Winnipeg Regional Office régional de la Health Authority santé de Winnipeg Caring for Health À l'écoute de notre santé	Long Term Care Facility Infection Prevention and Control Program		
Operational Guideline	Environmental Hygiene		Page 1 of 7
	Approval Signature:	Supersedes: Infection Control in Housekeeping and Maintenance (December 12, 2001)	
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1.0 **PURPOSE:**

1.1 To achieve a clean environment to help prevent the spread of microorganisms.

2.0 **DEFINITIONS**:

- 2.1 <u>Additional Precautions:</u> infection prevention and control precautions and practices required in addition to Routine Practices based on the mode (means) of transmission of an infectious agent: airborne, droplet, and contact.
- 2.2 <u>Cleaning:</u> The physical removal of foreign material, e.g., dust, soil, 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. Cleaning agents are the most common chemicals used in housekeeping activity.
- 2.3 <u>Detergent:</u> Substances used to clean that change the surface tension of a formulation to form an emulsion around certain ingredients.
- 2.4 <u>Disinfection</u>: The inactivation of disease producing microorganisms. Disinfection does not destroy bacterial spores. Disinfectants are used on inanimate objects; antiseptics are used on living tissue. Disinfection usually involves chemicals, heat or ultraviolet light. Levels of chemical disinfection vary with the type of product used.

- 2.5 <u>Contact Time</u>: The contact time is the period of time during which the treated surface remains saturated with the disinfectant. An effective contact time will depend upon the disinfectant and the microorganisms or toxins that are present. Fast-acting disinfectants should be selected because longer contact times may be difficult to achieve. Although alcohols may have bactericidal activity after an extended contact time (e.g. 10 minutes), they are unlikely to remain on surfaces this long because they evaporate.
- 2.6 <u>Facility Approved Disinfectant:</u> A disinfectant cleaner that has been approved by the facility/organization after review of the products intended use and efficacy.
- 2.7 <u>High level disinfection</u>: The level of disinfection required when processing semi critical items. High level disinfection processes destroy vegetative bacteria, mycobacteria, fungi and enveloped (lipid) and non-enveloped (non-lipid) viruses, but not necessarily bacterial spores. High level disinfectant chemicals (also called chemisterilants) must be capable of sterilization when contact time is extended. Items must be thoroughly cleaned prior to high level disinfection.
- 2.8 <u>Low level disinfection</u>: The level of disinfection required when processing <u>non-critical items</u> or some environmental surfaces. Low level disinfectants kill most vegetative bacteria and some fungi as well as enveloped (lipid) viruses (e.g., hepatitis B, C, Hantavirus and HIV). Low level disinfectants do not kill mycobacteria or bacterial spores. Low level disinfectants-detergents are used to clean and disinfect environmental surfaces.
- 2.9 <u>Non-critical items</u>: Those items that either touch only intact skin but not mucous membranes or do not directly touch the resident. Examples of non-critical items include equipment such as lifts, transfer boards, wheel chairs, BP cuffs and call bells. Reprocessing of non-critical items involves cleaning and/or low level disinfection.
- 2.10 <u>Sterilization:</u> The destruction of all forms of microbial life including bacteria, viruses, spores and fungi. Items must be cleaned thoroughly before effective sterilization can take place.

3.0 **OPERATIONAL GUIDELINES:**

- 3.1 Routine <u>cleaning</u> of environmental surfaces and non-critical patient care items should be performed according to a predetermined schedule. The <u>cleaning</u> schedule should be sufficient to keep surfaces visibly clean and dust free.
- 3.2 Surfaces that are frequently touched by the hands of health care providers and residents, such as nurse call systems, surfaces of medical equipment and knobs for adjustment or opening require frequent <u>cleaning</u> (at a minimum daily, more often as required (e.g., during outbreaks).

4.0 **PROCESS:**

4.1 Routine Cleaning

Refer to facility specific housekeeping and maintenance procedures which should include but is not limited to the following:

- 4.1.1 The environment should be kept free of clutter to facilitate housekeeping.
- 4.1.2 <u>Cleaning</u> is accomplished with water, <u>detergent</u> and mechanical action. Detergents are adequate <u>cleaning</u> agents for most housekeeping services. Extraordinary measures (i.e. <u>high level disinfection</u> and sterilization) are not needed to disinfect the health care environment.
- 4.1.3 Careful <u>cleaning</u> of environmental surfaces is effective in removing many contaminants from surfaces.
- 4.1.4 Environmental surfaces require <u>cleaning</u> and <u>low level disinfection</u> when they have become soiled with blood and/or body fluids, in rooms upon discharge or transfer before a new resident moves in, and after <u>Additional Precautions</u> for droplet, droplet/contact, or contact transmitted organisms have been discontinued (e.g., after resolution of an influenza or clostridium difficile infection).
- 4.1.5 A schedule for <u>cleaning</u> and maintaining ducts, fans, and air conditioning systems should be established and implemented in collaboration with appropriate departments e.g. housekeeping, maintenance.
- 4.1.6 An education program for housekeeping staff should be implemented to facilitate understanding of the effective methods of <u>cleaning</u> and <u>disinfection</u>.

