# Recommended Best Practices for Transporting Home Birthing Equipment & Biological Materials

***All care providers are recommended to complete the UBC CPD Midwifery Best Practice in Materials Management Course***

**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*
        - *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
    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
      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
      iv) Presence of foreign debris

2. Immediately After Use
   a) "Critical" and "semi-critical" medical devices[1] 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.

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.