



 <p>Winnipeg Regional Health Authority Office régional de la santé de Winnipeg <i>Caring for Health À l'écoute de notre santé</i></p> <p>Operational Directive</p>	<p>WRHA Infection Prevention & Control Program</p>	
	<p>Cleaning and Disinfection of Non-Critical Reusable Equipment/Items for Patients in Hospital</p>	
	<p>Page 1 of 9</p>	<p>Supersedes:</p> <ul style="list-style-type: none"> • Cleaning of Non-Critical, Reusable Items Policy 90.00.040 June 2007 • Cleaning and Disinfection of Non-Critical Reusable Equipment/Items for Patients in Hospital Operational Directive June 26, 2008
	<p>Approval Signature: n/a</p>	
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1.0 PURPOSE:

- 1.1 To reduce the transmission of microorganisms due to contamination of Non-Critical Reusable Equipment/Items in WRHA facilities/programs and WRHA funded facilities/programs.

2.0 PREAMBLE:

- 2.1 In the healthcare setting contaminated non-critical medical devices, items and equipment can play a role in the transmission of potentially harmful microorganisms. Using the indirect mode of transmission, the contaminated non-critical medical device, item or equipment is touched and microorganisms are transferred onto hands which can come into contact with a portal of entry (mouth, nose, eyes, etc.).
- 2.2 Thorough and regular cleaning of medical devices, items and equipment disrupts transmission to the health care worker and patient by decreasing the amount of microorganisms present and thereby decreasing the risk of infection.
- 2.3 Medical devices, items and equipment within the healthcare setting have a greater potential to spread infection than items in a non-healthcare related setting mainly due to three factors: the increased presence of potentially harmful organisms, multiple opportunities to come into contact with contaminated items, and the increased susceptibility of the population served.
- 2.4 Whereas hand hygiene is the single most effective means of decreasing healthcare associated infections, the importance of effective cleaning and disinfection of non-critical medical devices, equipment and items should not be undervalued.

3.2.1



- 2.5 The frequency of cleaning and disinfecting non-critical medical devices, items and equipment will vary according to the healthcare setting and the amount of use, regardless of multiple patient use or soiling potential.

3.0 **DEFINITIONS:**

- 3.1 **Cleaning:** The physical removal of foreign material, e.g., dust, soil and organic material such as blood, secretions, excretions and microorganisms. Cleaning physically removes rather than kills microorganisms. Cleaning reduces or eliminates the reservoirs of potential pathogenic organisms. It is accomplished with water, detergents and mechanical action.
- 3.2 **Contamination:** The presence of microorganisms on inanimate objects (e.g., clothing, surgical instruments) or in substances (e.g., water, food, milk) or microorganisms transported transiently on body surfaces (e.g., hands).
- 3.3 **Detergent:** A facility approved synthetic cleansing agent that can emulsify oil and suspend soil. A detergent contains surfactants that do not precipitate in hard water and may also contain protease enzyme and whitening agents (e.g., dish detergent or laundry detergent).
- 3.4 **Disinfection:** The inactivation of disease producing organisms. Disinfection does not destroy high levels of bacterial spores. Disinfectants are used on inanimate objects. Disinfection usually involves chemicals, heat or ultraviolet light. Levels of chemical disinfection vary with the type of product used.
- 3.5 **Facility Approved Disinfectant:** A disinfectant cleaner that has been approved by the facility or organization.
- 3.6 **Non-Critical Items:** Those items that either touch only intact skin but not mucous membranes or do not directly touch the patient. Examples of non-critical items are equipment such as lifts, transfer boards, wheelchairs and items such as plastic assessment tools and call bells.
- 3.7 **Non-Critical Wipeable Items:** Non-Critical medical devices/items/equipment composed of non-porous material able to withstand Facility Approved Disinfectant. Some examples are: diagnostic imaging equipment, infusion pumps, intravenous (IV) poles, sleep surfaces, stethoscopes, walkers, and wheelchairs.
- 3.8 **Non-Critical Hard-to-Clean Items:** Non-Critical medical devices/items/equipment composed of porous material (e.g., fabric, cardboard, paper, foam). Some examples are wheelchair cushions, puzzles, sliders, slings, craft supplies, pencils, books, magazines and transfer belts.
- 3.9 **Outbreak:** An excess over the expected incidence of disease within a geographic area during a specified time period, synonymous with epidemic.
- 3.10 **Personal Care Items:** Personal care supplies include but are not limited to items used for bathing, skin care, nail care, oral hygiene and denture care.
- 3.11 **Personal Protective Equipment:** Gloves, gowns, masks and protective eyewear and face protection used according to risk of exposure to prevent transmission of infection and injurious health effects due to exposure to hazardous substances



