

Recommended Best Practices for Transporting Home Birthing Equipment & Biological Materials - March 2016

Purpose: To summarize recommended best practices for transporting equipment and biological material associated with home births in British Columbia.

Background

- The functionality and sterility of home birth equipment cannot be maintained unless appropriate precautions are taken during transport.
- Soiled medical equipment, unsecured sharps, and biological matter are significant occupational health and safety hazards that must be appropriately managed.
- In 1994, the Government of Canada passed the [*Transportation of Dangerous Goods Act*](#) (the Act) to regulate the transportation of dangerous goods. The Act sets requirements for documentation, containment, worker training, and other topics relating to the transport of dangerous goods. **Please note:**
 - a) Medical waste is included under the Act in Section 2.36.1 of the Regulations.
 - b) Section 5.16.2 of the Regulations states, "*A person must not handle, offer for transport or transport dangerous goods that are UN3291, (BIO) MEDICAL WASTE, N.O.S. of Class 6.2, Infectious Substances, unless the dangerous goods are in a Type 1C means of containment that is in compliance with CGSB-43.125*".
 - c) A "Type 1C means of containment" is defined by Transport Canada as a container consisting of:
 - *a UN11G intermediate bulk container tested to a Packing Group I or II performance level;*
 - *a UN1G fibre drum with a leak-tight liner tested to a Packing Group I or II performance level;*
 - *a plastic film bag in a leak-tight, rigid, plastic outer packaging; or*
 - *a plastic film bag in a fibreboard box.*
- In 1996, the Government of British Columbia passed the [*Transport of Dangerous Goods Act*](#). Section 5 of the Act states that a person must not handle or transport dangerous goods unless:
 - a) all applicable prescribed safety requirements are complied with; and
 - b) all containers, packaging, [and] road vehicles [...] comply with the applicable prescribed safety standards and display the applicable prescribed safety marks.
- In 2007 (and again in 2011), the BC Ministry of Health issued the document *Best Practice Guidelines for Cleaning, Disinfection, and Sterilization of Critical and Semi-critical Medical Devices in BC Health Authorities (The Guidelines)* as provincial policy.
- The Guidelines describe the safe handling, monitoring, assessment, transportation and cleaning/disinfection/sterilization of re-useable medical devices.

Best Practices

- The Guidelines include best practices relevant to the transportation of biological matter and home birth equipment.

Please note: Health authorities may also have local policies or clinical practices with additional requirements that must be followed.

1. Prior to Use

- a) Prior to opening, packages and/or containers used for the storage of reprocessed medical device shall be checked to ensure that tamper-proofing mechanisms have not been compromised.
- b) Prior to opening, the reprocessed medical device package shall be reviewed for the following:
 - i) Integrity of the package (e.g., clean, dry and intact);
 - ii) Change of *external* chemical indicator; and
 - iii) Expiry date, if applicable.
- c) After opening, the reprocessed medical device package shall be reviewed for the following:
 - i) Change of *internal* chemical indicator;
 - ii) Presence of moisture or watermarks within the package;
 - iii) Filter alignment in rigid containers, where applicable; and
 - iv) Presence of foreign debris.

2. Immediately After Use

- a) "Critical" and "semi-critical" medical devices¹ owned by clients/patients cannot be reprocessed safely as sterilization and/or high-level disinfection cannot be achieved in the home environment. Therefore, critical and semi-critical medical devices shall remain single use in the home and disposed of after use.
- b) Disposable sharps such as needles and blades shall be removed from the medical device and disposed of by the user in an appropriate sharps container at the point of use.
- c) Reusable devices that are sharp or that incorporate sharp components shall be segregated to prevent injury to personnel handling and reprocessing these devices.
- d) Immediately after use, medical devices shall be cleaned of gross soil by rinsing with water. Do not use saline for this purpose. **Please note: Removal of gross soil by rinsing is a mandatory step that must be completed every time.**
- e) Devices shall be sorted and contained after gross soil removal is complete.
- f) Placentas must not be transported in the same containers as soiled instruments.

¹ In Spaulding's classification system, a "critical" medical device is a device that enters normally sterile tissue or the vascular system or through which blood flows. Such devices should be sterilized, which is defined as the destruction of all microbial life. A "semi-critical" medical device that comes in contact with non-intact skin or mucous membranes but ordinarily does not penetrate them (e.g., respiratory therapy equipment; transrectal probes; specula). Reprocessing semi-critical devices involves meticulous cleaning followed by, at a minimum, high-level disinfection.

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3.Device Transportation

- a) Soiled devices shall be transported in compliance with Federal and Provincial legislation for the transportation of dangerous goods.
- b) Soiled medical devices shall be handled in a manner that reduces the risk of exposure and/or injury to personnel and clients/patients/residents, or contamination of environmental surfaces:
 - i) Contaminated devices shall be transported in covered, fully enclosed, puncture-resistant containers that prevent spill of liquids. Lids must fit tightly to ensure contaminated contents do not leak or spill.
 - ii) Contaminated devices shall be transported to a designated decontamination area as soon as possible after use.
 - iii) On-site transport for contaminated devices shall follow designated routes to avoid high-traffic and patient-care areas.
 - iv) All carts and containers containing contaminated devices shall be so identified (i.e., labelled with a biohazard sign).
 - v) Containers shall be decontaminated after each use by the Medical Device Reprocessing Department.
 - vi) Sterile and soiled devices shall not be transported within the same container due to the risk of cross-contamination.

4.Device Drop-Off

- a) All contaminated devices shall be dropped off at the Medical Device Reprocessing Department with sufficient time to allow for cleaning and turnaround of the devices.