



Rehadapt Mounts: Cleaning and disinfection Guidelines

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1. Definitions

Noncritical Medical Device: Devices that either touch only intact skin (but not mucous membranes) or do not directly touch the client/patient/resident. Reprocessing of noncritical devices involves cleaning and may also require low-level disinfection (e.g., blood pressure cuffs, stethoscopes) [1, 2].

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. Cleaning must be performed before disinfection or sterilization [1].

Disinfection: A process that kills most disease-producing microorganisms. Disinfection does not destroy all bacterial spores. Medical devices must be cleaned thoroughly before effective disinfection can take place [1].

Low-Level Disinfection (LLD): A process capable of killing most vegetative bacteria, enveloped (lipid) viruses, and some fungi. This class of disinfection does not kill mycobacteria, including *Mycobacterium tuberculosis*, or bacterial spores. LLD is used for noncritical medical devices and some environmental surfaces [1].

2. Instructions

2.1. Considerations

- All Rehadapt devices fall into the noncritical device category according to Spaulding classification system [2]. This is due to the fact that they are only meant to be in contact with intact skin but not mucous membranes.
- As Rehadapt products are noncritical devices, cleaning is usually acceptable. However, when disinfection is required Low-Level Disinfection (LLD) is sufficient [1, 3].
- The device must always be cleaned prior to disinfection.
- The instructions for cleaning are defined in Section 2.2.
- The instructions for disinfecting are defined in Section 2.3.
- The recommended products used for cleaning and disinfecting are listed in Section 3.
- Rehadapt products must not be submersed as many components are hollow (e.g. tubes) and liquids can be trapped inside. Therefore, manual cleaning is preferred over mechanical cleaning.

2.2. Cleaning/Decontamination

- i. **Disassembling.** Disassemble the device following the assembly instructions in reverse order.
- ii. **Pre-cleaning.** If gross soil is visible, wipe the surfaces with a cloth dampened with tap water and remove the gross soil using tools such as brushes and cloths.
- iii. **Cleaning.** Spray every part with a detergent solution.
- iv. **Rinsing.** Rinse the surfaces thoroughly with water. Rinsing removes the residues that might react with the disinfectant.
- v. **Drying.** The device should be dried by hand with a clean, lint-free towel (disposable paper towels are recommended). Drying removes the residual water and prevents the dilution of the disinfectant¹.
- vi. **Reassembling.** Reassemble the device if disinfection is not required.

¹ Rehadapt's devices should be dried immediately after rinsing to prevent water spotting.

2.3. Disinfection

LLD consists in the following procedure:

- i. **Pre-cleaning.** Clean the device according to the instructions set in Section 2.2.
- ii. **Dilution and application.** Apply a Low-Level Disinfectant for hard surfaces (see Section 3.2). Follow the product label in regard to dilution².
- iii. **Exposure time.** The surfaces should remain wet for the exposure time included on the product label.
- iv. **Wiping.** Wipe dry with paper towels or disposable cloths. Air drying is not recommended when the disinfectant is not a alcohol solution.
- v. **Reassembling.** Reassemble the device according to its assembly instructions.

² The disinfectant may be applied by spraying or wiping with a single-use disposable towel impregnated with a disinfectant.

3. Recommended products

3.1. Considerations

- Always follow product labels for use-dilution and time of exposure.

3.2. Cleaning detergent

- Enzymatic cleaners
- Detergents
- 0.5% Accelerated hydrogen peroxide [3]

3.3. Disinfectant

The recommended disinfectant is 70% alcohol wipes for hard surfaces [3]. For hard to reach edges and corners (e.g. wheels) alcohol solutions can be poured and let to air-dry. However, as mentioned in Section 2.2, drying the devices with a paper towel is always recommended to prevent spotting.

Despite the recommendation of alcohol, any Hospital Grade Disinfectant [4] is usually appropriate to disinfect Rehadapt mounts. Other possible disinfectants include:

- 60-90%³ Alcohol (ethanol or isopropanol) [1, 6, 7]
- 3% Hydrogen peroxide [1]
- 0.5% Accelerated hydrogen peroxide [4, 1]
- Hypochlorite (1000 ppm) [1]
- Quaternary ammonium compounds – QUATs (e.g. Zephirin, CDQ, A-3) [6, 1]
- Phenolics (should not be used in nurseries) [6, 1]
- Diluted sodium hypochlorite (e.g. bleach) [6, 1]

³ Concentrations of 70% are recommended. Higher concentrations evaporate too quickly and lower concentrations are not as effective [7].

References

- [1] NHS Wirral, "Cleaning and Disinfection Policy," NHS, 2001.
- [2] BC Ministry of Health, "Best Practice Guidelines For Cleaning, Disinfection and Sterilization of Critical and Semi-critical Medical Devices," 2011.
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- [4] Diversey, "Oxivir 1 Wipes," 2018. [Online]. Available: <http://solutionsdesignedforhealthcare.com/solutions/products/disinfectants/oxivir-1-wipes>.
- [5] Shore Health System, "Cleaning Environment, Patient Equipment and Medical Devices," University of Maryland Medical System, 2011.
- [6] Environmental Health & Safety - University of Colorado, "Disinfectants and Sterilization Methods," 2008. [Online]. Available: <https://ehs.colorado.edu/resources/disinfectants-and-sterilization-methods/>.
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