ENVIRONMENTAL CONTROLS

Effective environmental control provides a clean and healthy environment for residents. Contaminated equipment and a contaminated environment can be sources of infection to residents. Infection may result from organisms being picked up from a contaminated surface, object or waste and then transferred to a susceptible person, medical device, equipment or the hands of workers. Pets may also be a source of infection for residents.

Infection control strategies for environmental services include putting effective procedures in place, educating staff and selecting products based on their efficacy, acceptability, safety and cost.

CLEANING AND DISINFECTING

There are two types of cleaning: cleaning of the environmental surfaces (housekeeping) and cleaning of equipment and instruments (decontamination).

"Elbow Grease", the actual physical removal of organisms by scrubbing, is the most powerful element in both types of cleaning. When soil is left on a surface, the organisms are protected from contact with sterilants and disinfectants. Soil also inactivates the cleaning agents. Since soil includes a variety of ingredients, organic and inorganic, no single cleaning agent is effective in all instances.

PRINCIPLES FOR EFFECTIVE CLEANING

- Clean from least to most contaminated areas to prevent cross-contamination. Cross-contamination occurs when dirty items contact clean areas and re-contaminate the clean area.
- Clean from top to bottom.
- Remove loose dirt or debris before washing or mopping.
- Change cleaning cloths, sponges, and mop heads frequently. Dirty cloths can harbour micro-organisms. Never double dip cleaning cloths
- Change cleaning solutions frequently
- Avoid situations which allow organisms to multiply in cleaning equipment. i.e. don't store mops or buckets when they are wet.
- Avoid cleaning methods that generate aerosols. Do not shake cloths or mops
- Make solutions more effective by using warmer water.
- Do Not use trigger sprays as this can generate aerosols

PRINCIPLES FOR EFFECTIVE DISINFECTION

- the most important thing to remember for effective disinfection is to follow the manufacturers instructions
- always clean prior to disinfection. An item that has not been properly cleaned can not be assuredly disinfected

- Dilute solutions properly. Improperly diluted solutions are not effective.
- Ensure accelerated hydrogen peroxide cleaning solutions that are automatically dispensed and mixed with water are tested for accuracy with provided dipsticks and results recorded, with every pail
- Wash and rinse containers prior to refilling as they may become contaminated. Do not top up containers of disinfectants
- Do Not use spray bottles to apply disinfecting agents to furniture and equipment

Housekeeping documents daily in point of care-care planning software as each room is cleaned. High touch surfaces and bathrooms in antibiotic resistant organism rooms are to be cleaned and disinfection twice daily, and documented in point of care.

THREE LEVELS OF DISINFECTANTS

LOW LEVEL DISINFECTANTS are used where contamination with normal flora is likely and where the intent is to reduce disease-causing bacteria to a safe level. These disinfectants destroy bacteria, some fungi and viruses. They do not destroy tubercule bacilli or bacterial spores. Low-level disinfectants cannot be relied on to kill antibiotic resistant bacteria. Surfaces requiring low-level disinfection include:

Blood pressure cuffs
Stethoscopes
Bedpans
Crutches
Furniture
Food and eating utensils
Linen

INTERMEDIATE LEVEL DISINFECTANTS are used for items that contact intact skin and are considered to be semi-critical. They destroy bacteria, most fungi and viruses, tubercule bacilli, but not bacterial spores. Surfaces requiring intermediate level of disinfectants include:

Hydrotherapy beds
Thermometers
Electric razors
Following a large environmental blood spill

HIGH LEVEL DISINFECTANTS are meant for areas of high contamination and high risk of disease transmission. High-level disinfectants eliminate most or all viruses, bacteria (including tubercule bacilli) and fungi. Some spores are killed. High-level disinfectants should be used for (if disposable not used):

Respirotherapy equipment
Vaginal speculum
Ear syringes
Nasal speculum
Nebulizer cups

SAFE STORAGE AND HANDLING OF CLEANING AGENTS

Chemicals must be treated carefully. All chemicals must be labelled and stored separately from food processing areas. Chemicals should be used according to manufacturer's directions, and always stored according to WHMIS regulations.

