

PROCESSING AND HANDLING OF CLEANING MATERIALS FOR HEALTHCARE

Jan Eudy, Corporate Quality Assurance Manager, Cintas Corporation

The Center for Disease Control (CDC) data shows current nosocomial or hospital-acquired infections in the United States alone afflict almost 2 million patients and kill approximately 100,000 people annually, more than diabetes, influenza and pneumonia. Next year, Americans will be able to check to see how their hospitals or medical facilities fare when it comes to preventing nosocomial or hospital-acquired infections. Health and Human Services (HHS) will implement the Consumer's Union Safe Patients project which will require hospitals to collect and report data about hospital-acquired infections. Lisa McGiffert, director of the project said, "Making infection rates public is a powerful motivator for hospitals to improve care and keep patients safe."

Since 1904, it has been known that floors are the most contaminated surface in a hospital or other healthcare environment such as doctor or dental offices, nursing homes, assisted-living facilities, surgical centers and clinics. The floors and other surfaces in the healthcare facilities such as door knobs, tables, telephones and monitoring equipment are some of the key sources of nosocomial infections or hospital-acquired infections. Therefore, a comprehensive program to minimize and eventually eliminate the risk of nosocomial or hospital-acquired infections is typically developed by the healthcare's infection control team.

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) mandates and audits these risk management infection control programs to assure the healthcare facility remains financially solvent, delivers the required quality of service to the community and maintains local clientele respect and reputation.

On January 1, 2010 Medicare began denying reimbursement for hospital-acquired infections which currently occurs at a rate of 5-10% in many hospitals. Whereas MRSA (*Methicillin Resistant Staph aureus*) is more easily identified, treated and quarantined, other causative microorganisms such as *Clostridium difficile* are not. *Clostridium difficile* is one of the least susceptible microorganisms to disinfectants commonly used in healthcare facilities. Typical sources of infectious microorganisms are:

- Patient to patient
- Employee to patient
- Patient rooms and associated hospital environment
- Visitors and family of patients
- Gifts (flowers, etc.) to patients – deliveries to patient rooms

Since patients are typically in a compromised state with diminished immune function, the incidence of acquiring an infectious agent is increased.

A comprehensive infection control program addresses patient, visitor and healthcare personnel travel through all healthcare environments such as patient rooms, cafeteria, X-

ray, ER, Lab, Admissions, etc. Any improvement of general cleanliness of these areas will improve the efficacy of the infection control program and have a positive impact on patients, visitors and healthcare personnel.

Cleaning and disinfecting all environments of a healthcare facility requires the commitment of everyone that enters the doors of the healthcare facility (i.e. patients, visitors, and healthcare personnel) to minimize the infectious load on all surfaces. Many non-symptomatic carriers do not know they have a disease or are even spreading microorganisms.

Healthcare personnel, patient and visitor education programs emphasize that the healthcare team is doing everything to keep patients safe and requires continuous cooperation from all in maintaining a robust infection control program. Cintas' turn-key microfiber program focuses on the following critical areas: educating housekeeping staff in the correct use of microfiber cleaning products and widely accepted best practices for terminal room cleanings, proper use of personal protective equipment (PPE) and ergonomically designed handles and buckets to reduce stress injuries. The patients and healthcare personnel appreciate the Cintas microfiber cleaning system because it is more efficient and less interfering than alternative methods.

Controlled studies show the microfiber mop and wiper system eliminates over 99% of microorganisms on surfaces and is superior to cotton string mops in the efficacy of cleaning and disinfecting floors and surfaces. The microfiber mop and wiper system supplied by Cintas Corporation to hospitals absorbs and applies the correct amount of disinfectant, is easy to use by housekeeping staff, and is economical.

The ease of use of the Cintas microfiber mop and wiper system and reduced liquid on hospital floors will improve hospital employee health and safety by reducing the numbers of slips, trips and falls due to wet floors and repetitive motion injuries from cleaning with heavy cotton, string mops that require buckets with wringers. The soiled microfiber mop is changed after every room to eliminate the possibility of cross-contamination and placed in a rigid, closed, and locked transportation container supplied by Cintas.

Recently, healthcare facilities have begun to outsource functions such as laboratory, x-ray and laundry services that previously were performed in-house. This integration of the Cintas comprehensive healthcare solution and healthcare housekeeping is designed to disinfect all areas of the healthcare facility which will improve the aesthetic appearance and eliminate odors within the facility. The Cintas microfiber mop and wiper system and laundry service reduces the healthcare facility's on-premise laundry workload as well as their water, chemical and energy consumption and costs.

With this system, Cintas becomes a partner with the healthcare infection control team. Cintas Corporation is well known for its high quality service and solutions to a variety of industries. The healthcare housekeeping cleaning solution begins with a dialog between Cintas and the healthcare infection control team. The infection control team reviews the

current infection control measures and Cintas provides the answers and solutions to enhance the current program.

Cintas has implemented and maintains a closed loop solution that includes the transportation of the mops to and from the hospital in rigid, sealed, tamper-proof containers and automated linear process laundering of batch lots with identification and traceability throughout the laundry process that meets or exceeds the Healthcare Laundry Accreditation Council's Standard for Processing Reusable Textiles for Use in Healthcare Facilities and Guidelines for Environmental Infection Control in Health-Care Facilities – Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HIPAC).

The soiled mops and wipers are transported directly to the Cintas facility in Cintas owned and dedicated trucks operated by a trained, knowledgeable Service Sales Representative. The confidential and proprietary wash formula used is CDC recommended, a ladder-logic, computer controlled, automated procedure that is equipped with visual and/or audible alarms if any specification of the wash formula is not achieved. The automated, computer controlled drying process reduces all moisture from the mops and wipers completing the decontamination process. The cleaned, dried mops are unloaded from the dryers into a clean environment that is segregated from the soiled area by a concrete wall therefore minimizing any risk of cross-contamination. The clean mops and wipers are visually inspected and are packaged and returned to the customer in the cleaned and sanitized rigid, sealed, tamper-proof transportation containers. Written procedures address every step of the laundry and delivery process. Cintas Partners are trained to these written procedures and the healthcare industry guidelines. Documented preventive and corrective maintenance programs for washers and dryers assure that the automated, computer controlled laundry process remains within industry specifications. An active pest control program inside and outside of the laundry protects the product from cross-contamination with pests. Periodic internal and customer audits verify the implementation and maintenance of this closed loop program at the Cintas industrial laundry and assure compliance with contracted services and solutions.

As an assurance of the continuing partnership in this program, the Cintas Service Manager meets regularly with the healthcare infection team to review all aspects of the program. All written and oral correspondence is recorded electronically in the Cintas Customer Request System. Cintas welcomes the healthcare infection team to visit and verify the implemented program at the Cintas facility during routine business hours.

References

Accreditation Standards for Processing Reusable Textiles for Use in Healthcare Facilities, April 2006, The Healthcare Laundry Accreditation Council

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