



Pathogen Eradication From an Environmental Services Perspective

By Thomas J. Fitzgerald III, CHESP

Globally, sick people usually end up in some type of healthcare setting to receive care for their illness; their treatment plans usually entail an inpatient stay, maybe surgery, a medication regimen, and follow-up care. One important step that is usually taken for granted is the Environmental Services (ES) role in the healing process. The ES department is usually responsible for cleaning all surfaces and textiles throughout the healthcare system; both can serve as an infection-transmission host if not addressed properly in regard to cleaning and linen processing.

Surface contamination by fomites is prevalent in any healthcare system due to numerous sick individuals seeking medical care who pass through our doors on a daily basis. It is paramount to the organization, patients, staff members, and visitors that ES department personnel and clinical staff be just as passionate and dedicated to keeping the healthcare-acquired infection (HAI) rate down and the positive patient outcomes high. This is usually the case, but it sometimes goes unrecognized or appreciated by the other clinical team members.

Many times, ES personnel requests assistance from clinical staff to have access to occupied rooms for the purpose of terminal cleaning on a monthly basis, only to be told that this will disrupt patient care. This response untrue, because if this important task is not completed properly, we can compromise the patient's treatment plan and health due to a unhealthy environment. Remember, a surgeon's work is for naught if his or her work environment is not properly processed by a trained and dedicated ES team member.

Proper housekeeping in a healthcare setting and the requirement for a clean, pest-free, and aesthetically pleasing environment is nonnegotiable. ES leadership must be steadfast in its approach to securing support of this very important requirement from the "C" suite and all other organizational staff.

The organizational atmosphere must be one of equal importance and value to all staff members; this shows a commitment to the role that each individual plays in the healing process. Many organizations relate importance to salary or educational degrees; this is a poor way to manage and often causes a breakdown in teamwork and unity. It takes all staff members in a healthcare system to prevent infection and heal a patient fully.

Senior management at the facility must support and embrace all aspects of the team approach to infection control across all organizational lines; there cannot be a disconnect with this approach.

I would like to ask every healthcare system to embrace and support your ES department as a true infection control champion, and remember, a surgeon cannot cut if the environment is not clean, and that cleaning is non-negotiable.

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A Clean Sweep:

Educating ES Personnel About Infection Control and Prevention

By Jennifer Schraag

Healthcare's housekeeping departments play a more important role than ever in closing the gap in infection control.

A *CHICAGO TRIBUNE* INVESTIGATIVE REPORT solidified the importance of environmental services (ES) departments working closely with their facility's infection control (IC) team when investigators alleged that in 2000, 75 percent of an estimated 103,000 patients' deaths linked to hospital-acquired infections (HAI) were due to unsanitary facilities, unwashed hands, and unsanitary instruments.¹

Both the ES and IC departments play an imperative role in reducing these statistics, and can do so by simply working together in taking a proactive approach in the education and execution of effective IC measures throughout all healthcare facilities.

Both departments must have regularly scheduled meetings to fully discuss and understand the risks of cross-contamination throughout all areas of the healthcare facility, and according to Raymond B. Otero, PhD, a consultant with Richmond, Ky.- based Consulting Services, ES supervisors also should make certain to regularly attend their facility's IC meetings.

Thomas J Fitzgerald III, CHESP, chief of environmental management service for the Veterans Administration Palo Alto Health Care System in California, and president of the American Society for Healthcare Environmental Services (ASHES), recommends taking this a step further and having an ES department head be a voting member on their facility's IC committee. "Most of the policies adopted by the committee usually impact the ES department directly," he notes. "You need to have a voice on the front end," he advises.

Rose Hamann, CHESP, director of environmental services and security at Quincy, Ill-based Blessing Hospital and an ASHES board member, adds, "Having a good working relationship with the IC team is imperative in reducing infection transmission within a healthcare facility." She shares that at her facility they have unit-based partnership councils as well as representation on the central partnership council. "Through these

councils, the housekeepers have been very involved and have brought attention to several patient safety issues, not just infection control," she states.

Douglas Green, director of environmental services at the University of Minnesota Medical Center in Fairview, and a member of the International Executive Housekeepers Association (IEHA) technical advisory committee, says the IC team at his hospital is very supportive of his ES department. "If there is a training need, or questions that need answered, I am assured that our IC staff will be available," he states, adding, "recently, one of the IC staff put together a complete training program on the different isolation classifications and trained the ES staff. We work as a team," he says.

At Fitzgerald's facility, the IC team often takes on a proactive role in working with his ES staff. "My IC practitioners conduct in-services on emerging pathogens and outbreak eradication throughout the year so that our staff members are educated on potential threats *before* we have an emergency at the facility," he notes.

