

# DISINFECTION OF SHARED MEDICAL EQUIPMENT

## COMPLYING WITH CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS) INTERPRETIVE GUIDELINES FOR LONG TERM CARE TAG F441

### ISSUE

Patient-to-patient transmission of Hepatitis B (HBV) and Hepatitis C (HCV) during the delivery of healthcare services has been increasingly reported in the US<sup>i</sup>. Persons receiving diabetes care in long term care facilities have been identified as one risk group due to multiple persons undergoing daily percutaneous exposures during blood glucose monitoring, and the sharing of blood glucose meters between multiple residents. As highlighted by CDC (MMWR, March 11, 2005/54(09); 220-223) in the report "Transmission of Hepatitis B Virus Among Persons Undergoing Blood Glucose Monitoring in Long-Term-Care Facilities—Mississippi, North Carolina, and Los Angeles County, California, 2003-2004, transmission of HBV among residents with diabetes occurred despite use of single-use fingerstick devices or insulin medical vials. Indirect transmission of HBV in healthcare settings through contaminated environmental surfaces or inadequately disinfected equipment has been reported with other health-care procedures, such as dialysis.

### UNDERSTANDING CMS TAG F441

Despite long-standing prevention recommendations, outbreaks of HBV infection continue to be reported in long term care settings. Improving infection prevention and control, oversight, and regulatory enforcement in long term care is an increasing public health priority for both CMS and state health departments. Lack of compliance with these regulations can result in facilities facing penalties based on the severity of the citation. An example of an Immediate Jeopardy citation as described by the CMS Interpretive Guidelines for Long-Term Care Facilities, Tag F441 is the practice of not cleaning and disinfecting glucometers between every use and re-using glucometer lancets. This creates an Immediate Jeopardy to resident health by potentially exposing residents to the spread of blood borne infections.

As stated in the CMS Tag F441 document, "Reducing and/or preventing infections through indirect contact requires the decontamination (i.e., cleaning, sanitizing, or disinfecting an object to render it safe for handling and disposal) of resident equipment, medical devices, and the environment. Alternatively, the facility may also consider using single-use disposable devices. The choice of decontamination method depends on the risk of infection to the resident coming into contact with equipment or medical devices."<sup>ii</sup>

### HOW IS THIS BEST ACCOMPLISHED?

The Centers for Disease Control and Prevention (CDC) has adopted the Spaulding classification system that identifies three risk levels associated with medical and surgical instruments: critical, semi-critical and non-critical. Non-critical items (e.g., stethoscopes, over-bed tables, blood pressure cuffs) are defined as those that come into contact with intact skin or do not contact the resident/patient. They require low level disinfection with an EPA registered disinfectant detergent or germicide that is labeled for health care settings. Blood glucose meter devices fall into the non-critical category. These devices do come into contact with intact skin and do not make direct contact with the resident, however a contaminated device may be a source of transmission of bloodborne pathogens and other microorganisms to the next resident/patient if not adequately cleaned and disinfected.

### CHOOSING THE RIGHT SOLUTION

Choosing the most appropriate disinfectant product is a critical task in the prevention of transmission of healthcare associated infections. To simplify the task, follow the steps outlined below:

1. Select a product that is EPA registered as a healthcare disinfectant, and is effective against the bloodborne pathogens HBV, HCV and HIV. A low level or intermediate level disinfectant is ideal for non-critical devices.
2. Select a product that does not require mixing to form a dilution, and is easy to use on the devices and surfaces that need disinfection. Pre-moistened, pre-mixed products such as impregnated germicidal wipes reduce risk of mixing errors and provide a convenient method of delivery for healthcare staff.
3. Select a product that achieves disinfection with a quick contact time. This is especially important for devices that are shared between residents as rapid turnover is preferred for healthcare worker time efficiency.
4. Select a product that may be used on all high touch surfaces and is compatible with most devices and items. This is ideal for a comprehensive infection prevention program for environmental disinfection. A second product may be needed for situational reasons such as a bleach solution for ongoing nosocomial *C. difficile* outbreaks if front-line prevention efforts are unsuccessful.
5. Select a product that will be most acceptable for use by the healthcare workers and least disruptive to the residents' daily activities. Choosing a product with the necessary efficacy claims will facilitate this process.
6. Select a product that provides manufacturer support and training on an ongoing basis in order to comply with existing regulatory standards. Working with an established infection prevention industry partner that provides access to educational materials and innovative programs is key to healthcare worker safety and an ongoing successful disinfection program.



