



Decontamination and Biomedical Waste Management – LAB SPECIFIC SOP

PI Name		Department	
Lab Location		Faculty	

Note: Reference documents can be found on the University of Ottawa Biosafety Webpage – Operational Hub. See second page for reference material.

I. These Types of Biomedical Waste are Generated in My Lab:

#	Types of Biomedical Waste* (ref.)	Waste Description (what you dispose)	Risk Group**
1			
2			
3			
4			
5			
6			
7			

II. Biomedical Decontamination Methods used in My Lab:

A. Autoclave

Note once biomedical waste is properly treated by autoclaving, it will be disposed as regular waste.

Type of Waste (#)	Autoclave Location	Frequency of Biological Validation Test	Autoclave Use Log and Validation Test Records are Retained by

B. Chemical Disinfection

Note once biomedical waste is properly treated with chemical disinfectant, it is no longer biomedical waste.

Type of Waste (#)	Chemical Disinfectant Name	Disinfectant Concentration	Contact Time	Disinfectant Effective Life / Expiry Date / Made Frequency	Final Disposal Container Used ***

C. Off-site Treatment (biomedical)

Biomedical waste must be sent for off-site disposal if it cannot be treated by autoclaving or chemical disinfectant.

Type of Waste (#)	Type of Containers

D. Surface Decontamination

Work surfaces must be decontaminated with effective disinfectant after working with biological material.

Types of Surface****	Chemical Disinfectant Name	Disinfectant Concentration	Contact Time	Disinfectant Effective Life / Expiry Date / Made Frequency



* Types of Biomedical Waste (ref. *University of Ottawa Biomedical Waste Management Procedures*)

- Solid biological material,
- Liquid biological material,
- Microbiological laboratory associated waste,
- Biomedical sharps waste,
- Human/animal anatomical waste,
- Human/animal blood and bodily fluids, or
- Mixed waste.

** Risk Group:

- Risk Group 1
- Risk Group 2
- Risk Group 3

*** For non-infectious liquid waste, enviro@uottawa.ca will define whether it needs to be sent out as a chemical waste and which container they will require (also available from them).

**** Types of surface include lab benchtop, biological safety cabinet (BSC) surface, waste container surfaces and equipment (i.e. centrifuge, laminar flow hood, incubator, etc.) surfaces.

OTHER CONSIDERATIONS:

To facilitate disposal of material that has been rendered non-infectious (chemical disinfection, autoclave...) it may still exhibit chemical properties that may determine how it is finally disposed of.

(For instance; drain disposal of buffer solutions may not be possible due to high phosphate concentrations, or total suspended solids, pH, etc.)

By contacting enviro@uottawa.ca with a description of the chemical composition of your solution, they will be able to advise on the type of containers and disposal route to be used. (Be proactive contact them in advance of generating the waste!)

References (available on uOttawa Biosafety web page)

1. *University of Ottawa Biomedical Waste Management Procedures*
2. *A Guideline for the Safe Use of Autoclaves*
3. *University of Ottawa Autoclave Procedures*
4. *Use of Bleach as Disinfectant*
5. *Biomedical Waste Door-to-Door Service Request Procedures*

Types of Biomedical Waste Containers

Significance of the Color of the Container:

(red = anatomical) (orange, yellow or clear- biomedical ONLY if appropriated label with a biohazard symbol)

Biomedical Sharps Containers

- Puncture proof, yellow containers (4.5 L or 23L, and other sizes on request)

Autoclave Bags

- Orange (purchased by generator)

Anatomical Drums

- Cardboard/fiber drum (small-14 gal, large-47gal)
- Drums to be lined with red plastic bags

Note: Animal anatomical waste to be returned to ACVS and placed in dedicated drums

Cardboard Boxes

- Small or medium sizes are available and labelled as biomedical
- Used with plastic bag liners
- May be used for packaging sharps containers for disposal, or solid waste for incineration

Red Pails (23L)

- Dedicated for anatomical waste. Provided only upon approval through bio.safety@uottawa.ca

Labels Required

The *University of Ottawa Hazardous Waste Label* must be put on each container with the following information filled:

- PI name
- Building, room location and phone number
- Contact person
- Date
- Contents: description of waste, Risk Group if applicable – NOTE after rendered non-infectious, RG rating is not applicable, and either the hazardous label is covered by 1) 'Autoclaved Biomedical Waste-Non- Hazardous' label, or 2) indicate the waste treated with chemical disinfectant.

Note: Other required labels are provided by OCRO. Contact bio.safety@uottawa.ca if other labels are required: anatomical, cytotoxic, pharmaceutical, incineration, etc.

