



IPAC CANADA PRACTICE RECOMMENDATIONS

Cleaning and Disinfection of Non-critical Multi-Use Equipment and Devices in Community Settings

Multi-use equipment and medical devices in health care have been linked to an increased infection risk.^{1,2} The practice of cleaning and disinfecting non-critical equipment in the community between clients, or even on a regular basis, has not been well established.³ Outbreaks related to lapses in infection control procedures have been associated with physician offices and clinics.⁴ The purpose of this practice review is to provide infection prevention and control recommendations to reduce the risk of

transmission of infection from non-critical equipment used in community practice settings (which may include but is not limited to home visits, ambulatory clinics, physician offices, outreach settings, supportive and facility living sites).

The best practices in this document are based on the assumption that health care settings in Canada already have basic IPAC systems and programs in place, including Routine Practices and Additional Precautions; adequate resources for their IPAC program; hand hygiene; disinfection and sterilization of used medical equipment; environmental services/housekeeping (cleaning and disinfection of rooms and equipment); and education and training (including orientation and continuing education).

DEVELOPED BY:
**IPAC Canada's Community
Health Interest Group**
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Infection Prevention and Control Practice Recommendations for Non-Critical Multi-Use Equipment

1. Hand Hygiene is performed according to Routine Practices⁵

- Before touching a client (e.g., upon entering the client home or entering a treatment space)
- Before retrieving clean or sterile equipment from an equipment bag or supply cart/bin
- Before and after handling multi-use equipment (such as therapeutic tools)
- Before aseptic technique; hand hygiene must be performed whether or not gloves are used (e.g., no gloves used because employing 'no touch' technique).
- After exposure or potential exposure to blood or body fluids
- Before donning gloves and immediately after removal of gloves
- After leaving the client home or treatment space.

2. Cleaning and Low-Level Disinfection^{6-12, 14,16}

- Non-critical equipment/devices are defined by Spaulding's classification as equipment/devices that touch only intact skin and not mucous membranes, or do not directly touch the client.⁶
- Non-critical multi-use equipment (such as blood pressure cuffs, stethoscopes, scales, etc.) are to be cleaned and disinfected:
 - when visibly soiled (immediately)

- after direct contact with a client
- after each use (prior to use on another client)
- after storage at a client’s home, even if not used for client care
- The required cleaning and disinfection should be documented and communicated with other health care providers caring for the client.
- Cleaning and disinfection is at least a two-step process: The first step is to remove visible soiling and organic matter. The second step is to apply the disinfectant, following manufacturer’s recommendations including contact time, using a fresh cloth or wipe and allowing the disinfectant to air dry. In the absence of visible soiling, and when using a combination cleaning/disinfecting product, this can be accomplished in one step.
- A risk assessment matrix should be used to ascertain the frequency of cleaning and disinfection of multi-use equipment/devices.^{8,12}
- Written policies and procedures, including for training need to be in place, readily accessible, and reviewed on a regular basis. Cleaning instructions must be available for each item.^{7,13}
- Audits of cleaning and disinfection practices are to be done on a regular basis¹⁴. Implementation of a quality improvement process related to the audit results is also necessary.¹⁵
- Only approved low-level disinfectants with a Drug Information Number (DIN) from Health Canada should be used to reprocess non-critical multi-use equipment and devices safely and consistently. Always refer to the manufacturer’s directions and follow manufacturer’s safety label guidelines, and consider Occupational Health and Safety. Consider the need to evaluate whether the manufacturer’s instructions meet health care requirements for cleaning and disinfection prior to making the decision for purchase or reuse.^{7,16}
- When the medical equipment/device is used solely for the home care client during care and remains in the client’s home or the client owns it, then cleaning after each use is recommended; however, disinfection may not be required.
- Devices that are labelled as “Single Patient Use” shall not be re-used on multiple individuals.

