Provincial Health Services Authority

PATIENT CARE EQUIPMENT CLEANING PRACTICE GUIDELINES

Summary of Changes

	NEW	Previous
BC Cancer	18-APRIL-2023	

1. Introduction

1.1. Focus

All reusable/shared patient care equipment and devices used within Provincial Health Service Authority (PHSA) facilities will be cleaned and reprocessed (Disinfection or Sterilization) according to the current Canadian standards and best practices.

Reusable medical devices and equipment can transmit microorganisms if they are not adequately reprocessed between patients. The level of reprocessing (disinfection or sterilization) depends on the degree of risk of infection associated with each medical device. The Spaulding Classification of Medical Devices classifies medical devices/equipment as critical, semi-critical, or noncritical and the required level of reprocessing (Table 1).

Nonetheless, all patients have the right to a clean and safe environment. This includes the use of clean equipment in the provision of their care.

The purpose of this document is to outline the practice guidelines when:

- Assessing when to clean
- Handling dirty/contaminated equipment
- Cleaning and disinfecting medical equipment
- Keeping in storage and labeling the equipment once the medical equipment is cleaned as well as when not in use

1.2. Health Organization Site Applicability

All sites at BC Cancer

1.3. Practice Level

This document applies to all health care professionals and staff that assist with Cleaning of non-critical medical and non medical equipment. Registered Nurses, Licences Practical Nurses, Registered Dietitians, Care Aides, Radiation Therapists, Environmental Services, Respiratory Therapist, Health Unit Clerk.

1.4. Definitions

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 (PICNet, 2016).

Cleaner/Disinfectant: A product that is a combination of both a cleaner and a disinfectant.

Disinfection: A process that kills most disease producing microorganisms. Medical devices must be cleaned thoroughly before effective disinfection can take place (PICNET, 2016).

Environmental Services: Environmental services are a critical part of clinical operations. These services provide an environment that is clean, aesthetically pleasing and free of contamination, and are crucial for preventing the transmission of health-care associated infections.

Hospital Grade Disinfectant: A disinfectant with a drug identification number (DIN) from Health Canada and approval for use as a low-level disinfectant in Canadian Hospitals (Alberta Health, 2022).

Low-level disinfection: A process capable of killing most vegetative bacteria, some viruses, and some fungi. Level of disinfection required when processing non-critical medical devices and some environmental surfaces.

Non-Critical Medical Equipment List: A medical equipment list that each cancer centre maintains related to their specific non-critical medical equipment.

Spaulding's Criteria: Divides medical equipment/devices into three categories defined by the potential risk of infection from its use, defined in the table below:

Sporicidal Disinfectant: A hospital grade disinfectant that is able to destroy spores. Not all disinfectants are sporicidal. These are required for organisms such as *Clostridioides difficile*.

1.5. Need to Know

- Prior to use on another patient, medical devices or equipment must be cleaned and reprocessed to render the devices safe for re-use.
- Medical devices labeled as single-use shall not be reprocessed and reused.
- Refer to the PHSA Policy - Use and Reprocessing of Critical and Semi-critical Medical Devices for specific policies on Sterile Processing which is not covered in this procedure:
- Medical equipment and devices that cannot be cleaned and reprocessed according to the standards shall not be purchased.

- Medical equipment must be compatible with organizational Hospital Grade Disinfectants and cleaning products. Where possible Cleaning and disinfecting instructions should be easy for staff to follow. All BC Cancer sites will have a semi-critical device list (Appendix A).
- If there is a discrepancy between the reprocessing level recommended by the manufacturer and the intended use of the instrument by Spaulding's Criteria, the higher level of Disinfection/Sterilization shall be used (Table 1).
- The "Green is Clean" labelling system will be used.

1.6. Equipment and Supplies

- Hospital Grade Disinfectant compatible with equipment manufactures' instructions for use (MIFU).
- A Sporicidal Disinfectant when Contact Plus Precautions are required.
- "Green Means Clean" Stickers or Labels.

2. Practice Guidelines

2.1. Assessment

Identifying when to clean:

- All new equipment must be cleaned and disinfected before patient use.
- All shared equipment must be cleaned and disinfected between patients.
- All equipment dedicated to a specific patient (e.g. Additional Precautions) will be clearly tagged as such, cleaned each day, and as needed until discharge or discharge clean.
- Equipment going for repair to Biomed or Facilities/Maintenance/Operations must be cleaned, disinfected and tagged with a green "I AM CLEAN" sticker before transport.

