

Biomedical waste

Biomedical waste is considered a special waste in the Yukon because of its potential to expose humans to infectious diseases and/or physical injury. Biomedical waste must be handled, stored and disposed of in accordance with the *Guidelines for the Management of Biomedical Waste in Yukon*. This fact sheet is a summary of the Guidelines; the full text of the Guidelines is available by contacting the Environmental Programs Branch.

Biomedical waste is the portion of medical waste that requires special precautions due to it being: infectious; sharps; cytotoxic; or especially sensitive due to the nature of the waste (e.g., human body parts). The complete list of items considered to be biomedical waste can be found under Part 10 of the *Guidelines for the Management of Biomedical Waste in Yukon*.

Minimizing risks

Proper segregation, packaging and storage reduce the risks posed by biomedical wastes to human and environmental health.

Segregation: Biomedical wastes should be separated from the general waste stream at the point of generation. This prevents costly treatment of the entire waste stream and permits the diversion of recyclable materials.

Packaging: Biomedical wastes should be packaged in ways appropriate for the waste involved. It is essential to ensure packaging is:

- a. leak resistant and tightly sealed;
- b. puncture resistant and marked with safe fill lines;
- c. able to withstand cleaning agents if reusable;

d. colour-coded depending on waste type as per this chart;

WASTE TYPE	COLOUR-CODING
Human anatomical	Red
Animal waste	Orange
Microbiology and lab waste	Yellow
Human blood and body fluid	Yellow
Waste sharps	Yellow

on
and
plastic

e. classified as either a sharps container, waste holding bag or cardboard container if designed for single use.

Storage: After biomedical waste has been collected and moved from its point of generation, it should be held in a storage area that is:

- a) Totally enclosed and separate from supply rooms or food preparation areas;

- b) Lockable and access restricted to authorized personnel only;
- c) Identified as containing biomedical waste, with biohazard symbol clearly displayed;
- d) Never used for storage of materials other than waste. If the storage area is used for both general and biomedical waste, care shall be given to prevent contamination of general waste from biomedical waste;
- e) Permanently marked to prevent recycling as a food storage appliance (as in the case of a domestic-type freezer or cold storage unit);
- f) Kept at a temperature of 4°C or lower for material stored more than four (4) days. (Note: Sharps wastes and special precaution wastes may have different storage requirements); and
- g) Thoroughly cleaned, including floors, walls and ceilings, in accordance with the facility's established procedures.

Long-term storage of special precaution wastes is not advisable. Arrange for transport as soon as possible to an approved disposal facility for treatment. If immediate removal is not possible, special precaution wastes may be held in storage areas that are refrigerated at 4°C or lower.

Treatment/disposal options

Biomedical waste makes up 10-15 per cent of the health care waste stream – about 40,000 tonnes per year across Canada. Treating biomedical waste prior to disposal reduces the amount of waste subject to stringent, costly transportation and disposal rules. Treatment methods vary depending on the type of waste, but can include:

- Autoclaving (sterilization with pressurized heat or steam);
- Microwave treatment (electromagnetic waves thermally destroy pathogens);
- Hydroclaving (sterilization with pressurized steam);
- Incineration (use of incinerator approved for biomedical wastes);
- Encapsulation (use of a mixture such as grout, epoxy or concrete to surround and immobilize biomedical wastes); or
- Any other process that provides disinfection to the required level.

Different biomedical wastes require different treatment methods. Treated biomedical waste can often be disposed of as regular solid waste. Appropriate precautions to protect the health and safety of sanitation workers should be followed at all times.

Permits

You will need a permit under the *Special Waste Regulations* to treat or dispose of biomedical waste or to handle biomedical wastes generated by other persons or businesses. People or businesses that only

The *Environment Act* and regulations may be viewed online at laws.yukon.ca, or at any Yukon Public Library, territorial agent, territorial representative or regional services office. You may purchase copies at the Inquiry Centre, Jim Smith Building, 2071-2nd Avenue in Whitehorse, or by mail from the Subscriptions Clerk, Government of Yukon Queen's Printer, Box 2703, Whitehorse, Yukon, Y1A 2C6 (phone 867-667-5783 or toll free 1-800-661-0408 extension 5783).

generate biomedical wastes do not need a permit, however. Waste handling must always comply with the *Guidelines for the Management of Biomedical Waste in Yukon*.

For more information on the Environment Act, please contact:

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