ES and IC objectives also need to be aligned with common objectives, according to Séverine Zaslavski, marketing director with Sturtevant, Wis.-based JohnsonDiversey Inc.

"This goes beyond individuals, it speaks about the reporting structures and organizational alignment," she relates. "The key is to ensure that the objectives are clear coming from the top management in order to achieve a balance between the control of risks and the control of costs, and that at the execution level, bridges are put in place for communication. Those usually translate on a day-to-day basis into the implementation of cross-functional teams."

Otero also recommends having an IC practitioner help in designing an IC manual for the ES department to further improve standards.

Another area of importance in working with the IC team in maintaining a clean environment is special attention and education in maintaining proper air quality during construction. At Hamann's facility, the housekeepers are trained to be part of the air quality team to help reduce potential infections and illness caused by possible airborne pathogens released in the air during construction. "They are taught to recognize dust tracking and dusty air in hallways and to report to construction so they can tighten their barriers or use more track off mats," she shares. It is also important to check these areas more frequently and keep these areas clean, she concludes.

Other aspects of IC education should include hand hygiene and sharps safety. Hand washing should be stressed daily by ES management staff, according to Green. "I ask the staff, 'Who is responsible for protecting you from infection?' The answer is: 'I am responsible for protecting myself.' ES staff must understand this concept. Proper hand washing is the first line of defense in stopping the spread of infection," he says.

Fitzgerald also recommends having the IC practitioners do regular in-services with the staff on hand hygiene, and such education should include the importance of staff always washing their hands between glove changes.

Sharps safety is of utmost importance among the ES staff. A recent study of 1,344 sharps injuries in more than 199 different healthcare institutions, conducted by the California Department of Health Services Sharps Injury Control Program, showed housekeeping and laundry staff to be the fourth most vulnerable worker group, behind nurses, physicians, and phlebotomists. Housekeeping and laundry staff in the study suffered nearly 10 percent of all sharps injuries.

Staff must understand that a sharp can turn up anywhere, and sharps education must be an integral part of both the initial and annual housekeeping training program. "This is a very important subject for ES, since ES handles the entire waste stream disposition," says Fitzgerald. He also points out that many cuts and needlesticks come from handling trash bags and overfilled sharps containers.

Otero advises the use appropriate gloves — not disposable latex or vinyl — for protection, and he says "never go in blind" in removing trash. "Make certain that you visualize what you are doing," he advises.

Additional training should include proper disposal of sharp boxes and how to pick up sharps from floors. "Sharps handling is really a part of a greater topic: 'how to protect yourself,'" says Zaslavski. She says this includes personal protective barriers, bloodborne pathogens, and hazard communication and safe work practices. "The best way to deliver training on this topic is by 'behavior modeling' where the employees can observe someone performing the task correctly, in a step-by-step manner. Employees must be made aware of the benefits of applying the correct protocol, and be made aware the consequences of not applying these steps correctly," she warns.

As Zaslavski mentioned, personal protective equipment (PPE) is imperative in this line of work. Green agrees, adding, "Insuring that staff understands the importance of what PPE is used for is vital. Staff must realize that PPE is not an option, it is a part of the job and it is their responsibility to know what should be worn for each circumstance. Staff must adhere to specific protocol under IC guidelines."

Green shares one incidence that occurs all too often, "When going to a patient room to clean a discharge, the isolation sign has been removed and the housekeeper cleans the room and finds out later that it was supposed to be cleaned within one of the isolation classifications. The procedure is that these signs are to be removed by the housekeeper and not by nursing. When this occurs, IC needs to be involved and investigate what the classification was and what the housekeeper needs to do, if anything."

No one protective wear should be considered more important than the others because all have at a point of time, a clear function, says Zaslavski. In the housekeeping setting, PPE

holds multiple functions: one is to protect the housekeepers from contact with infectious diseases; the other is to prevent possible contact with cleaning compounds.

Eyewear or goggles, according to Fitzgerald and Hamann, appear to be the most commonly overlooked PPE items among ES. These should be worn when blood and body fluid contamination may occur, when dusting and cleaning surfaces that require chemical interaction, when mixing chemicals or anytime a splash hazard is probable.

In addition, David Frank, president of Highlands Ranch, Colo-based KnowledgeWorx, recommends wearing steel-toed shoes or safety boots of some kind, especially when using heavy machinery like buffers when cleaning floors. Back braces also are a good tool, he says.

The types of floors ES staff must clean presents many challenges as well. As David Palmer, president of River Edge, N.J.-based Solutions by Palmer points out, "It's crazy what grows on a floor."

Any type of polymer or seamless floor will provide a more sanitary environment, he says. "If they have seamed flooring — like a rubber flooring — the flooring always shrinks. It moves and what happens then is that seam breaks. That's when the biological matter gets in between the flooring or gets into that seam. Then, right underneath, that's where the bacteria, germs, etc., start to grow and fester. You can have fungus down there or any sort of biological matter down there."