2.2. Intervention

Handling of dirty/contaminated equipment:

- Always remove the green "I AM CLEAN" sticker before the equipment is used for patient care.
- Conduct a point of care risk assessment to determine what personal protective equipment is required for Low Level Disinfection.
- Dirty/contaminated equipment should be cleaned and disinfected at point of use or in a soiled utility room. If contaminated/dirty equipment must be stored before

cleaning, it must be stored in a specific dedicated and labelled "soiled equipment" area (located at least 2 meters separation from clean equipment).

- Dirty equipment will not be moved throughout the hospital/cancer centre.

Cleaning and Disinfecting:

- Ensure the Hospital Grade Disinfectant wipe used is compatible with equipment and any additional precautions in place (i.e. Sporicidal Disinfectant used for patients under Contact Plus Precautions).
- If grossly or visibly contaminated or when using a disinfectant only (ie. alcohol wipes) a two-step process is used:
    - **Step 1 - Clean:** One wipe is used to remove debris
    - **Step 2 - Disinfect:** New, second wipe is used to thoroughly wet all the surface area for the required contact time. Contact time is determined by the product manufacturer and found on the container directions. It is the time needed for the surface to remain wet with the product to ensure Disinfection takes place.
- For items that are not grossly or visibly soiled, one disinfectant wipe can be used which will both clean and disinfect.
- Use sufficient wipes to ensure surfaces are wet for the required contact time.
- Ensure the lid of the wipes container is closed to prevent the product from drying and being ineffective. If the wipes are too dry, discard the container.
- Do not add water or any product to the wipes container.

Storage and Labeling:

- After cleaning and disinfecting all surfaces, apply the green "I AM CLEAN" sticker to the piece of equipment.
- All shared equipment must be cleaned and disinfected between patients.

2.3. Site Specific Practices

Certain Nursing Units, i.e. inpatient care, pharmacy, OR, may have their own cleaning and Disinfection protocols but labelling of designated clean and dirty equipment locations and the use of green " I AM CLEAN" sticker will be used as part of an organizational standard. Always confirm what these protocols are before you start working in these areas.

Please see Appendix B for details.

2.4. Evaluation

Cancer centres will complete 'green is clean' audits on a quarterly basis. (Appendix C)

2.5. Monitoring

Cancer centre Regional Operation Quality Committee (ROQC) will be responsible for review audit results and creating action strategies.

3. Related Document and References

3.1. Related Documents

PHSA Policy Use and Reprocessing of Critical and Semi-critical Medical Devices

3.2. References

British Columbia Ministry of Health. *Best Practice Guidelines for Cleaning, Disinfection and Sterilization of Critical and Semi-Critical Medical Devices.* March, 2011. http://www.health.gov.bc.ca/library/publications/year/2011/Best-practice-guidelines-cleaning.pdf

Provincial Infectious Diseases Advisory Committee (PIDAC). *Routine Practices and Additional Precautions In All Health Care settings.* Ontario Agency for Health Protection and Promotion. November 2012. http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf

Association for Professionals in Infection Control and Epidemiology. *Chapter 31: Cleaning, Disinfection, and Sterilization.* APIC Text of Infection Control and Epidemiology. February, 2015.

Alberta Health Services. *Principles for Environmental Cleaning and Disinfection*. September 2022. https://www.albertahealthservices.ca/assets/healthinfo/ipc/if-hp-ipc-bpg-cleaning-principles.pdf

4. Appendices

- Appendix A: Sample Critical Equipment Device List
- Appendix B: Site specific Cleaning and Disinfection Protocols
- Appendix C: Sample "Green is Clean" Audit Checklist

Appendix A: Sample Critical Equipment Device List

BC Cancer Vancouver: SLP & Nutrition

Non-Critical Medical Equipment definition:

Equipment or device that either touches only intact skin (but no mucous membranes) or does not directly touch the patient.

Reprocessing involves cleaning and may also include low-level disinfection (e.g. blood pressure cuffs, stethoscopes).

Medical equipment includes: Any instrument, apparatus, appliance, material, or other article intended by the manufacturer to be used for the purpose of diagnosis, prevention, monitoring, treatment or alleviation of disease, injury or handicap. Does not include equipment such as fridges, tvs, tables.

