All patients undergoing surgical procedures in a non-hospital medical/surgical facility (NHMSF) are to be considered potentially infectious. As most microorganisms are spread by hands or contact with the contaminated environment, both strict adherence to hand hygiene and cleanliness of the environment is crucial to the prevention of transmission of microorganisms in the non-hospital setting.

**INDICATORS:**

- Environmental cleaning policies and procedures are in place and outline:
  - all locations, spaces and rooms, frequency of cleaning and accountability for cleaning (e.g. who cleans, what do they clean and when do they clean it)
  - cleaning products (detergents, disinfectants) and their use
  - procedures for cleaning of non-critical patient care equipment between patients
  - procedures for environmental contamination (e.g. blood and body fluid spills, chemical spills, pests, water-related emergencies (flood))
  - housekeeping room and housekeeping equipment (e.g. mops, buckets, cloths, power-scrubbers, carts) cleaning and maintenance
  - initial and ongoing education of cleaning staff (facility staff and external cleaning staff) and regular competency assessment of cleaning staff

- Disinfecting products have a drug identification number (DIN) from Health Canada*
  
  *In addition, an infection prevention and control expert should be consulted for product selection

- Cleaning personnel receive initial and ongoing education on the principles and performance of environmental cleaning and undergo regular competency assessments

- Cleaning cards and checklists are used (either carried on cleaning cart and/or posted in each room) and list all the things in the room to be cleaned

- Daily, weekly and monthly cleaning logs are maintained

- Cleaning audits are completed and documented at a minimum twice a year by facility staff and deficiencies corrected
Facility environmental cleaning policies and procedures are used to outline requirements if cleaning services are contracted out.

**Environmental and engineering control measures ensure a clean environment for patients**

**INDICATORS:**
- All areas, rooms, surfaces and furnishings of the facility are visibly clean (free of dust, gross soil, stains, spills and streaks).
- Finishes and furnishings are cleanable and removed from service when torn, scratched or chipped.
- Upholstered furniture is covered with fabrics that are fluid-resistant, non-porous and can withstand cleaning with hospital-grade disinfectants.
- Upholstered furniture covered with fabric that is NOT fluid-resistant* is vacuumed regularly and steam cleaned as necessary when stained or visibly soiled.
  *Furniture covered with fabrics that are not fluid-resistant is not recommended.
- Children’s toys, if available,* are in good condition, cleanable, non-porous and able to withstand daily disinfection.
  *Children’s personal toys are preferred.
- Books, magazines, if available,* are in good condition, visibly clean and not more than one year old.
  *Patient’s personal books/magazines are preferred.

**Environmental cleaning practices establish a clean environment for patients and visitors**

**INDICATORS:**
- Surfaces and furnishings in the facility are cleaned with hospital-grade cleaners and environmental disinfectants.
- Cleaning and disinfection products are used in accordance with manufacturer’s recommendations for dilution, contact time and use.
- Cleaning and disinfecting products are compatible with the items and equipment to be cleaned and disinfected.
- All patient care areas (admission area, exam rooms, recovery room, washrooms and waiting areas) are cleaned daily and when visibly soiled.
- Operating/procedure rooms are cleaned at start of day (preliminary cleaning), between cases and at end of day (terminal cleaning) (see Intraoperative Care standard).
- Patient care items (e.g. stethoscope, blood pressure cuff, O₂ saturation monitor, IV poles) are cleaned and disinfected as soon as possible after use and before use for another patient.
Transport equipment (e.g. wheelchair, stretcher) is cleaned and disinfected as soon as possible after use and before use for another patient

Food preparation areas are cleaned and disinfected at least once daily using a food safe disinfectant

Cleaning progresses from the least soiled areas (low-touch) to the most soiled areas (high-touch) and from high surfaces to low surfaces

Cleaning cloths are not “double-dipped/re-dipped” in cleaning and disinfecting solutions

Cleaning and disinfecting products are not applied by an aerosol spray

Visible soil is removed prior to disinfection

Surfaces are left to air dry after damp wiping or mopping

Floors in non-restricted areas are dry dusted followed by wet mopping with a floor cleaner

Carpets in non-restricted areas are vacuumed daily with a HEPA filtered vacuum

Carpets in non-restricted areas undergo extraction and shampooing on a regular basis and more frequently if soiling is visible or following a spill

Cleaning and disinfecting solutions are changed frequently, when visibly soiled and immediately after cleaning blood and body fluid spills

Cleaning and disinfecting products from bulk containers are dispensed into smaller containers that have been cleaned, disinfected and dried prior to filling/re-filling

Cleaning and disinfecting product containers are not topped up with fresh product

Cleaning and disinfecting products are used within their labeled expiration date

If air disinfection/fogging technology is used, standard cleaning and disinfecting practices precede air disinfection (e.g. ultraviolet irradiation (UVI))*