## IMPLEMENTATION

In order to solidify a successful Infection Prevention and Control program in Long Term Care Settings, clinicians must fully understand the CMS Interpretive Guidelines for Long Term Care Facilities (Tag F441), and how it applies to their infection prevention program. The next step is assessment of the facility's current protocols to address process improvement. Industry Partners such as the Association for Professionals in Infection Control and Epidemiology (APIC) are great sources of scientific knowledge and development of key opinion leader relationships and for peer networking.

**Professional Disposables International, Inc. has been a long standing infection prevention partner, and stands ready to assist healthcare facilities in their Targeting Zero Healthcare Associated Infections campaigns.**

## THE RIGHT SOLUTION

### EPA-Registered, Hospital-Grade Disinfectant Wipes

#### SUPER SANI-CLOTH®

**Germicidal Disposable Wipe:** Bactericidal, Virucidal\*, Tuberculocidal

- High alcohol formula (55% alcohol)
- **\*KILLS HBV, HCV, HIV, PANDEMIC 2009 INFLUENZA A (H1N1) VIRUS & MRSA IN 2 MINUTES**
- Tested effective against 26 microorganisms
- Kills bacteria and viruses including Vancomycin-resistant *Enterococcus faecalis* (VRE), *Escherichia coli* (E. coli), *Acinetobacter baumannii*, *Campylobacter jejuni*, *Mycobacterium bovis* BCG (Tuberculosis), Influenza A2/Hong Kong, Hepatitis B, Hepatitis C, Respiratory Syncytial Virus (RSV)
- Disinfects hard, non-porous surfaces and equipment
- EPA Registration #9480-4, List D: EPA's Registered Antimicrobial Products Effective Against Human HIV-1 and Hepatitis B Virus & List E: EPA's Registered Antimicrobial Products Effective Against *Mycobacterium tuberculosis*, Human HIV-1 and Hepatitis B



REORDER #	PACKING	WIPE SIZE
<b>Q55172</b>	160/can, 12 cans/case	Large
<b>H04082</b>	50/box, 10 boxes/case	Large
<b>Q86984</b>	65/can, 6 cans/case	Extra-Large
<b>U87295</b>	50/box, 3 boxes/case	Extra-Large

#### SANI-CLOTH® PLUS

**Germicidal Disposable Cloth:** Bactericidal, Virucidal, Tuberculocidal

- Low alcohol formula (14.85% alcohol)
- **KILLS HBV, HCV, HIV, PANDEMIC 2009 INFLUENZA A (H1N1) VIRUS & MRSA IN 3 MINUTES**
- Tested effective against 15 microorganisms
- Kills bacteria and viruses including Vancomycin-resistant *Enterococcus faecalis* (VRE), *Escherichia coli* (E. coli), *Salmonella enterica*, *Campylobacter jejuni*, *Mycobacterium bovis* BCG (Tuberculosis), Influenza A2/Hong Kong, Hepatitis B, Hepatitis C, Respiratory Syncytial Virus (RSV)
- Disinfects hard, non-porous surfaces and equipment
- EPA Registration #9480-6, List D: EPA's Registered Antimicrobial Products Effective Against Human HIV-1 and Hepatitis B Virus & List E: EPA's Registered Antimicrobial Products Effective Against *Mycobacterium tuberculosis*, Human HIV-1 and Hepatitis B



REORDER #	PACKING	WIPE SIZE
<b>Q89072</b>	160/can, 12 cans/case	Large
<b>H54082</b>	50/box, 10 boxes/case	Large
<b>Q85084</b>	65/can, 6 cans/case	Extra-Large
<b>U36495</b>	50/box, 3 boxes/case	Extra-Large

## PDI® INFECTION PREVENTION PAK™

### MOBILE COMPLIANCE ACCESSORY TO EASILY FACILITATE THE DISINFECTION PROCESS

- An on-the-person belt pack to accommodate Sani-Cloth® individual packet products and small Personal Protective Equipment such as gloves and masks.
- Promotes usage and compliance with Joint Commission National Patient Safety Goals and Elements of Performance



P611WS / P711WS  
PDI® Infection Prevention Pak™

<sup>1</sup>Thompson et al. Nonhospital health care-associated hepatitis B and C virus transmission: United States, 1998–2008. *AIM* 2009;150:33-39

<sup>2</sup>CMS Manual. Interpretive Guidelines for Long-Term Care Facilities Tag F441. Available at: <http://www.cms.hhs.gov/transmittals/downloads/R55SOMA.pdf>. Accessed February 17, 2010

\* Always check with equipment manufacturer for recommended disinfecting/cleaning chemicals.