- 3.12 **Reprocessing:** The steps performed to prepare a used medical device for reuse. The steps may include: the collection and transportation of soiled devices, cleaning, inspection, disinfection, sterilization, packaging, clean transportation, and storage of clean and disinfected/sterilized devices.
- 3.13 **Reusable:** A device that has been designed and tested by the manufacturer that is suitable for reprocessing prior to use on a patient.
- 3.14 **Routine Practices:** A set of infection control precautions and practices used for all direct care regardless of the patient's presumed infection status or diagnosis.

4.0 OPERATIONAL DIRECTIVES:

- 4.1 Refer to Regional Infection Prevention & Control (IP&C) Policy: Single-use Medical Devices 90.00.010.
<http://home.wrha.mb.ca/corp/policy/files/90.00.010.pdf>
- 4.2 Cleaning and maintenance of Non-Critical Reusable Equipment/Items shall follow the manufacturer's recommendations. Manufacturer's recommendations shall be reviewed in consultation with Regional Infection Prevention & Control and made available to all users.
- 4.3 The facility/program shall determine and train the individuals responsible for Cleaning and/or Reprocessing Non-Critical Reusable Equipment/Items.
- 4.4 Individuals responsible for Cleaning and/or Reprocessing shall be trained to follow IP&C approved manufacturer's recommendations and safety handling of cleaning product as specified on the products Material Safety Data Sheet(as Per Part 35 Workplace safety and Health Regulation)
- 4.5 Gather any necessary equipment:
- Container of Facility Approved Cleaner and/or Disinfectant (flip top bottle or ready to use wipes)
 - Cleaning cloths
 - Facility approved detergent
 - PPE as required for the task or by MSDS of cleaning product
 - Tap water
 - Adhesive tape remover
 - Isopropyl Alcohol at recommended concentration
 - Brush
 - Any other specific supplies not listed above for the cleaning/disinfection of the item mentioned in the manufacturer's instructions
- 4.6 All health care workers shall follow Routine Practices, including hand hygiene and the wearing of appropriate Personal Protective Equipment, when Cleaning and/or Reprocessing Non-Critical Reusable Equipment/Items as outlined in the WRHA Infection Prevention & Control manual.
- 4.7 Non-Critical Reusable Equipment/Items in direct contact with the patient or their environment shall be cleaned and/or reprocessed before use in the care of another patient.



- 4.8 Visibly soiled Non-Critical Reusable Equipment/Items shall be cleaned and/or reprocessed immediately after use on a patient.
- 4.9 When Additional Precautions (Contact, Airborne/Contact or Droplet/Contact Precautions) are in place Non-Critical Reusable Equipment/Items shall be cleaned and/or reprocessed with a Facility Approved Disinfectant prior to removal from the Additional Precautions room.
- 4.10 Personal care items shall be single patient use only and shall not be shared. They shall be stored and labeled in a manner that will ensure personal use only.
- 4.11 Equipment/items dedicated to one patient are kept in the patient's room, bed space, and/or bathroom. They shall be stored and labeled in a manner that will ensure dedicated use only.
- 4.12 Any damaged Non-Critical Reusable Equipment/Items shall be reported according to facility/program policy to determine the need for replacement, repair or ability for Cleaning and/or Reprocessing
- 4.13 Store clean/disinfected supplies in a designated and separate clean dry area protected from dust. Do not store under sinks and/or near plumbing as leaks may occur.
- 4.14 Develop and maintain a cleaning schedule according to facility/program according to Infection Prevention & Control standards for all routinely shared Non-Critical Reusable Equipment/Items which cannot be cleaned and disinfected or reprocessed between uses.
- 4.15 Cleaning schedules should be developed unique to each program. The frequency of cleaning should take into consideration:
 - Whether or not surfaces are high-touch or low-touch
 - The type of activity taking place in the environment
 - The infection risk associated with it
 - The vulnerability of the patient seen/treated in the area
 - The probability of contamination
 - Whether the item is in the client's home and dedicated to the client
 - If the piece of equipment will be used on multiple patients throughout the course of the day
- 4.16 A record of completion of these scheduled cleaning tasks shall be maintained. The records shall include signatures and dates of completion.
- 4.17 Responsibility and accountability for completion of these tasks and maintenance of the completion records should be assigned by unit/area/department management.
- 4.18 During an outbreak a more extensive Cleaning/Disinfection procedure may be required as directed by site/Regional Infection Prevention & Control.



