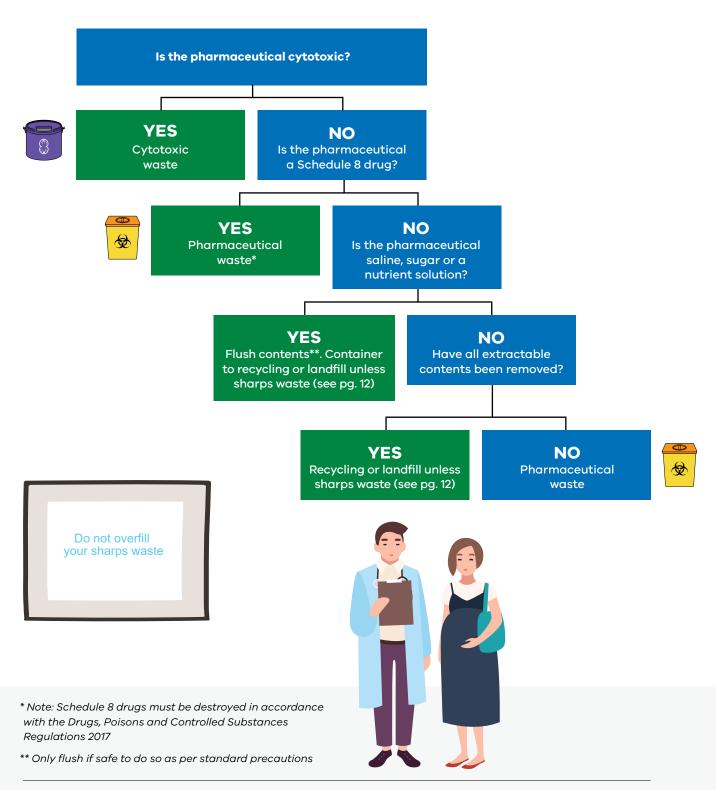




## **Pharmaceutical container**

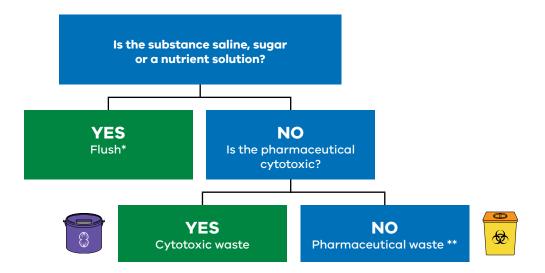
(including medicine bottles, syringes, tubing, vial or ampule)

**WARNING:** Unless it is saline, sugar or a nutrient solution pharmaceutical substances **must not** be flushed, poured down sinks or disposed of directly to the environment.



### **Pharmaceutical substance**

**WARNING:** Unless it is saline, sugar or a nutrient solution, pharmaceutical substances **must not** be flushed, poured down sinks or disposed of directly to the environment.



Dave has a pill bottle containing tablets that are no longer needed. He disposes of the tablets in the pharmaceutical bin and the now empty pill bottle in the landfill or recycling bin.



After administering medication to a patient Robin has only used half of the contents of an ampule. As not all of the contents have been extracted Robin places the ampule in the pharmaceutical waste bin.

Jesse extracts all the contents of a glass vial when administering medication to a patient. These are a few droplets of pharmaceutical left in the vial. As the pharmaceutical is not a Schedule 8 drug or cytotoxic, and all extractable contents have been removed, Jesse disposes of the vial in the landfill bin.

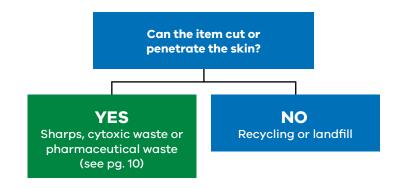
\* Only flush if safe to do so as per standard precautions.

\*\*Schedule 8 drugs must be destroyed in accordance with the Drugs, Poisons and Controlled Substances Regulations 2017.

## Sharps

Note: A syringe without a needle is not classified as a sharp.

A sharp is any item capable of cutting or penetrating the skin.







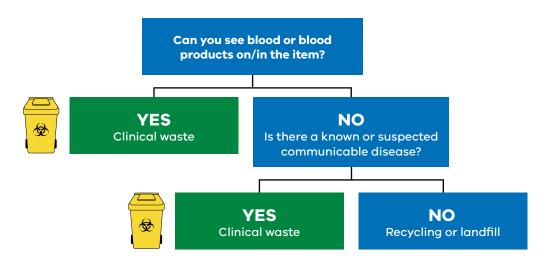
Sarah administers medication through an IV line. As the syringe does **not** have a needle on it, and is empty, Sarah disposes of the syringe in the landfill bin.

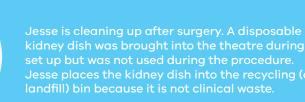
Carrie has two empty glass vials after treating a patient. As the vials are not broken they cannot cut or penetrate the skin. Carrie disposes of the vials in the landfill bin.

### **Blood and blood products**

(including items contaminated with blood and blood products)

#### Albumin, plasma, serum and so on







A few drops of blood fall onto a piece of sterile wrap during a procedure. Dave places the sterile wrap into the clinical waste bin.

Robin takes blood from a patient. Her gloves do not have any blood on them and so Robin disposes of them in the landfill bin.

## Other ways to minimise contamination

- Always place clinical waste bins next to general waste bins (and recycling bins if available).
- If using clinical waste bags only open them when required, not when setting up for a procedure.
- Use consistent bin colours for each waste stream (see pages 8 and 9).
- Ensure all bins have clear signage.
- Use CAPS-BBI when deciding whether an item is clinical waste (see page 6).

### Contacts

For clarification regarding clinical and related waste talk to Capital Health Care Pty Ltd management.

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### **Reference documents**

Department of Health and Human Services (2017) Disposal of radioactive material (https://www2. health.vic.gov.au/public-health/radiation/licensing/ management-licenses-businesses/generalconditions/acquisition-disposal-relocation)

Department of Health and Human Services (2011) The blue book. https://www2.health.vic.gov.au/about/ publications/researchandreports/The-blue-book

EPA (2009) IWRG612, Clinical and related wasteoperational guidance. https://www.epa.vic.gov.au/~/media/Publications/ IWRG612%201.pdf

National Health and Medical Research Council (2019) Australian Guidelines (https://www.nhmrc.gov. au/about-us/publications/australian-guidelinesprevention-and-control-infection-healthcare-2019)

Legislation.vic.gov.au (2017) Drugs, Poisons and Controlled Substances Regulation 2017 (http://www.legislation.vic.gov.au/Domino/ Web\_Notes/LDMS/LTObject\_Store/LTObjSt10. nsf/DDE300B846EED9C7CA257616000A3571/DF 50163E7DEA2F6CCA2583300002B4C7/\$FILE/17-29sra005%20authorised.pdf)

Legislation.vic.gov.au (2005) Radiation Act 2005 (http://www.legislation.vic.gov.au/ Domino/Web\_Notes/LDMS/PubLawToday.nsf/ a12f6f60fbd56800ca256de500201e54 /1dd76f79e5fd65acca257dbd007a0d12! OpenDocument)

Standards Australia (2018) DR AS 3816:2018, Management of clinical and related wastes

WMAA (2014) Industry Code of Practice for the Management of Biohazardous Waste (Including Clinical and Related Wastes), 7th Edition



### Notes


### Notes