



## Two New Studies Show Decrease in Hospital Acquired Infections after Xenex Germ-Zapping Robots Used for Room Disinfection

Evidence of the Xenex Germ-Zapping Robot's ability to help hospitals reduce Hospital Acquired Infection (HAI) rates continues to grow. Xenex Disinfection Services today announced two new infection reduction posters which were presented by healthcare facilities that utilize the Xenex Pulsed Xenon Full Spectrum™ ultraviolet (UV) room disinfection system to destroy the microorganisms that cause HAIs. The posters were presented at the Association for Professionals in Infection Control and Epidemiology (APIC) Annual Conference taking place in Nashville, TN, June 27-29, 2015.

Xenex offers the only UV disinfection technology shown, in peer reviewed published studies, to effectively reduce HAI rates. Designed for speed, effectiveness and ease of use, hospital cleaning staff operate the robot without disrupting hospital operations. The robot pulses intense UV light covering the entire UV spectrum, destroying viruses, bacteria and bacterial spores in a five-minute disinfection cycle. Without contact or chemicals, the robot eliminates harmful microorganisms safely and effectively. The Xenex robot destroys *C.diff* spores in less than five minutes and other microorganisms in even less time.

The poster entitled, "The Impact of Pulsed Xenon Ultraviolet Light on Hospital Acquired Infection Rates in a Tertiary Care Community Hospital" reported the impact of Xenex's disinfection system as an adjunct to traditional cleaning methods on multidrug-resistant organisms (MDRO) infection rates in the intensive care unit (ICU) and non-ICU areas at Orlando Health South Seminole Hospital (FL). The hospital disinfected all isolation discharges within its ICU and experienced a 61 percent decrease in MRSA, VRE and *Clostridium difficile* (*C.diff*) infection rates in the ICU. The hospital disinfected only *C.diff* discharges throughout the rest of the facility, which resulted in a 41 percent decrease in *C.diff* infections facility-wide. According to the authors of the poster, the reduction in infections saved the hospital \$730,000 over a 22 month period.

"We have been very pleased with the results of the Xenex UV room disinfection system. We know that with Xenex, we are creating a safer patient environment because we are getting the dangerous pathogens out of the environment before they can cause infections and harm patients. The results are evident and we are sharing them in hopes that other hospitals will follow our lead. We've seen a significant decrease in infections and a return on our investment," said Dr. Thomas Kelley, Chief Quality Officer of Orlando Health South Seminole Hospital.

Environmental contamination may pose an even greater challenge in long-term care facilities than acute care settings because of the extended length of stay for patients and patient-to-patient contact. Patients inhabit rooms for weeks to months at a time, making thorough disinfection a challenge for environmental services. With the goal of preventing hospital-acquired *C.diff* infection and its associated rebounds and recurrence, a Texas skilled nursing facility (SNF) implemented Xenex technology to enhance its environmental disinfection practices. Their infection reduction results are significant and offer great promise for other skilled nursing facilities.

The poster entitled "The Effect of Pulsed Xenon Ultraviolet Disinfection and Enhanced Chemical Disinfection of Surfaces on Incidence and Recurrence of *Clostridium difficile* Cases within a Skilled Nursing Facility" reports on Morningside Ministries at The Manor's nearly 80 percent reduction in hospital acquired *C.diff* infection rates. In an effort to decrease *C.diff* occurrences, the facility retrained staff on hand hygiene practices and implemented the use of sodium hypochlorite cleaning. No immediate change in infection rates was seen, so the facility began using a Xenex robot to disinfect all *C.diff* isolation rooms and all common areas (dining room and community living areas).

Following implementation of the Xenex robot, the SNF's C.diff infection rate dropped 76.8 percent.

Morningside Ministries credits ease of integration of the Xenex system as part of its ability to achieve high environmental disinfection compliance.

"This validation from Morningside Ministries and South Seminole Hospital is similar to the data we are seeing from many of our customers after they began using Xenex robots for room disinfection. Three hospitals have published their HAI reductions in peer-reviewed journals and several more are in press or in review," said Mark Stibich, co-founder and Chief Scientific Officer at Xenex. "Xenex has a team of experienced infection preventionists, epidemiologists and account managers that work closely with the hospital to rapidly integrate the robots into the hospital's operations to ensure their proper use and deployment. We are committed to helping solve this global health crisis and our technology is a proven weapon in the battle against HAIs."

### **Only UV Disinfection System Proven to Reduce HAI Rates**

MD Anderson Cancer Center, the Central Texas Veterans Health Care System, Cooley Dickinson Health Care (an affiliate of Massachusetts General Hospital and Partners HealthCare System) and other hospitals have published 11 studies providing evidence of the Xenex robot's efficacy in highly regarded scientific journals that include the American Journal of Infection Control (AJIC), Journal of Infection Prevention, Infection Control & Hospital Epidemiology (ICHE) and BMC Infectious Diseases. Hospitals that purchased Xenex robots have reported greater than 50 percent decreases in methicillin-resistant Staphylococcus aureus (MRSA) and C.diff infection rates in peer-reviewed literature, documenting how they used the Xenex robot in their real-world hospital environment to reduce infection rates.

With a proven five-minute disinfection cycle for C.diff and less than 90 seconds for other pathogens, the robot can disinfect 30-62 hospital rooms per day (according to Xenex customers), including: patient rooms, operating rooms, equipment rooms, emergency rooms, intensive care units and public areas. Nearly 300 hospitals, Veterans Affairs, DoD, skilled nursing facilities, ambulatory surgery centers and long-term acute care facilities in the U.S. and Europe use Xenex robots.

### **Stop HAIs & Avoid HAC Penalties**

The Centers for Medicare and Medicaid Services (CMS) is now measuring C.diff and MRSA Standardized Infection Ratios (SIR) scores as key performance standards in the Value Based Purchasing (VBP) and Hospital Acquired Condition (HAC) Reduction programs. Hospitals performing in the bottom quartile of the HAC program face a one percent reduction in inpatient Medicare reimbursement with HAIs now comprising 75 percent of the score. VBP puts an additional two percent of inpatient Medicare reimbursement at risk with potential for up to a two percent incentive. To demonstrate the potential impact that HAI reductions could have on their bottom line, Xenex provides hospitals with an ROI model, an interactive calculator that shows a facility or health system the clinical and financial impact of adopting a successful environmental disinfection program, based on that facility's reported data.

Source: <http://www.businesswire.com/news/home/20150629006152/en/Studies-Show-Decrease-Hospital-Acquired-Infections-Xenex#.VcDkX7V8rCo>

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