Also, when equipment is dropped on these types of floors, the floors get chipped and these chips withhold biological matter as well, Palmer adds. "Usually what happens is blood gets into that chip. It's very hard to clean and then it starts getting beneath the epoxy and begins to grow and fester. So then you have these little biological matter potholes in and amongst these sanitary environments."

Time is Not on Our Side

The *Tribune*'s investigators also found hospital cleaning staff inadequately trained and that cleaning budgets had been steadily cut — upwards of 15 to 20 percent annually.3 This resulted in overwhelmed and overworked staff — unfortunately the norm across the nation.

In defense of healthcare ES staffs, Frank says hospitals have one of the best workforces as it relates to cleaning and sanitation. "They have the lowest turnover and their workers, I believe, have a much better knowledge of how to disinfect and sanitize surfaces."

Time constraints and staffing issues continue to have negative effects and can often debilitate efficiency. With such detriments as budget cuts, illnesses, and other time off, housekeepers may all too often find themselves too hurried to complete their tasks efficiently.

"Today we have less staff than a few years ago and more square footage to clean," Green points out. "You know where budgets get cut first. When you consider daily call-offs, leave of absences, vacation requests, and intermittent family leave, a decision is made on what will be cleaned vs. what will be trashed and dashed." This is all too common a problem among healthcare ES departments, and unfortunately, "If you are short staffed for the day and you have to divide three or four work schedules among the present staff, something is not going to be done in accordance to standards," Green states.

On the other hand, these situations cannot be an excuse for quality and unsafe work practices in a healthcare setting, adds Fitzgerald. "The bottom line is if we do not do our job properly the first time, someone could get a HAI and stagnate their healing process or even worse, lose their life which is *unacceptable*. It is the responsibility of the ES manager to educate and articulate to the 'C' suite the critical requirement of adequate staffing levels and overtime funding, and how the ES department supports the mission of the medical center. I always say a surgeon cannot cut if his surgical suite is not properly cleaned."

Simple steps can be taken to help in deterring such incidence. As Otero points out, sometimes the nurses on the floors push the housekeepers to finish their job hastily. They should work close together and the director of nursing should make sure that they have time to perform their duties, he offers.

"Cleaning has a connection to other departments," as Frank points out. He shares that in one European study, researchers found poor cleaning standards directly related to rising insurance costs and as cleaning standards declined, infection levels increased. "What also went up was risk levels and liability insurance," he adds.

"A lot of people see cleaning as a cost," says Frank. "I see cleaning as a marketing tool to retain customers. You can't sell a dirty building. Clean facilities will generate revenues for their operations."

In educating ES staff several aspects must be taken into consideration. "We're an industry of immigrants," advises Frank. "We're dealing with communication issues and we have a difference in cultural hygiene ... such as someone from a third world country who doesn't have an idea of what we define as hygiene in America. Their cleaning standards, as they perceive it, aren't right or wrong, it's just that's were they came from.

Fitzgerald makes another good point, "Most of the time ES staff usually are the lowest paid staff at the facility and feel somewhat underappreciated, but we need to let them know that without them the organization would flounder and/or fail." I always educate my staff on their very important role in providing great customer service, positive patient outcomes, and how we help in the healing process. This organizational atmosphere must be cultivated across all levels."

References:

- 1. Berens M.J. Infection epidemic carves deadly path: Poor hygiene, overwhelmed workers contribute to thousands of deaths. *The Chicago Tribune*. July 21, 2002.
- 2. Rampling A., et al. Evidence that hospital hygiene is important in the control of methicillin-resistant *Staphylococcus aureus*. *J Hosp Infect*.

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Something's Lurking Among Us

No matter the facility, there will always be areas that have been overlooked during the cleaning process. Fitzgerald says every surface must be treated as a potential host for infection. "With all of the emerging resistant pathogens that we are faced with on a daily basis, we must ensure that our staff are diligent and professional in their approach to keeping the HAI rate at bay in all areas of the healthcare system."

Environmental surveys have found radiators, medical equipment, and furniture to be among the most frequently contaminated sites within healthcare facilities.² All high touch points such as light switches, door handles or knobs, blood pressure cuffs, telemetery cords, blinds, ledges, the top and around the television, hand rails, patient bedside rails, telephone and elevator buttons, all bins, pails, cans, and similar receptacles, and the underneath the over-bed tables, all must be taken into consideration for proper healthcare facility hygiene.

"When you look at diseases such as norovirus that utilize these surfaces as cross-contamination mechanisms, you must educate yourself and staff on the different pathogens they are faced with on a daily basis and how they impact positive patient outcomes, how they populate, and the important role we play in the eradication process," states Fitzgerald.