5.0 PROCEDURES

- 5.1 **Inspect** all Non-Critical Reusable Equipment/Items for safety concerns prior to cleaning. Report any damaged items according to program policy.
- 5.2 **Determine surface type:** Non-Critical Reusable wipeable Equipment/Items OR Non-Critical Reusable hard-to-clean Equipment/Items. Refer to “Appendix A - Cleaning Table for Non-Critical Reusable Patient Equipment/Items in Hospitals” for examples to assist in determining surface type, if required.
- 5.3 For all Non-Critical Reusable Equipment/Items:
 - 5.3.1 Wear PPE according to cleaning activities
 - 5.3.2 If necessary disassemble item according to manufacturer’s instructions
 - 5.3.3 Use appropriate water and detergents and/or Facility Approved Disinfectant according to Infection Prevention & Control approved product recommendations
 - 5.3.4 Remove all tape. Remove any tape residue with adhesive tape remover or detergent.
 - 5.3.5 If using reusable gloves clean and disinfect the gloves with Facility Approved Disinfectant after use. Allow to air dry before re-use.
 - 5.3.6 Allow all cleaned and disinfected Non-Critical Reusable Equipment/Items to air-dry prior to use in the care of another patient, following manufacturer’s contact time recommendations
 - 5.3.7 Refer to specific section below for further cleaning/disinfection procedures according to surface type
- 5.4 **Cleaning** of Non-Critical Reusable **wipeable** Equipment/Items:
 - 5.4.1 Clean equipment/items with water and detergent and/or Facility Approved Cleaner/Disinfectant using a scrubbing action
 - 5.4.2 Clean grooves on equipment with scrub brush
- 5.5 **Disinfection*** of Non-Critical Reusable **wipeable** Equipment/Items:
 - 5.5.1 After all foreign material has been removed, disinfect the equipment/items by repeating the above process with a Facility Approved Disinfectant
- 5.6 **Cleaning** of Non-Critical Reusable **hard-to-clean - cardboard/paper** Equipment/Items:
 - 5.6.1 Discard if not laminated or if lamination not intact
 - 5.6.2 Clean laminated cardboard/paper with water and detergent or cleaner/ disinfectant wipes using mechanical action
- 5.7 **Disinfection*** of Non-Critical Reusable **hard-to-clean - cardboard/paper** Equipment/Items:
 - 5.7.1 After all foreign material has been removed, disinfect the laminated cardboard/paper with a Facility Approved Disinfectant
- 5.8 **Cleaning** of Non-Critical Reusable **hard-to-clean - foam** Equipment/Items:
 - 5.8.1 Items with foam components should be covered with vinyl or impermeable material prior to use
 - 5.8.2 Limit uncovered foam to single patient use only