Non-Critical Medical Equipment Name	Location/Department	Manufacturer (if known)	Is there a manual/cleaning instructions available? (Y/N)	Required cleaning product (if known)	Current cleaning frequency (e.g. unknown, 1/day, 1/week, 1/month, inbetween patients)	Does cleaning currently meet the requirements? (Y/N)	Current cleaning responsibility (e.g. staff, housekeeping)
stethescope	574-SLP	Littman	n	caviwipes	before and after pt use	yes	staff
pulse oximeter	574-SLP		y	caviwipes	before and after pt use	yes	staff
sEMG	574-SLP		y	caviwipes	before and after pt use	yes	staff
iOPI	574-SLP		y	caviwipes	before and after pt use	yes	staff
IV poles	1408, 574, 662		y	caviwipes	before and after pt use	yes	staff
weight scales	1408, 662		y	caviwipes	before and after pt use	yes	staff
feeding pumps	Room 574		y	caviwipes	before and after pt use	yes	staff

Appendix B: Site specific Cleaning and Disinfection Protocols

Equipment	Frequency	Who's responsible	Remarks
AirBo	Between Patients/After Use	Respiratory	Health Authority (HA) Approved Hospital Grade Disinfectant
BP Monitor & Cables - Portable	Between Patients / After Use	All Users	Health Authority (HA) Approved Hospital Grade Disinfectant
Basin	After use/ Between Patients	All users	Medical Device Reprocessing (MDR) or Sterile Processing (SPD)
Bath (Hair wash) tub - Portable	After Use / Between Patients	All Users	Health Authority (HA) Approved Hospital Grade Disinfectant
Bed	On Discharge: mattress, mattress support, railings, head & footboard, brakes. (Long admissions, but have a bed cleaning schedule)	Environmental Services	If visibly soiled contact housekeeping for cleaning direction
Bedpan	After each Use	All Users	Vernicare and/or send to MDR/SPD **Refer to Human Waste Disposal Policy
BiPAP/ CPAP Machine	After Use	Respiratory Therapy	Health Authority (HA) Approved Hospital Grade Disinfectant
Bladder Scanner	After Use	All Users	Health Authority (HA) Approved Hospital Grade Disinfectant

BP cuffs - Reusable	Between Patients	Environmental Services / Support Staff	Health Authority (HA) Approved Hospital Grade Disinfectant
BP Machines – wall mounted (Out-patient)	Between Patients	Nursing/Support staff	Health Authority (HA) Approved Hospital Grade Disinfectant
BP Machines- wall mounted **(In-patient)**	Weekly & On discharge	Environmental Service	Health Authority (HA) Approved Hospital Grade Disinfectant
Call Bell	Daily	Environmental Service	Health Authority (HA) Approved Hospital Grade Disinfectant
Chairs in room	Between Patients or when soiled	Environmental Service	Health Authority (HA) Approved Hospital Grade Disinfectant
Charts	Weekly & On discharge	Unit Clerk / All Users	Health Authority (HA) Approved Hospital Grade Disinfectant
Commode Chair	Daily Between Patients	Environmental Services All Users	Housekeeping will not clean unless commode pot is empty
Commode collection container (disposable)	Dispose	Nursing/ All users	Single use
Computer Keyboard & Screens (Stationary)	Daily & PRN ***Hand hygiene before & after use***	As designated by unit	As per manufacturers instructions

Appendix C: Sample "Green is Clean" Audit Checklist

BC CANCER

Non-Critical Medical Equipment Cleaning Quality Improvement (QI) Tool Results

Audit Details			Regional Centre					
Area	Equipment	Audit Period	Abbotsf.	Kelowna	P George	Surrey	Vanc	Vict
ST/Chemo	IV Pole							
	IV Pumps							
	Bed / Stretcher / Chair							
RT	Pillows / Donuts							
	Treatment Couches / Hand Controls							
	Knee Bolster							
ST ACU	Weigh Scale							
	Blood Pressure Machines / Cuffs / Vital Sign Machines							
	Bed / Chair / Stretcher							
RT	Mould Baths / Oven							
	Weigh Scale							
	Blood Pressure Machines / Cuffs / Vital Sign Machines							

	Green Responded "yes" to all questions.
	Yellow Responded "yes" to audit questions 1, 2, 3 and 6. Responded "no" to question 4, 5, or 7.
	Red Responded "no" to at least one of questions 1, 2, 3 or 6.

NCME QI Tools Questions

1. *The staff member identified is responsible for cleaning this piece of equipment and is able to identify the cleaning process.*
2. *The cleaning product identified in the NCME list is used to disinfect the item (please include the cleaning product name in the 'Comments'section if answering 'No').*
3. *The item is cleaned per the frequency identified in the NCME list. Please note the supporting evidence for this in the comments.*
4. *There is a system in place to ensure staff know that the piece of equipment is clean and ready to use.*
5. *The piece of equipment is in compliance with that identified system.*
6. *The item appears clean upon inspection (i.e. no visible dust, dirt, residue, etc.).*
7. *Site procedures or the Manufacturer Instructions for Use (MIFU) are followed when cleaning/disinfecting the item.*

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