*if this technology is being considered, please contact the College

Environmental cleaning of the operating room/procedure room minimizes the risk of transmission of potentially infectious microorganisms

Refer to the Intraoperative Care standard for intraoperative cleaning including preliminary cleaning, end of procedure cleaning and terminal cleaning

Environmental cleaning equipment is appropriately selected and maintained

INDICATORS:

The housekeeping room is a dedicated room and not used for other purposes, is free from clutter and undergoes daily environmental cleaning

Cleaning equipment (e.g. mops, buckets, power scrubber/floor polisher) is well maintained and in good repair
○ Cleaning equipment is cleaned and disinfected according to manufacturer’s recommendations
○ Tools and equipment used for cleaning and disinfection are cleaned and dried between uses (e.g. mops, buckets, cloths)
○ Reusable cleaning cloths and mops heads are laundered daily and dried thoroughly before storage
○ Microfibre mop heads are preferred over conventional string mops
○ Housekeeping carts are thoroughly cleaned and disinfected at the end of the day
○ There is no food, drink or personal items stored on the housekeeping cart or in the housekeeping room

**Personal protective equipment (PPE) eliminates or controls hazards associated with environmental cleaning**

**INDICATORS:**

○ Staff adhere to routine practices* when performing environmental cleaning (e.g. hand hygiene, use of PPE and standardized cleaning protocols)
  
  *See Routine Practices and Transmission-based Precautions standard for PPE requirements when performing medical device reprocessing and providing patient care

○ Staff adhere to routine practices* when performing medical device reprocessing and providing patient care
  
  *See Routine Practices and Transmission-based Precautions standard

○ All cleaning and disinfection products are appropriately labelled including those dispensed from bulk containers into smaller bottles

○ PPE requirements identified on a material safety data sheet (MSDS) are followed when using chemical agents

○ Appropriate gloves* are selected for the task (e.g. anticipated length of use, amount of stress on the glove, MSDS requirements )
  
  *Disposable vinyl gloves are generally sufficient for most tasks

○ Synthetic gloves, such as nitrile or neoprene, are used during discharge/transfer cleaning, for wet work of long duration and in accordance with MSDS requirements for disinfectants

○ Household utility gloves are not used for cleaning of clinical/care areas

○ Gloves are single-use and task-specific (e.g. changed between cleaning of each room—operating, procedure, overnight stay and pre and post-op recovery bays)

○ PPE is removed and discarded immediately after the task has been completed

○ Hand hygiene is performed immediately after glove removal
Appendix A: Cleaning and disinfecting agents

Non-hospital medical/surgical facilities may be categorized into three components for the purposes of environmental cleaning:

Public component is the public areas of the clinical office that are not involved in patient care (e.g. waiting rooms, offices, corridors and service areas).

- Public component areas are cleaned with a detergent at a minimum

Clinical component is the area involved in patient care (e.g. examination rooms, consult rooms, bathrooms and diagnostic and treatment areas).

- Clinical component areas, including surfaces, furnishings and non-critical patient equipment, are cleaned with a detergent and then disinfected with a hospital-grade disinfectant.

Surgical component is the area involved in surgery and invasive procedures (e.g. operating rooms, procedure rooms, scrub area).

- Surgical component areas, including surfaces, furnishings and non-critical patient equipment, are cleaned with a detergent and then disinfected with a hospital-grade disinfectant.

Cleaning products Include:

- detergents (a pH neutral, non-sudsing, water-soluble cleaning agent that combines with impurities and dirt to make them more soluble); manufacturer instructions must identify the detergent is an environmental cleaner (detergent) and should identify it as “hospital grade”
- “one step” cleaner disinfecter – these can be used for both the cleaning and disinfecting as a single product

All products must be used following manufacturer’s instructions for use.

Appendix B: Examples of cleaning requirements in specialized areas

Operating room/procedure room cleaning between cases

After each patient/case, each operating/procedure room is cleaned and disinfected. This includes all horizontal surfaces that have come in contact with or may have come in contact with a patient or body fluids, including:

- tops of surgical lights,
- blood pressure cuffs, tourniquets and leads
- suction canisters
- bed/stretcher/OR table
- electronic equipment (e.g. monitors)
- other equipment (e.g. X-ray machines, compressed gas tanks)
• floor in a three to four-feet perimeter around the bed if visibly contaminated and extended to encompass all visible contamination