- 5.8.3 Discard foam that has become contaminated if it cannot be laundered
- 5.8.4 Clean impermeable surface with water and detergent or facility approved cleaner/disinfectant using mechanical action to remove all foreign material
- 5.9 **Disinfection** of Non-Critical Reusable **hard-to-clean - foam** Equipment/Items:
 - 5.9.1 Disinfect impermeable surface by using the disinfection technique outlined in 5.5
 - 5.9.2 Allow to air-dry, following manufacturer's contact time recommendations
- 5.10 **Cleaning and disinfection** of Non-Critical Reusable **hard-to-clean - fabric** Equipment/Items:
 - 5.10.1 Follow IP&C approved manufacturer's cleaning instructions
 - 5.10.2 Do not add bleach unless approved by manufacturer
 - 5.10.3 If no manufacturer's cleaning instructions are available, clean by using one of the following methods:
 - Machine wash using gentle cycle at high temperature (>71.1°C) and machine dry if tolerated or allow to air-dry
 - Machine/hand wash at low temperatures after discussion with Infection Prevention & Control Practitioner/Professional
 - Dry clean
 - 5.10.4 Discard fabric that cannot be cleaned and/or laundered
- 5.11 **Cleaning and disinfection** of Non-Critical Reusable **hard-to-clean – other** Equipment/Items:
 - 5.11.1 Consult an Infection Prevention & Control Practitioner and/or Clinical Engineer for equipment/items for which cleaning method is undetermined
- 5.12 Equipment/items with components falling into more than one surface type will require more than one Cleaning/Reprocessing method
- 5.13 **Reassemble** (if necessary) Non-Critical Reusable Equipment/Items for use after cleaning and disinfection
- 5.14 **Store** Non-Critical Reusable Equipment/Items in a designated clean area
 - *Disinfection technique options:
 - Ready-to-use cleaner/disinfectant wipes
 - Apply Facility Approved Disinfectant to a clean cloth. Avoid applying disinfectant directly onto equipment/items.
 - Allow to **air-dry**, following cleaner/disinfectant manufacturer's contact time recommendations*



6.0 REFERENCES:

- 6.1 Centers for Disease Control and Prevention (CDC). (2003) Guidelines for environmental infection control in health-care facilities. Atlanta GA <http://www.cdc.gov/hicpac/pubs.html>. Originally accessed December 13, 2007; re-accessed August 10, 2012 to check for updates for revision.
- 6.2 Health Canada. (1998) Hand washing, cleaning disinfection and sterilization in health care. Ottawa, ON. Retrieved December 13, 2007 from: <http://www.collectionscanada.gc.ca/webarchives/20071124225902/http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98vol24/index.html>.
- 6.3 Manitoba Health. (2012) Routine practices and additional precautions: Preventing the transmission of infection in health care. Winnipeg, MB. Retrieved July 19th, 2012 from: <http://www.gov.mb.ca/health/publichealth/cdc/ipc.html> .
- 6.4 Provincial Infectious Disease Advisory Committee (PIDAC). (Revised 2012) Best practices for environmental cleaning for prevention and control of infections. Toronto, ON. Retrieved August 10, 2012 from: <http://www.oahpp.ca/resources/pidac-knowledge> . .

Operational Directive Contacts:

Janice Briggs, Specialist, Infection Prevention and Control Program

Chantelle Riddle-Yarycky, Community Infection Control Professional

Appendix A

Assignment for responsibility and accountability is in accordance with facility/program policy.

Overall Infection Prevention & Control cleaning principles for Non-Critical Reusable Equipment/Items:

Inspect all Non-Critical Reusable Equipment/Items for damage prior to each cleaning.

- **Report** any damaged items according to facility policy

Determine surface type

Disassemble item if necessary

Clean and disinfect non-critical reusable items:

- When visibly soiled
- Prior to use by another patient
- *Prior to sending for repair*
- According to predetermined facility cleaning schedule

Reassemble (if necessary) equipment/items

Store equipment/items:

- In patient's room while dedicated to a patient
- In a designated clean area if not dedicated

Cleaning Table for Non-Critical Reusable Patient Equipment/Items in Hospitals

This table is not intended as an all inclusive list.

Equipment/Item	Surface Type (Refer to Procedures)	Comments
Ambulation Aid <ul style="list-style-type: none"> • Crutches • Walkers 	Hard-to-clean – more than one surface type (5.2) Wipeable (5.3.1 & 5.3.2)	Dedicate to one patient when possible Ensure cleaning between patients
Bed side monitor <ul style="list-style-type: none"> • Bladder scanner 	Wipeable (5.3.1 & 5.3.2) May have Hard-to-clean components (5.2)	Examples of hard to clean components include screens and keyboards
Blood glucose monitor	Wipeable (5.3.1 & 5.3.2)	May be visibly soiled with blood/body fluids Ensure visible soiling is cleaned prior to disinfection
Cervical collar	Hard-to-clean – more than one surface type (5.2) Wipeable and hard-to-clean - fabric (5.3.5)	Single patient use items shall be for single patient use only Ensure cleaning between patients where not single patient use
Electronic devices <ul style="list-style-type: none"> • Continuous Positive Airway Pressure (CPAP) machine • Portable Continuous Cardiac Monitoring device 	Hard-to-clean – other (5.3.8)	Use caution with electronic connections
Fans (personal use) <ul style="list-style-type: none"> • If approved for use by facility 	Hard-to-clean – other (5.3.8)	Ensure disassembly and cleaning according to manufacturer's instructions and established facility schedule
High touch surfaces	Wipeable (5.3.1 & 5.3.2)	E.g., bed rails, call cords, beds, over-bed table