PLEASE REFER TO PIDAC'S BEST PRACTICES FOR ENVIRONMENTAL CLEANING FOR PREVENTION AND CONTROL OF INFECTIONS IN ALL HEALTH CARE SETTINGS – 2ND EDITION

LINEN AND LAUNDERING

Soiled linen has been identified as a source of a large number of disease-causing organisms such as salmonella, hepatitis A and fungi. However, there is little risk of spreading infection if care and common sense are used when handling and treating soiled linen. Soiled linen should be handled as little as possible and with minimal agitation to prevent contamination of the air and persons who handle it. Likewise, hand-washing facilities should be readily available. Workers who handle linen at the bedside and in the laundry area need to be instructed regarding proper handling procedures and the importance of hand washing.

COLLECTING SOILED LINEN

To avoid organisms being spread throughout the resident care area:

- handle soiled linen with minimal shaking
- bag all soiled linen at the location where it was used
- contain linen at the source in closed leak proof bags. Double bag if the outside of the bag is visibly soiled or when leakage could be a problem
- don't pre-rinse or sort soiled linen in resident care areas
- wear gloves if hands are likely to come in contact with linen soiled with blood or body fluids or if resident's are on Contact Precautions

TRANSPORTATION

To avoid soiling of the environment and aerosols as linen moves through the building:

- use closed bags, covered carts
- clean all carts on a regular basis
- clean linen rooms regularly
- wear gloves if hands are likely to come in contact with linen soiled with blood or body fluids
- wash hands frequently

PROCESSING SOILED LINEN

To lower the chance of organisms being transferred to workers:

- Gown and gloves are to be worn handling and sorting all soiled linen
- handle gently
- keep sorting area separate from clean area
- exhaust air to outside of the building
- watch for sharps hidden in linen
- sort after washing
- wash hands frequently

WASHING LINEN

To ensure laundering eliminates organisms:

- do not overload the machines
- launder heavily soiled articles separately
- any items arriving in laundry tied in plastic bags for gross soiling should be soaked prior to washing; items soiled with vomitus/diarrhea are to be done in a bleach wash prior to regular wash
- wash at a temperature > 71 degrees C. for 25 minutes
- use fabric softener to prevent dermatitis

FOLDING, TRANSPORTING AND SORTING CLEAN LINEN

To avoid resoiling of linen:

- wash hands before handling clean linen
- handle clean linen as little as possible
- transport in a clean covered cart
- store in a clean area

PPE STORAGE & STEWARDSHIP

Various PPE is stored throughout the building in empty closets in vacant resident units. This includes procedure masks, N95 masks, gloves, gowns and eye protection. A master list of location and inventory counts are maintained in the main office. Supplies are audited weekly for expiry dates and need for replenishment orders. Registered Staff are responsible for the decision to place a resident in isolation and dispersing appropriate PPE to staff. Housekeeping staff routinely restock the PPE murals located throughout the Home.

WASTE

LEGAL REQUIREMENTS

The Ministry of the Environment, as well as Municipalities have regulations and/or by-laws governing the disposal of biohazardous and medical waste from health care facilities. These regulations or laws define which wastes are included, what is picked up and by whom, what requires special treatment and other issues.

RISK OF INFECTION FROM WASTE

The waste that is generally generated by a long term care home is not any more infective than residential waste. Transmission of infection through waste is almost always by direct contact. Within a facility, this may occur during collection, transportation or storage of wastes. Workers must therefore be fully trained in handling waste to avoid the possibility of infection being spread.

Proper Containers

Waste must be properly contained to protect residents, staff, visitors and the public against potential exposure to infectious organisms while it is being handled and stored.

Choose containers that will:

- suit the type of waste being generated
- resist tearing or breakage during collection, handling and storage
- be easy to clean and line with a plastic bag
- be leak proof
- protect the waste from insects and vermin

Special packaging or containers must be used to identify wastes, which require special handling and disposal.

Collection and Storage of Wastes

- Waste must be collected from resident care areas at least daily. It may be stored on a short tem basis (no more than 1 or 2 days, in a soiled utility room or other room dedicated for that purpose). Access to these areas should be limited to authorized workers.
- Take care to prevent splashing and wear appropriate PPE when pouring body fluids into a toilet
- When sealing plastic bags prevent the retention of air by carefully pressing the bag toward the opening while closing, being careful to direct escaping air away from your face/uniform
- Double bagging is required only when there is a risk of leaking
- Bags should be secured for disposal when no more than ¾ full

