



Best Practices: Reducing the Risk of Healthcare Associated Infections (HAIs) Through Effective Environmental Cleaning Processes

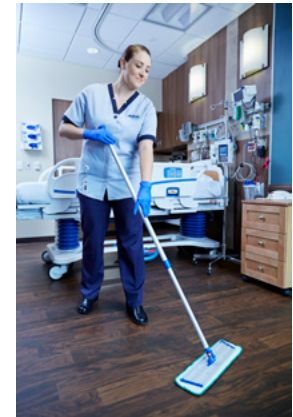
March 30, 2015
By Gary Pollack

Best Practices: Reducing the Risk of Healthcare Associated Infections (HAIs) Through Effective Environmental Cleaning Processes

By Gary Pollack

Hospitals should be a safe haven for healing, not a breeding ground for infection. Yet evidence suggests environmental contamination leads to the development of HAIs. To prevent infection and improve patient safety, stringent cleaning and testing of cleaned surfaces by trained and supervised staff is critical. **Learn from ABM the latest environmental services best practices.**

The healthcare physical environment plays a critical role in the transmission of disease causing germs. These can include methicillin-resistant *Staphylococcus aureus* (MRSA) Vancomycin-resistant *Enterococcus* (VRE), *Clostridium difficile*, carbapenem-resistant *Enterobacteriaceae* (CRE), norovirus and others. Research published during the past few years demonstrates the critical importance of effective environmental cleaning along with appropriate disinfection practices in breaking the chain of infection transmission in the healthcare setting.⁽¹⁻³⁾ The reality of the research is that lapses in cleaning and disinfection processes used routinely in healthcare have been identified. In fact, multiple studies have shown that less than 50 percent of hospital room surfaces tested were cleaned effectively upon terminal room cleaning, despite having the appearance of being cleaned and prepared for the next patient admission.⁽⁴⁻⁶⁾



Never before has the importance of the role of the Environmental Service staff been recognized in healthcare as today. No longer is “hotel clean” acceptable in the healthcare environment. In December 2010, the CDC launched a new expectation of evaluating the effectiveness of environmental cleaning in the healthcare arena with the publication of the “Options for Evaluating Environmental Cleaning.” As leaders in the healthcare environmental services profession, we are called upon to redefine what the “norm” of daily cleaning of patient rooms should be. The good news is that in the intervention studies conducted in numerous hospitals, it has been shown that providing environmental service staff with feedback about the results of such monitoring and educating them about the importance of their activities has led to significant improvements in the proportion of surfaces that are cleaned by the front line staff.

With the widely reported outbreak of the “superbug” bacteria CRE at the National Institute of Health in Baltimore in 2011, it became increasingly clear to all of us working in healthcare that despite environmental cleaning, the problem of persistent contamination of healthcare surfaces with invisible pathogens was one that we all shared across the country.

Our goal should be to reduce the environmental bioburden in patient care areas. This reduction in the count of invisible



organisms on patient care surfaces is the critical key to reducing the HAI risk from environmental pathogens to patients. Key to reducing the risk of disease transmission is to reduce the number of environmental organisms and promoting enhanced hand hygiene opportunities for healthcare workers and patients.

What are the best practice recommendations for environmental surface monitoring as we move forward?

The first step is the continuation of using the “visual inspection” at the point of service and supplementing it with new technology such as fluorescent marking or ATP measuring devices. These additional tools utilized by the EVS supervisors and Infection Preventionists are quickly becoming the gold standard in the industry. These enhancements allow the EVS supervisors the ability to evaluate how effective the cleaning practices of the front line staff are in the removal of contaminants on healthcare surfaces. Providing this feedback to the frontline staff can lead to improved effectiveness of cleaning practices.

Future considerations for improving the cleaning efficacy of the EVS staff include enhancing the fundamental cleaning disinfection practices with no-touch decontamination technology such as Ultra Violet Light and Hydrogen Peroxide Vapor processes. The infection prevention experts recommend that this type of cutting edge technology be considered when challenges with environmental pathogens continue despite adherence to the regular processes of the environmental cleaning program.



Quality EVS Programs include:

- Employing a workforce of highly trained and competent Environmental Service managers, supervisors and front line staff.
- Assure that your program is providing effective surface cleaning and disinfection. This includes providing staff with the appropriate tools for the appropriate job including microfiber technology and use of tools to measure cleanliness of high-touch surfaces such as fluorescent marking gel or ATP technology.
- Following the recommendations of the Centers for Disease Control and Prevention (CDC) in the “Options for Evaluating Environmental Cleaning” publication, 2010.
- Forming collaborative partnerships between EVS, infection prevention and control and nursing leadership.
- Promoting enhanced hand hygiene awareness programs facility wide for all members of the healthcare team.



Through re-evaluating the current processes in place in our healthcare organizations and the addition of new technologies and processes in the performance of the role of environmental services in healthcare, we are leading the way to improving the cleaning efficacy of the patient care areas, reducing the HAI risk to patients and staff and reducing costs to the healthcare system through these efforts.

About the Author

Gary Pollack is Vice President of Operations, Environmental Services, for ABM Healthcare Support Services and has been an invaluable member of the team for over 30 years.

1. Martinez JA, Ruthazer R, Hansjosten K Barefoot L, Snyderman DR. Role of environmental contamination as a risk factor for acquisition of vancomycin-resistant enterococci in patients treated in a medical intensive care unit. *Arch Intern Med.* 2003;163:1905-1912.
2. Huang SS, Datta R, Platt R. Risk of acquiring antibiotic-resistant bacteria from prior room occupants. *Arch Intern Med.* 2006;166:1945-1951.
3. Drees M, Snyderman DR, Schmid CH, et al. Prior environmental contamination increases the risk of acquisition of vancomycin-resistant enterococci. *Clin Infect Dis.* 2008;46:678-685
4. Carling PC, Briggs JL, Perkins J, Highlander D. Improved cleaning of patient rooms using a new targeting method. *Clin Infect Dis.* 2006;42:385-388.
5. Carling PC, Parry MF, Von Beheren SM, Healthcare Environmental Hygiene Study Group. Identifying opportunities to enhance environmental cleaning in 23 acute care hospitals. *Infect Control Hosp Epidemiol.* 2008;29:1-7. Abstract 6. Goodman ER, Platt R, Bass R, Onderdonk AB, Yokoe DS, Huang SS. Impact of an environmental cleaning intervention on the presence of methicillin-resistant *Staphylococcus aureus* and vancomycin-resistant enterococci on surfaces in intensive care unit rooms. *Infect Control Hosp Epidemiol.* 2008;29:593-599.
7. Evaluating hygienic cleaning in healthcare settings: What you do not know can harm your patients. Philip C. Carling, MD, and Judene M. Bartley, MS, MPH, *Am J Infect Control* 2010;38:S41-50.

About ABM

ABM (NYSE: ABM) is a leading provider of facility services in the United States and various international locations. ABM's comprehensive capabilities include janitorial, electrical & lighting, energy solutions, facilities engineering, HVAC & mechanical, landscape & turf, mission critical solutions and parking, provided through stand-alone or integrated solutions. ABM provides custom facility solutions in urban, suburban and rural areas to properties of all sizes - from schools and commercial buildings to hospitals, data centers, manufacturing plants and airports. ABM Industries Incorporated, which operates through its subsidiaries, was founded in 1909. For more information, visit ABM.com.



866.624.1520
ABM.com/Healthcare