CDC Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008

ABSTRACT

This document was developed by HICPAC (formerly the Hospital Infection Control Practices Advisory Committee) and reviewed and approved by the Centers for Disease Control (CDC). The Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008, presents evidence-based recommendations on the preferred methods for cleaning, disinfection and sterilization of patient care medical devices and for cleaning and disinfecting the healthcare environment. The document supersedes the relevant sections contained in the 1985 Centers for Disease Control (CDC) Guideline for hand washing and Environmental Control. Furthermore, this is the first CDC Infection Control Guidelines that includes information on Accelerated Hydrogen Peroxide® (AHP®), highlighting the advantages of AHO technology and its rapid contact time when compared to traditional disinfectant chemistries, legitimizing the use of AHP®.

BAKGROUND

In addition to updated recommendations, new topics addressed in this guideline include:

1. Inactivation of antibiotic-resistant bacteria, bioterrorist agents, emerging pathogens and bloodborne pathogens

2. Toxicologic, environmental, and occupational concerns associated with disinfection and sterilization practices

3. Disinfection of patient-care equipment used in ambulatory settings and home care

4. New sterilization processes

5. Disinfection of complex medical instruments

SUMMARY OF KEY RECOMMENDATIONS WITH RESPECT TO CLEANING & DISINFECTION

Category Definitions: Category 1B – Strongly recommended for implementation and supported by some experimental, clinical, or epidemiologic studies, and by a strong theoretical rationale.

Category IC – Required by state or federal regulations. Because of state differences, readers should not assume that the absence of an IC recommendation implies the absence of state regulations.

Category II – Suggested for implementation and supported by suggestive clinical or epidemiologic studies by a theoretical rationale.

1. In hospitals, perform most cleaning, disinfection, and sterilization of patient-care devices in a central processing department in order to more easily control quality. Category II

2. Perform low-level disinfection for noncritical patient-care surfaces (e.g. bed rails, over-the-bed table) and equipment (e.g. blood pressure cuff) that touch intact skin. Category II

3. Disinfect noncritical medical devices (e.g. blood pressure cuff) with an EPA-registered hospital disinfectant using the label's safety precautions and use directions. However, multiple scientific studies have demonstrated the efficacy of hospital disinfectants

against pathogens with a contact time of at least 1 minute. By law, all applicable label instructions on EPA-registered products must be followed. If the user selects exposure conditions that differ from those on the EPA-registered product label, the user assumes liability from any injuries resulting from off-label use and is potentially subject to enforcement action under FIFRA. Category 1B.

4. Ensure that, at a minimum, non-critical patient-care devices are disinfected when visibly soiled and on a regular basis (such as after use on each patient or once daily or once weekly). Category II. 5. Clean housekeeping surfaces (e.g. floors, tabletops) on a regular basis, when spills occur, and when these surfaces are visibly soiled. Category II. 6. Disinfect (or clean) environmental surfaces on a regular basis (e.g. daily, three times per week) and when surfaces are visibly soiled. Category II

7. Follow manufacturers' instructions for proper use of disinfecting (or detergent) products – such as recommended use-dilution, material compatibility, storage, shelf-life, and safe use and disposal. Category II.

8. Prepare disinfecting (or detergent) solutions as needed and replace these with fresh solution frequently (e.g. replace floor mopping solution every three patient rooms, change no less often than at 60-minute intervals), according to the facility's policy. Category 1B

9. Use a one-step process and an EPA-registered hospital disinfectant designed for housekeeping purposes in patient care areas where a. Uncertainty exists about the nature of the soil on the surfaces (e.g. blood or body fluid contamination versus routine dust or dirt, or b. Uncertainty exists about the presence of multidrug resistant organisms on such surfaces. Detergent and water are adequate for cleaning surfaces in nonpatient-care areas (e.g. administrative offices). Category II

11. Do not use disinfectants to clean infant bassinets and incubators while these items are occupied. If disinfectants (e.g. phenolics) are used for the terminal cleaning of infant bassinets and incubators, thoroughly rinse the surfaces of these items with water and dry them before these items are reused. Category IB.

12. For site decontamination of spills of blood or other potentially infectious materials implement the following procedures. Use protective gloves and other PPE appropriate for this task. Disinfect areas contaminated with blood spills using an EPA-registered tuberculocidal agent, a registered germicide on the EPA Lists D and E (e.g. products with specific label claims for HIV or HBV or freshly diluted hypochlorite solution). Category II, IC.

13. In Dentistry offices, noncritical contact surfaces, such as uncovered operatory surfaces (e.g. countertops, switches, light handles), should be barrier-protected or disinfected between patients with an intermediate disinfectant (e.g. EPA-registered hospital disinfectant with a tuberculocidal claim) or low-level disinfectant (e.g. EPA-registered hospital disinfectant with HIV and HBV claim). Category IB.

14. To minimize microbial contamination of disinfectants the following control measures should be implemented

a. Prepare the disinfectant correctly to achieve the manufacturer's recommended use-dilution, and

b. Prevent common sources of extrinsic contamination of germicides (e.g. container contamination or surface contamination of the healthcare environment where the germicides are prepared and/or used). Category II

CONCLUSION

This document will be an excellent tool to have in your arsenal of support for the use of the AHP® Technology. Not only does the document legitimize the use of AHP® but it includes a concise summary of best practices that covers cleaning and disinfection of environmental surfaces and noncritical devices as well as occupational

health and safety and environmental issues. Many of these sections fall directly into the advantages of choosing AHP® over other competitive chemistries. Review the summary and include some of the points into your discussions with purchasing, infection control practitioners, and occupational health and safety.

IMPLICATIONS FOR AHP®

AHP® was specifically mentioned in this guideline as an effective disinfectant alternative to other technologies. As the healthcare industry continues to push for greener and less toxic cleaners and disinfectants, AHP® will continue to be recognized as an industry leader that will be supported by its pillars of strength.

AHP® Disinfectants are One-Step Disinfectant Cleaners

• AHP® has proven cleaning efficiency resulting in lower costs and faster results as well as added confidence that disinfection can occur

AHP® Disinfectants provide the perfect balance between safety and efficacy

• AHP® is designed to be easier on employees and occupants resulting in protocol compliance

• AHP® provides a HMIS rating of "0", meaning it has been proven to be non-toxic, non-irritating to eyes and skin and non-skin sensitizing and does not require the use of personal protective equipment to handle

AHP® Disinfectants are environmentally sustainable

• AHP®'s active ingredient, hydrogen peroxide, breaks down into water and oxygen leaving no active residues • AHP® is formulated to ensure that it will not negatively impact indoor air quality and has been approved as an asthma-safe product AHP® Disinfectants have realistic contact times • Short contact times ensure surfaces remain wet for the required contact time, providing comfort and confidence that disinfection has occurred • AHP® has been proven through peer reviewed studies to reduce HAIs

AHP® Disinfectants are compatible

• AHP® formulations are tested to ensure compatibility that preserve your investments in equipment, furniture and building surfaces by reducing corrosion and wear