- Hold the bag away from the body during transport to prevent injury from sharp objects that may have been incorrectly discarded
- Waste, other than anatomical, cytotoxic, pharmaceutical and chemical is disposed of through recycling, landfill or decontamination then landfill
- Only human liquid blood or semi-liquid blood and blood products, items contaminated with blood or blood products that would release the liquid if compressed should be disposed of in the yellow Sharps/Biohazard containers located in the tub, shower, med carts and pharmacy. Soiled dressings, soiled alcohol swabs, used glucometer strips, etc. are to be disposed of in the general garbage
- Syringes, broken glass or other materials which are capable of causing punctures or cuts and which have come into contact with blood or body fluids, where the blood is visible, should be disposed of in the yellow Sharps/Biohazard containers
- Syringes that have had their needles disintegrated, the nubs bent, and that contain no visible blood may be disposed of in the general garbage
- BLOOD SPILL CLEAN-UP:
    - Appropriate PPE should be worn for cleaning up a blood spill. Gloves should be worn during the cleaning and decontamination procedures. If the possibility of splashing exists the worker should wear a face shield. PPE should be removed prior to leaving the location of the spill and hands washed/sanitized
    - The blood spill area must be cleaned or organic material (blood) before disinfection of the area is effective
    - Excess blood and fluid capable of transmitting blood-borne pathogens must be removed with disposable blue incontinent pads. Discard the blue pads into a plastic bag, then waste receptacle. The surface must be cleaned of obvious organic material before applying a disinfectant because germicides can be substantially inactivated by blood and other organic materials
    - The area must then be thoroughly cleaned with accelerated hydrogen peroxide, ensuring the appropriate contact time, as per the manufacturer, is met
- EMESIS CLEAN-UP:
    - Alert others by placing a Wet Floor Sign at area
    - Spread OASIS Absorbant Granules evenly over the spill (For small spills allow sufficient time for moisture to be absorbed and deodorizing to take place; For large spills granules should be dispensed on an as needed basis to look after any foul odours plus absorbing any odorous bearing liquids)
    - After 30-60 seconds, when the granules are dry, sweep up and discard in general garbage

VENTILATION

Many buildings have been built without windows that open to the outside air and must rely on mechanical ventilation to supply fresh air. Inadequate ventilation can lead to Sick Building Syndrome.

Adequate amounts of fresh air are required to ensure carbon dioxide levels are below 1000 ppm. At levels above this people may feel lethargic and experience headaches. Hazardous vapours and airborne germs can also be reduced by proper ventilation. It is important to ensure that all ventilation units are operating as they were designed. Duct cleaning will be scheduled for bi-annually.

PETS

Animals can provide comfort, confidence and company for residents of a long term care home. Yet, they can also pose a health threat by the very nature of the organisms that they carry. Cats can harbour parasites such as Toxoplasma gondi, or fungi such as ringworm, or viruses such as rabies. Dogs can carry roundworm, rabies, and ticks, which in turn harbour parasites and bacteria. Birds can carry Psittacosis. Good handling and hygiene practices can prevent infections from occurring.

CHOICE OF PETS

Pets most commonly found in long term care homes are cats, dogs and birds. Guinea pigs, hamsters and gerbils also make good pets.

Do not keep turtles, as salmonella is common among them and is easily spread to people. For the same reason chickens and ducks are not recommended.

PURCHASING

Buy all pets from reputable dealers. Isolate the animals from the residents for two weeks before letting the residents touch and handle them.

HEALTH

Annual rabies immunization is mandatory for all cats and dogs. Keep pets free of mites and ticks. Ensure that all pets' immunizations are up to date and deworming treatments have been given. Arrange for all dogs and cats to have an annual check-up, which includes immunization and a stool sample tested for roundworm. Have health and immunization records for each pet available at all times.

FOOD

Buy commercial brands of pet foods as they are usually processed sufficiently to be kept free of organisms that cause disease. Do not feed raw meats to pets, as they could pick up parasites in this manner.

CARE OF PETS

Cages should be cleaned out at least once per week to minimize the build up of animal stool and odour. When discarding the bedding material from the bottom of the cage, avoid disturbing the dust. Carefully place the waste material in a garbage bag and then tie the bag closed before placing in the waste container.

Keep cat litter boxes in an appropriately place, such as a soiled utility room. Remove soiled waste from the cat litter box daily. Do not allow incompetent residents to handle waste. Always wash hands thoroughly after handling cat litter.