3. Materials and Design of Multi-Use Equipment and Devices

- Multi-use equipment/medical devices showing visible evidence of damage or that cannot be cleaned adequately, must be repaired or replaced. This includes: upholstered items, instrumentation, examination devices and therapeutic tools, such as speech therapy equipment or toys. (Also see *IPAC Canada Practice Recommendations: Toys*, available at http://www.ipac-canada.org/links_position.php.)
- When a multi-use medical equipment/device requires laundering for cleaning, health care best practices for laundry must be followed.^{5, 10}
- It is recommended that non-cleanable equipment not be multi-use. If an item cannot be cleaned with a low-level disinfectant and is necessary for client care, a risk assessment must be done with infection prevention and control to determine the best approach to mitigate the risk of transmission of microorganisms. When considering using such items, the organization’s policies and procedures must include individual risk assessment, hand hygiene for both staff and client before and after touching the equipment/device; and prompt replacement when soiled or damaged.

- Recommend the use of disposable items and consider disposable covers for medical equipment/devices where appropriate. For example, covers may help protect the equipment/devices from soiling and damage, e.g., tympanic thermometer, but do not preclude the requirement for cleaning and disinfection between clients and/or prior to applying a new disposable cover.

4. Equipment in the home

- Limit the amount of multi-use equipment/devices taken into the home. Take only necessary equipment for each client into the home.
- Equipment should be dedicated to the client, e.g., glucometer.^{1,5} Leave dedicated client care medical equipment/devices in the home, if at all possible, until the patient is discharged from home care services.
- Medical equipment/devices that cannot be cleaned and disinfected adequately in the home are considered contaminated and need to be transported and handled in a safe manner until reprocessed. Gross soil should be removed as much as possible and the item should be contained securely for safe transport; e.g., inside a tied, intact, plastic bag or cleanable lidded container.
- All principles of cleaning and disinfection also apply to contracted equipment provided to home care settings.
- **Equipment Bag:** When taking an equipment bag into the home, place it on a clean, dry surface.^{11,16} Perform hand hygiene.^{11,17} Keep the entire equipment bag clean and remove any gross soiling immediately.

5. Ambulatory Clinics and Outreach Settings

- Storage areas, e.g., shelves, carts, cupboards, must be cleaned and disinfected regularly. Clean and disinfect immediately when visibly soiled or if in contact with blood or body fluids.⁸
- All stretchers/treatment tables are to be cleaned and disinfected with a low-level disinfectant (i.e., contains a DIN #) after each use and allowed to air dry.
- All principles of cleaning and disinfection also apply to contracted and/or borrowed equipment.
- Clean and dirty items must be easily identifiable from each other.

6. Documentation

Cleaning and disinfection of all equipment/devices and equipment bags shall be documented, as per the organization's policy and procedure.

7. Auditing

Cleaning and disinfection practices should be audited regularly as defined in organizational policy.¹²

Glossary

Client – Any individual receiving care provided by a health care professional in ambulatory/outreach settings, physician offices, private homes or in supportive and facility living sites.

Low-Level Disinfection – Disinfectants that kill most vegetative bacteria (e.g. MRSA) and some fungi as well as enveloped (lipid) viruses (e.g. hepatitis B, C, hantavirus, and HIV). Low level disinfectants do not kill mycobacteria (e.g. TB) or bacterial spores (e.g. *C. difficile*) and must have a Health Canada Drug Information Number (DIN). Level of disinfection required when processing non-invasive medical

equipment (i.e., non-critical equipment) and some environmental surfaces. Equipment and surfaces must be thoroughly cleaned prior to low-level disinfection.⁸

Cleaning – The physical removal of foreign material (e.g., dust, soil) and organic material (e.g., blood, secretions, excretions, microorganisms). Cleaning physically removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action.⁸

Non-critical equipment/devices – Equipment/device that either touches only intact skin (but not mucous membranes) or does not directly touch the client. Reprocessing of noncritical equipment/devices involves cleaning and may also require low-level disinfection (e.g., blood pressure cuffs, stethoscopes).⁸

As per the Canadian Standard Association (CSA):

“SHALL” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard;

“SHOULD” is used to express a recommendation or that which is advised but not required; and

“MAY” is used to express an option or that which is permissible within the limits of the standard, an advisory or optional statement.

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