

## Provincial Infectious Diseases Advisory Committee (PIDAC) Best Practices for Cleaning, Disinfection, and Sterilization In All Health Care Settings

### PIDAC

#### ABSTRACT

This document was developed by the Provincial Infectious Diseases Advisory Committee (PIDAC) and reviewed and approved by the Ministry of Health and Long-Term Care. This document is intended for health care providers to ensure that the critical elements and methods of decontamination, disinfection and sterilization are incorporated into health care facility procedures. The document describes essential elements and methods in the safe handling, transportation and biological decontamination of contaminated medical equipment / devices. The best practices for reprocessing medical equipment set out in this document should be practiced in all settings where care is provided, across the continuum of health care. This includes settings where emergency care is provided, hospitals, long-term care homes, outpatient clinics, community health centers and clinics, physician offices, dental offices, offices of allied health professionals, public health and home health care.

#### Summary of Key Findings with respect to Infection Control

1. All reprocessing of medical equipment / devices, regardless of source must meet this guideline whether the equipment is purchased, loaned, physician /practitioner-owned, used for research or obtained by any other means, and regardless of where reprocessing occurs.
2. Failure to use disinfectant products or processes

appropriately has repeatedly been associated with the transmission of healthcare associated infections.

3. 0.5% Accelerated Hydrogen Peroxide has been listed as an approved cleaner
4. 0.5% Accelerated Hydrogen Peroxide has been listed as an approved disinfectant for Low Level Disinfection for Non-Critical devices.
5. 2% Accelerated Hydrogen peroxide has been listed as an approved disinfectant for High Level Disinfection for Semi-Critical devices
6. 2% Accelerated Hydrogen Peroxide has been listed as an approved disinfectant for Sterilization of Critical devices
7. 7% Accelerated Hydrogen Peroxide has been listed as an approved disinfectant for Sterilization of Critical devices.

#### Summary of Revisions with Respect to Infection Control and Cleaning & Disinfection

1. Routine Practices: This section has expanded to include guidelines for the preprocessing of all reusable medical equipment/devices and how they should be reprocessed using procedures that are effective against all human pathogens, including bloodborne pathogens. The importance of this section is important so that all activities included in the reprocessing of medical equipment/devices will be based on the consistent

application of Routine Practices and Hand Hygiene.

2. Manual Cleaning: This section was expanded to include the manual cleaning of heavily soiled equipment/devices before mechanical cleaning. This addition is important as many disinfectants are inactivated in the presence of organic soils. In order to prevent the transmission of infections organic soils must be removed during disinfection and sterilization.

3. Sterilization of Reusable Medical Equipment and Devices: This section was expanded to include that the preferred method for decontamination of heat-resistant medical equipment/devices is dynamic air removal steam sterilization, however for those devices that cannot withstand steam sterilization, chemical sterilization shall be used. Also added to this section was the recommendation of AHPs chemical sterilant, which is important for the continued acceptance of AHP in device reprocessing.

4. Unacceptable Methods of Disinfection and Sterilization: The use of a chemiclave and formaldehyde solution is no longer considered to be an acceptable method of disinfection/sterilization. This statement is an important addition as formaldehyde is carcinogenic in which the toxicity profile can potentially impact user compliance. It essential for facilities to be aware of disinfection and sterilization practices that are no longer considered acceptable to ensure standard practices are being met.

## CONCLUSION

AHP has gained a reputation for being the most effective and safest disinfection product on the market. The addition of AHP into this document provides support that can help to convert healthcare facilities to AHP that are currently using quats, phenols, orthophthaladehyde or glutaraldehydes.