Best Practice Guideline	Cleaning and Disinfection (Low and Intermediate Level) of Reusable Devices
Date	January 9, 2024
Reviewed Date	
Revised Date	

Site Applicability

All Vancouver Coastal Health owned, operated and contracted LTC homes.

Scope of Practice

Basic skill for all VCH employees, contracted staff, service providers working in any capacity and volunteers.

Purpose

All non-critical shared equipment including therapeutic and interactive devices used between residents will need to be cleaned and disinfected using a hospital grade disinfectant compatible with the equipment. Level of disinfection should meet the requirements for the organisms suspected or confirmed. Low or Intermediate level disinfectants with either a norovirus, C. diff or *C. auris* kill claim may need to be considered. See Appendix A Commonly used Disinfectant Table.

Background

Equipment and devices shared between residents become vectors for transmission of microorganisms that can result in infections. Cleaning and disinfecting between uses reduces the risk of transmission and illness in residents and staff.

Equipment and Supplies

Hospital grade cleaning and disinfecting wipes with a Drug Identification Number (DIN) of the disinfectant

Guideline

Staff using the equipment or device is responsible for cleaning and disinfecting the equipment

Identify frequency of cleaning and disinfection

a. Clean and disinfect between use
b. Some items may require a schedule for cleaning

Select chemical specific for **Low- Level Disinfection** or **Intermediate-Level Disinfection***

(*has non-enveloped kill claim)

a. The level of disinfection selected is dependent on the organism suspected

b. Use manufacturer's instructions specific for each medical device/equipment
c. Ensure disinfectant is used prior to expiry date

Identify appropriate personal protective equipment (PPE) as per Safety Data Sheet (SDS) and point of care risk assessment (PCRA).

How to clean and disinfect medical device or equipment

1. The first application of disinfectant wipes ***cleans*** and the second application ***disinfects***
    a. Cleaning: Wipe from clean to soiled in a single motion using friction; repeat this step as necessary with a new wipe until all visible soil removed
    b. Disinfecting: Immediately apply the product solution and ensure the device remains wet with solution for the required contact time stated on the product container.
    c. The device must then be air dried for the appropriate contact time to achieve disinfection.

* Note: following the contact time, staff may choose to wipe down the device with a wet towel to remove streaks left behind from the cleaning and disinfectant wipes.

2. Inspect device
    a. Re-clean and disinfect if visibly soiled
    b. Remove from service any damaged, chipped, cracked or misaligned equipment and either dispose of or label and send for repair. Damaged equipment must be cleaned and disinfected prior to sending for repair
    c. Remove any equipment with missing parts
    d. Test equipment for function as identified in the manufacturer's instructions
    e. Report damaged equipment to manager
3. Label equipment after cleaned and disinfected
    a. Develop a process that differentiates cleaned and disinfected from soiled equipment
    b. Store device and equipment as clean in a designated clean area
        i. Examples include "Green Means Clean" or "I am clean"
4. For therapeutic devices that require laundering
    a. Transport used items to laundry facilities in a closed container; consider using a laundry bag.
    b. Launder items using the appropriate detergents, chemicals and water temperature.
    c. Staff to follow the Management of Linen BPG for laundering.
5. Therapeutic devices (Paros, shared or dedicated therapeutic pets)

Documentation

Site to develop item specific work instruction and store where staff have access.

See Appendix B Work Instruction

Definitions

Cleaning: The physical removal of foreign material – inorganic (e.g., dust, soil) or organic material (e.g., blood, secretions, excretions, microorganisms) from objects and surfaces. It is normally accomplished by manual or mechanical means using water with detergents or enzymatic products. Cleaning must be performed before high-level disinfection or sterilization.

Disinfectant: A chemical agent that kills most disease-producing microorganisms, but not necessarily bacterial spores. Disinfectants are applied only to inanimate objects. Some products combine a cleaner with a disinfectant.

Disinfection: A process that eliminates many or all-pathogenic microorganisms on inanimate objects, with the exception of bacterial spores. Medical devices must be cleaned thoroughly before effective disinfection can take place. There are three levels of disinfection; high, intermediate and low.

Drug Identification Number (DIN): In Canada, disinfectants are regulated as drugs under the Food and Drugs Act and Regulations. Disinfectant manufacturers shall obtain a drug identification number (DIN) from Health Canada prior to marketing, which ensures that labeling, supporting data have been provided, and that the product has undergone and passed a review of its formulation, labeling and instructions for use.

Intermediate level disinfection (ILD): A process capable of killing most vegetative bacteria, some viruses including non-enveloped (Norovirus), and some fungi. This class of disinfection cannot be relied on to kill microorganisms such as mycobacteria, including *Mycobacterium tuberculosis*, or bacterial spores. Level of disinfection required when processing non-critical medical devices and some environmental surfaces for Gastrointestinal Outbreaks.

Low-Level Disinfection (LLD): A process capable of killing most vegetative bacteria, some viruses, and some fungi. This class of disinfection cannot be relied on to kill microorganisms such as mycobacteria, including *Mycobacterium tuberculosis*, or bacterial spores. Level of disinfection required when processing non-critical medical devices and some environmental surfaces**.**

Manufacturer's instructions for use (MIFU): the written directions provided by the manufacturer or distributor of a product that contain the necessary information for the safe and effective use of the product.

Non-critical Medical Device: Equipment/device that either touches only intact skin (but not mucous membranes) or does not directly touch the client/patient/resident. Reprocessing of noncritical devices involves cleaning and may require low-level disinfection (e.g., blood pressure cuffs, O2 Sat, stethoscopes).

Paro: A therapeutic robot baby harp seal, intended to have a calming effect on and elicit emotional responses in residents in nursing homes, similar to animal-assisted therapy except using robots**.**

SDS: Safety Data Sheet contains information on the potential hazards and guidance on safe work with chemical products. SDS database found here.

Appendices

- Appendix A – Commonly used Disinfectants Table
- Appendix B – Work Instruction Template

References

B.C. Ministry of Health (2011). Best Practice Guidelines for Cleaning, Disinfection and Sterilization of Critical and Semi-critical Medical Devices in BC Health Authorities, December 2011

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