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Equipment/Item	Surface Type (Refer to Procedures)	Comments
Infusion pump	Wipeable (5.3.1 & 5.3.2)	Ensure cleaning between patients
Intravenous (IV) poles	Wipeable (5.3.1 & 5.3.2)	Ensure cleaning between patients
Hygiene items <ul style="list-style-type: none"> • Basins • Jetted tub 	Wipeable (5.3.1 & 5.3.2) Hard-to-clean (5.2)	Follow manufacturer's instructions for specific products
Monitoring equipment	Wipeable (5.3.1 & 5.3.2)	Ensure cleaning between patients
Portable bedside equipment <ul style="list-style-type: none"> • Continuous Passive Motion machine (CPM) <ul style="list-style-type: none"> ○ device ○ fabric lining 	Hard-to-clean – more than one surface type (5.2) Wipeable (5.3.1 & 5.3.2) Hard-to-clean – fabric (5.3.5)	Dedicate to one patient when possible Ensure cleaning between patients
Portable blood pressure machine	Hard-to-clean – more than one surface type (5.2) Wipeable (5.3.1 & 5.3.2) and Hard-to-clean components (5.2)	Ensure blood pressure cuff is cleaned, disinfected and air-dried. If Velcro™ portion of cuff is visibly soiled, hand wash with liquid detergent and water. Clamp off hose ends to ensure water does not enter the cuff. Allow to air-dry.
Orthopedic heel boot <ul style="list-style-type: none"> • Plastic molded shell • Fabric lining 	Hard-to-clean – more than one surface type (5.2) Wipeable (5.3.1 & 5.3.2) Hard-to-clean – fabric (5.3.5)	Single patient use items shall be for single patient use only Dedicate to one patient when possible Ensure cleaning between patients
Pulse Oximeter <ul style="list-style-type: none"> • Peripheral probe • Cable 	Wipeable (5.3.1 & 5.3.2)	Ensure cleaning between patients
Pressure relief devices <ul style="list-style-type: none"> • Gel cushion • Pressure relief inflatable wheelchair cushion • Pressure relief mattress 	Hard-to-clean – other (5.3.8)	Must check integrity of cover <ul style="list-style-type: none"> • Wipeable if intact Follow manufacturer's instructions
Splint	Wipeable (5.3.1 & 5.3.2), Hard-to-clean – fabric (5.3.5)	Check for presence of fabric
Stethoscope	Wipeable (5.3.1 & 5.3.2)	Ensure cleaning between patients
Thermometer (electronic)	Wipeable (5.3.1 & 5.3.2)	For rectal thermometers, ensure visible soiling is cleaned prior to disinfection
Toileting device <ul style="list-style-type: none"> • Commodes 	Wipeable (5.3.1 & 5.3.2)	Ensure cleaning/disinfecting between patients Ensure crevices and/or grooves are cleaned and disinfected
Tourniquet	Single use	WRHA process requiring single use
Transferring/mobility device <ul style="list-style-type: none"> • Fabric transfer belt/slider/sling • Plastic/metal transfer belt/slider/sling 	Hard-to-clean – fabric (5.3.5) Wipeable (5.3.1 & 5.3.2)	Ensure fabric portion is removed for laundering Transfer belts/slings: machine dry at low temperature if tolerated or hang to air-dry.
Ventilator	Hard-to-clean – more than one surface type (5.2)	Responsibility of Respiratory Therapist May be sent to Medical Device Reprocessing (MDR)
Wheelchair/Geri Chair	Hard-to-clean – more than one surface type (5.2)	Ensure any pressure relief devices and grooves are cleaned appropriately