

CTRNet Standard Operating Procedure Biohazardous Material Waste Management			
SOP Number:	8.1.002	Version	e1.0
Supersedes:		Effective Date	09 Jan 08
Subject:	Biohazardous Material Waste Management	Category	Materials Handling and Documentation

Prepared By:		Jean de Sousa-Hitzler		
	Signature	Name	Title	ddMmmyy
Approved By:		Peter Geary	CEO	09 Jan 08
	Signature	Name	Title	ddMmmyy
Approved By:				
	Signature	Name	Title	ddMmmyy

REVISION HISTORY

SOP Number	Date Issued	Author (Initials)	Summary of Revisions
6.1.002	2008	JdSH	1 st Release.

1.0 PURPOSE

All Human Biological Materials (HBMs) whether fixed, lyophilized, fresh, frozen or paraffin embedded should be considered biohazardous. The degree of processing may reduce the risk from infective agents. However, certain agents may still be infective even when fixed or processed. All human specimens, independent of their state, should be treated with universal precautions. They should be handled as if infected with agents that may be pathogenic to humans.

Biohazardous materials are generated during the collection and processing of human blood and tissue samples. The purpose of this document is to describe the way in which biohazardous waste should be disposed of.

2.0 SCOPE

This standard operating procedure (SOP) outlines processes that must be followed in order to dispose of biohazardous waste in a manner compliant to safety regulations and ensuring that the following risks are minimized:

- Contamination of public waste sites with biohazardous materials.

- Exposure of repository and waste management personnel to infectious agents.

3.0 REFERENCE TO OTHER POLICIES AND SOPS

1. CTRNet Policy: POL 002.001 Ethics
2. CTRNet Policy: POL 004.001 Privacy and Security
3. CTRNet Policy: POL 007.001 Material and Information Handling Policy

4.0 ROLES AND RESPONSIBILITY

The policy applies to all personnel from CTRNet member repositories that work at the repository site and are responsible for collecting, processing and storing of repository samples and disposing of biological waste.

Tumour Bank Personnel	Responsibility/Role	Site Specific Personnel and Contact Information
Phlebotomist/ Venipuncture nurse	Draw Blood from patient and read and understand product inserts	
Lab Technician	Collect and process biological material	
Pathologist/Pathologist assistant	Collect, Process and assess biological material	

5.0 MATERIALS, EQUIPMENT AND FORMS

The materials, equipment and forms listed in the following list are recommendations only and may be substituted by alternative/equivalent products more suitable for the site-specific task or procedure.

Materials and Equipment	Materials and Equipment (Site Specific)
Autoclave	
Waste disposal bags (appropriately labeled)	
Biohazardous sharps disposal containers	
Bleach or chemical disinfectant	

6.0 DEFINITIONS

Autoclave: An apparatus for sterilization by steam pressure, usually at 121° C for a specified length of time.

Biohazard: Microbial or antigenic entities presenting risk or potential risk to the well-being of man, other animals, or plants, either directly through infection or indirectly through disruption of the environment.

Biohazardous Material: Any substance which contains or potentially contains biohazardous agents.

CSA: Canadian Standards Association

Decontamination: A process that removes or renders microorganisms on an object non-pathogenic and therefore safe for handling.

Human Anatomical Waste: Waste that consists of human tissues, organs and body parts, including those parts that have been preserved, but excludes teeth, hair and nails.

Human Blood and Body Fluids waste: Waste that consists of fluid blood, blood products and body fluids used for diagnosis or removed during surgery, treatment or autopsy.

Safety: Processes, procedures and technologies to ensure freedom from danger or harm.

Sharps Waste: Waste that consists of any objects that can penetrate skin. This includes more than obvious items used in human patient care: hypodermic needles, re-sheathed needles, syringes with or without attached needle, scalpel blades, lancets, capillary tubes, broken pipettes and medical glassware, broken blood tubes, retorts and culture dishes. It also includes broken or unbroken items that have, or are likely to have, come in contact with infectious agents. Examples of these include, slides and cover slips and other items that can penetrate the plastic disposal bag.

7.0 PROCEDURES

CTRNet repositories must follow procedures regarding the disposal of biohazardous waste that minimized the risk it poses to the environment and to repository personnel.

Procedures should ensure adherence to Canadian and provincial guidelines. The repository must ensure the use of appropriate waste management techniques, containment levels and training of personnel.

7.1 Disposal - Human anatomical waste

1. Place all human anatomical waste and materials that have come into contact with such waste into a bag that is clearly labeled with the universal biohazard symbol.

2. Biohazardous waste must be decontaminated before disposal to a landfill site.
3. Decontaminate by heat sterilization (autoclaving) and take to the institutional designated area for pick-up and disposal.
4. Biohazardous waste that has not been decontaminated can be picked-up by an established waste disposal company for disposal. This may require that the repository obtains a special ministerial permit granting approval for generation and disposal of waste by this procedure.

7.2 Disposal – Biohazardous Liquids (Human Blood and Body Fluids Waste)

1. Dispose of blood and liquid biohazardous waste generated during sample processing by pouring the waste into a leak proof container containing freshly prepared 10 % chlorine bleach solution or other suitable chemical disinfectant.
2. After 30 minutes or a suitable time-interval ensuring decontamination, the solution may be discarded down the drain if permitted by local regulations.
3. Avoid the creation of aerosols or spills during this process.

7.3 Disposal – Sharps Waste

1. Recapping of needles is not recommended.
2. Dispose of all sharps waste into a readily available, CSA approved puncture resistant container labelled with the biohazard symbol.
3. Sharps containers must be decontaminated (preferably by incineration or autoclaving) and disposed of in accordance with institutional, national and provincial guidelines.

8.0 APPLICABLE REFERENCES, REGULATIONS AND GUIDELINES

1. Tri-Council Policy Statement; Ethical Conduct for Research Involving Humans; Medical Research Council of Canada; Natural Sciences and Engineering Council of Canada; Social Sciences and Humanities Research Council of Canada, August 1998. <http://www.pre.ethics.gc.ca/english/policystatement/policystatement.cfm>
2. Best Practices for Repositories I. Collection, Storage and Retrieval of Human Biological Materials for Research. International Society for Biological and Environmental Repositories (ISBER). <http://www.isber.org>
3. Canadian Council of Ministers of the Environment “Guidelines for the Disposal of Biomedical Waste in Canada” CCME-EPC-WM-42E

9.0 APPENDICES

None