- 4.1.7 Damp rather than dry dusting or sweeping should be performed whenever possible. Any dry <u>cleaning</u> should be done carefully with a chemically treated dry mop or vacuum cleaner (equipped with exhaust filter) rather than a broom.
- 4.1.8 Vacuum cleaners should be used on carpeted areas. Expelled air from vacuum cleaners should be filtered to prevent the spread of dust in the air from unclean surfaces.
- 4.1.9 During wet <u>cleaning</u>, <u>cleaning</u> solutions and the tools with which they are applied soon become contaminated. Therefore, a routine should be adopted that does not redistribute microorganisms. This may be accomplished by <u>cleaning</u> less heavily contaminated areas first and changing <u>cleaning</u> solutions and cloths/mops frequently.
- 4.1.10 Wet mopping is most commonly done with a double-bucket technique (one bucket for <u>cleaning</u> with disinfectant and another bucket for rinsing), which extends the life of the solution because fewer changes are required. When a single bucket is used, the solution must be changed more frequently because of increased contamination.
- 4.1.11 Tools used for <u>cleaning</u> and disinfecting must be cleaned and dried between uses.
- 4.1.12 Mop heads used in areas of great activity should be laundered daily.

 Mop heads used in areas of lesser contamination should be laundered at a set interval. All washed mop heads must be dried thoroughly before storage.
- 4.1.13 A <u>detergent</u> is an acceptable <u>cleaning</u> agent for surface <u>cleaning</u> in most areas.
- 4.1.14 <u>Cleaning</u> and disinfecting agents must be mixed and used according to the manufacturers' recommendations. If an automatic dilution station is used, testing and documentation of dilution accuracy should be done according to manufacturer's recommendations.
- 4.1.15 Protective equipment including gloves should be worn during <u>cleaning</u> and disinfecting procedures per manufacturers' directions and the product's Material Safety Data Sheet (MSDS) to ensure safe handling practices.

5.0 <u>Cleaning Procedures for Common Items</u>

Surface/Object	Procedure	Special Consideration
Horizontal surfaces such as over bed tables, work counters, beds, mattresses, bedrails, call bells	 Thorough regular <u>cleaning</u> <u>Cleaning</u> when soiled Cleaning <u>and</u> disinfection between residents and after discharge 	Special procedures sometimes called carbolizing or terminal cleaning are regularly scheduled and also done before new resident admission.
Walls, blinds, curtains	Should be cleaned with a detergent based on a determined schedule and as splashes/visible soil occur	
Floors	 Thorough <u>cleaning</u> based on a determined schedule <u>Cleaning</u> when soiled <u>Cleaning</u> between residents and after discharge Damp mopping preferred 	Detergent is adequate in most areas. Blood/body fluid spills (see 7.0) should be cleaned up with disposable cloths followed by disinfection with a low-level disinfectant.
Carpets/Upholstery	 Where they exist, they should be vacuumed based on a determined schedule and shampooed as necessary Replace soiled carpet tiles with new clean tiles where carpet tile applications are used 	Carpeting and soft upholstery should be avoided in LTC settings as it cannot be effectively cleaned and disinfected
Toilets and Commodes	 Thorough <u>cleaning</u> based on a determined schedule <u>Cleaning</u> when soiled Clean between residents and after discharge Use a low-level disinfectant 	These items may be the source of enteric pathogens such as <i>C. difficile</i> and <i>Shigella</i> .

6.0 **Special Cleaning**

- 6.1 During an outbreak, thorough environmental <u>cleaning</u> and <u>disinfection</u> with a <u>facility approved disinfectant</u> that has demonstrated effectiveness against the specific organism is required.
- 6.2 More frequent <u>cleaning</u> in rooms is necessary when <u>Additional Precautions</u> are required.

7.0 Recommendations for Cleaning Blood or Body Fluid Spills

- 7.1 Assemble materials required for dealing with the spill prior to putting on personal protective equipment.
- 7.2 Inspect the area around the spill for any splatters or splashes
- 7.3 Restrict activity around the spill until the area has been cleaned and disinfected, and is completely dry.
- 7.4 Wear appropriate personal protective equipment for <u>cleaning</u> up a blood or body fluid spill. Gloves should be worn during the <u>cleaning</u> and disinfecting procedures. If the possibility of splashing exists, the worker should wear a face shield (or fluid resistant mask and eye protection) and gown. For large blood or body fluid spills, overalls, gowns or aprons, as well as boots or protective shoe covers should be worn. Personal protective equipment should be changed if torn or soiled, and always removed before leaving the location of the spill.
- 7.5 Use disposable towels to mop up as much of the spill as possible. Discard the towels in a plastic-lined waste receptacle.
- 7.6 Disinfect the entire spill area with a <u>facility approved disinfectant</u> and allow it to stand for the <u>contact time</u> recommended by the manufacturer.
- 7.7 Wipe up the area again using disposable towels and discard them into regular waste.
- 7.8 Remove gloves and other PPE and perform hand hygiene according to Routine Practices.
- 7.9 Care must be taken to avoid splashing or generating aerosols during the cleanup.

Operational Guideline Contact: WRHA LTC Manager of IP&C

LTC Manual Working Group approved	August 5, 2015
LTC ICP committee approved	September 3, 2015
LTC Directors of Care approved	October 20, 2015
LTC Leadership approved	October 29, 2015

8.0 **REFERENCES**:

- 8.1 Health Canada. <u>Infection Control Guidelines: Handwashing, Cleaning,</u>
 Disinfection and Sterilization in Health Care. CCDR 1998; 24S8:29-32.
- 8.2 PCH Program Operational Directive: Cleaning, Disinfecting or Reprocessing of Non Critical Reusable Resident Equipment/Items Approved October 30, 2008
- 8.3 Provincial Infectious Disease Advisory Committee, Best Practices for Environmental Cleaning for Prevention & Control of Infections, December 2009
- 8.4 Regional Policy: Cleaning of Non critical Reusable Equipment/Items Policy # 90.00.040 approved June 2007
- 8.5 Health Canada. Canadian Biosafety Standards and Guidelines (CBSG) First Edition, June 20, 2013; Ch. 16:16.2.1.3.
- 8.6 Health Canada: http://webprod.hc-sc.gc.ca/nhpid-bdipsn/pfReq.do?id=31&lang=eng