Operating room/procedure room end of day cleaning
After the day’s procedural schedule is complete, each operating/procedure room, scrub area, corridor, furnishings and equipment are cleaned and disinfected. This includes:
  • surgical lights
  • all furniture, including wheels/casters
  • door handles and push plates
  • all exposed horizontal surfaces and outside of cabinets and handles
  • light switches and controls
  • scrub sinks and surrounding walls
  • visible contamination of walls
  • telephones and computer keyboards
  • exterior surfaces of all machines and equipment (follow manufacturer’s instructions for a list of compatible disinfectants)
  • floors, each floor mopped with fresh solution and fresh mop head
  • washrooms
  • areas where specimens are handled and labelled

Semi-restricted and restricted area weekly cleaning
Items/areas in cleaning schedule include, but are not limited to:
  • cabinets, closets, shelves
  • warming cupboards
  • ceiling-mounted tracks
  • operating/procedure room walls and ceilings
  • recessed ceiling tracks
  • store rooms
  • offices and lounges
  • pre-op holding area storage, cabinets
  • refrigerators, ice machines
  • locker room

Semi-restricted and restricted area monthly cleaning
- walls
- HVAC grills/vents
- light fixtures, sprinkler heads
- ducts and filters

**Sterile processing area schedule**

- disinfect sinks and faucets between uses and at the end of the day
- disinfect transport containers after each use
- disinfect all counters daily
- high-level disinfect or sterilize reusable brushes at the end of the day following manufacturer’s instructions for use
- disinfect horizontal surfaces (shelves, counters) in sterilization areas, preparation and packing areas and decontamination areas daily
- clean and disinfect soak boats (liquid chemical high level disinfection or sterilization) after emptying and before refilling
- clean floors daily
- disinfect walls every six months
- clean light fixtures, sprinkler heads and other fixtures every six months

**Sterile storage areas**

- disinfect work counters daily
- clean open area floors daily and under shelving, carts, pallets etc. weekly
- disinfect shelves and containers every three months
- disinfect walls every six months and when visibly contaminated
- clean light fixtures, sprinkler heads and other fixtures every six months

**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.
contamination
The presence of an infectious agent on hands or on a surface such as clothes, gowns, gloves, bedding, toys, surgical instruments, patient care equipment, dressings or other inanimate objects.

detergent
A 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 enzymes (see “enzymatic cleaner”) and whitening agents.

enzymatic detergent
A pre-cleaning agent that contains protease enzymes that break down proteins such as blood, body fluids, secretions and excretions from surfaces and equipment. Most enzymatic cleaners also contain a detergent. Enzymatic cleaners are used to loosen and dissolve organic substances prior to cleaning.

disinfectant
A product that is used on surfaces or medical equipment/devices which results in disinfection of the equipment/device. Disinfectants are applied only to inanimate objects. Some products combine a cleaner with a disinfectant.

hospital-grade disinfectant
A low-level disinfectant that has a drug identification number (DIN) from Health Canada indicating its approval for use in Canadian hospitals.

low-level disinfectant
A chemical agent that achieves low-level disinfection when applied to surfaces or items in the environment.

disinfection
The inactivation of disease-producing microorganisms. Disinfection does not destroy bacterial spores. Medical equipment/devices must be cleaned thoroughly before effective disinfection can take place. See also “disinfectant.”

low-level disinfection (LLD)
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.

drug identification number (DIN)
In Canada, disinfectants are regulated as drugs under the Food and Drugs Act and Regulations. Disinfectant manufacturers must obtain a drug identification number (DIN) from Health Canada prior to marketing, which ensures that labelling and supporting data have been provided and that it has been established by the Therapeutic Products Directorate that the product is effective and safe for its intended use.

high-touch surfaces
High-touch surfaces are those that have frequent contact with hands. Examples include doorknobs, call bells, bedrails, light switches, wall areas around the toilet and edges of privacy curtains.

low-touch surfaces
Surfaces that have minimal contact with hands. Examples include walls, ceilings, mirrors and window sills.
material safety data sheet (MSDS) A document that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with a chemical product. It also contains information on the use, storage, handling and emergency procedures all related to the hazards of the material. MSDSs are prepared by the supplier or manufacturer of the material.

personal protective equipment (PPE) Clothing or equipment worn by staff for protection against hazards.

precautions Interventions to reduce the risk of transmission of microorganisms (e.g. patient-to-patient, patient-to-staff, staff-to-patient, contact with the environment, contact with contaminated equipment).

routine practices The system of infection prevention and control practices recommended by the Public Health Agency of Canada to be used with all clients/patients/residents during all care to prevent and control transmission of microorganisms in all health-care settings.

Workplace Hazardous Materials Information System (WHMIS) The Workplace Hazardous Materials Information System (WHMIS) is Canada’s national hazard communication standard. The key elements of the system are cautionary labelling of containers of WHMIS “controlled products,” the provision of material safety data sheets (MSDSs) and staff education and training programs.

References


Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Infection prevention and control for clinical office practice [Internet]. 1st