LOCATION OF PETS

Section 41(d) of the Food Premises Regulations stipulates that no birds or animals, except Seeing Eye dogs, are allowed where food is prepared and served.

To avoid dust and droppings from birdcages, do not place the cages above areas where residents will be sitting. Use guards under the cages to limit the spread of grit.

DEATH OF A PET

If an animal dies, separate its cage from any other cages and clean and disinfect the entire area.

ANIMAL BITES

If a resident, visitor or worker is bitten by an animal:

- provide first aid by washing the affected area well with soap and water
- seek medical advice
- report the bite to the Health Department. The Public Health Inspector will advise you of any necessary quarantine requirements for the pet and any further follow up.

GUIDELINES FOR ANIMALS VISITING THE HOME

Hand Hygiene:

- All residents, visitors, and healthcare workers are required to practice hand hygiene both before and after each animal contact
- Animal handlers will utilize alcohol-based hand rub (ABHR) located throughout the building

FACILITY MANAGEMENT OF PROGRAMS FOR ANIMAL VISITATION

- The ICP shall provide support and facilitation to animal handlers visiting the home
- All pets that visit must be under the care of a veterinarian and have up-to-date vaccinations
- All pets must be under the control of a handler/owner ensuring animals do not jump up or paw at residents or staff members potentially causing scratching or skin tears
- Restrict animals that are not suitable for domestic companionship ie – reptiles, amphibians, etc
- A record of all pet visitation organizations visits/pets/health records will be maintained by the Activity department
- All animals entering the home must be on a leash at all times
- Pets should not be allowed in the dining room or kitchen, laundry
- Family bringing pets in are not to be visiting other residents in their rooms
- Take prompt action if an incident of biting or scratching by an animal occurs

DRAIN CLEANING **26.3.2025**

Antibiotic Resistant Organisms, specifically Extended-spectrum beta-lactamases (ESBL) and Carbapenamase-producing organisms (CPO), are increasingly seen in Canadian healthcare facilities.

Although caregiver hands and shared equipment remain the major sources of transmission, drains and plumbing in healthcare settings have been found to be colonized with ESBL and CPO, serving as an ongoing reservoir.

Drain Management

In order to reduce transmission of these ARO's from sink or showers drains, staff should be trained to dispose of body fluids, bathing water, leftover tube feeds in the toilet, not in the resident's sink or a hand hygiene sink. Appropriate PPE should be worn based on assessment of risk of splashes.

Proactive drain treatments will be used to reduce biofilm and the organisms within it, on a monthly basis using a **FOAM-It dispenser** and approved disinfectant. Foam chemical disinfection controls contact time as it adheres to the lining of drains and plumbing.

This will occur on the first of every month, near the end of the housekeeping shift. Appropriate PPE should be worn based on risk assessment for splashes, chemical exposure and organizational policy (gown, gloves, mask with face shield). This involves the drain in every resident bathroom sink, the shower drain and the tub drain.

PROCEDURE – Also see attached User Manual

1. Foam-It Container is kept in Housekeeping room on the shelf
2. Fill container with Diversey Rescue Gel to the "Fill" line only
3. Take container to first room. Ensure residents and PSWs are aware to not use room/equipment until cleaning is done and drain has been rinsed
4. Ensure gown, gloves and mask with faceshield are on
5. Pump top handle of unit until it is very difficult to continue pumping
6. Insert nozzle at end of tube into the opening of the drain
7. Pull trigger and allow unit to empty into the drain
8. Allow foam to sit in drain for a minimum of 5 minutes then rinse with hot water for 30 seconds
8. Move to next drain and repeat procedure – Pump – Insert-Trigger-Empty
9. Ensure every drain is done – every resident sink, tub room, shower room, sink in Utility Room
10. Refill container with Rescue Gel PRN as needed (1 container usually will do entire building)

11. When complete empty Foam-It Container into floor drain in Housekeeping room and rinse container and lid and hose/nozzle with hot water and allow to air dry on the shelf. When dry reassemble container for next use

DRAIN CLEANING COMPLETION SIGNATURE SHEET

Please add Year beside Month

DATE	Resident Rooms	Utility Room	Tub Room	Shower Room	Signature
January 1					
February 1					
March 1					
April 1					
May 1					
June 1					
July 1					
August 1					
Sept 1					
October 1					
November 1					
December 1					
January 1					
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