

Suburban Hospital, Bethesda, MD

Between the months of August 2005 and July 2006, the Infection Control department at Suburban Hospital in Bethesda, MD, led by Nurse Epidemiologist Rita Smith, conducted a study to determine whether formal staff training, including hand washing awareness, combined with new disinfectants would be effective in reducing the healthcare-associated infection (HAI) rate.

The innovations made in the Environmental Services department for this study had the added outcome of making the cleaning program more environmentally friendly.



“We would not have been able to carry out our research without the support of the cleaning staff.”

--Rita Smith
Nurse Epidemiologist

❖ Next Generation of Chemicals

At Suburban Hospital in Bethesda, MD, the Environmental Services department, managed by Crothall Services Group, is taking steps to deliver a cleaner, healthier environment while ensuring that it is done in the most earth-friendly manner possible. Best of all, the introduction of Green chemicals has actually improved infection control.

One key tool in this program has been JohnsonDiversey's *Oxivir* disinfectant. Its formula makes it the perfect solution for fighting infections without harming the environment. The active ingredient is hydrogen peroxide, which biodegrades into water and oxygen and is completely safe to the environment. It produces no noxious odors, and it does not pollute the wastewater stream, unlike many other powerful chemicals. In fact, *Oxivir* was the first hospital-grade disinfectant of its kind to achieve U.S. Environmental Protection Agency registration.

One reason it is so effective is the speed at which it works. Because many disinfectants require a contact time of up to 10 minutes to achieve results, they are sometimes wiped up prematurely by the housekeeper. *Oxivir* requires only 60 seconds to air dry and leaves no residue. It has been highly effective in destroying pathogens such as MRSA, Hepatitis C, and Norovirus.

For general multi-purpose cleaning, the department has adopted JohnsonDiversey's *Alpha-HP* solution, and for glass cleaning, they use JohnsonDiversey's ammonia-free *Glance* product. Both have received Green Seal certification. To earn this designation, cleaning agents at non-diluted strength must be non-toxic to human, animal, and aquatic life, non-corrosive and



**GOING
GREEN
AND STAYING
CLEAN**



non-irritating to eyes and skin, combustion free, and contribute neither to indoor nor outdoor pollution.

❖ Embracing Innovation

In addition to Green chemicals, Suburban Hospital has made the move from traditional mops to microfiber technology. The cutting-edge construction of the fibers makes the mop capable of holding up to 6 times its weight in water, and it electrically attracts dirt and lint. Although the initial cost is about double that of a standard mop, microfiber has a lifespan 10 times longer. Clean mop heads are used once per patient room and never dipped in dirty water. When the room has been cleaned, the mop head is removed and laundered so it can be reused in the future. This technique saves water and chemical usage and prevents cross-contamination from one area to the next. It also saves time because the employee does not have to return to the bucket repeatedly to rinse and wring out the mop. Used properly, microfiber mops are a highly-effective, cost-conscious, Green solution.



❖ Oxivir has improved infection control efforts while making the EVS department more environmentally friendly.

❖ Enhanced Training

In order to make these forward-thinking practices most effective at Suburban Hospital, staff members participated in a formal training course focused on proper cleaning techniques using the new products, with a special focus on infection control. Crothall's management team was instrumental in these efforts. Rita Smith comments, "Crothall has been very cooperative with our infection control program. The team was on board for every step, from putting all employees through our formal training program to the addition of a new disinfectant. We would not have been able to carry out our research without the support of the cleaning staff."

❖ Outcome

As a result of the combination of new training, chemicals, and tools, the hospital saw a 10% decrease in antibiotic use, indicating a reduction in the infection rate at the hospital. The study showed that Environmental Services is an important part of the strategy to combat HAIs. As Smith notes, "Cleaning staff is fundamental to infection control. We expect our clinical staff members to be impeccable about how they handle medical devices and other tools, and they have to be absolutely meticulous about washing their hands. If any of these processes are not followed at all times, we are dependent on the cleaning staff to have done their job in killing any potentially harmful organisms in the first place."

At Suburban Hospital, "Going Green" does not mean sacrificing quality. Crothall is proud to be a part of this program that is both effective and environmentally responsible.



❖ Crothall Environmental Services Director Anthony Cox and Suburban Hospital Nurse Epidemiologist Rita Smith.

"We are dependent on the cleaning staff to have done their job in killing any potentially harmful organisms in the first place.."

--Rita Smith
Nurse Epidemiologist