XENEX LIGHTSTRIKE™ GERM-ZAPPING ROBOTS™

SUMMARY OF STUDIES

RESULTS	JOURNAL/DATE (AUTHOR, LOCATION)
In Peer Review	***Abstract Details***
39% drop in *C. diff* infection rates in 6 month controlled study with 85% of discharges treated	*APIC Conference Poster*/June 2016 (Folkert, Mayo Clinic Rochester)
Clinical Effectiveness	***Peer Reviewed Outcome Studies***
71% reduction in UTI rates and **100% in skin infection rates, 54% drop in hospital readmissions from nursing home**	*BMC Infectious Diseases*/March 2017 (Kovach, Jewish Home and Care Ctr)
46% reduction in Class I SSIs, $478,055 saved	*AJIC*/February 2016 (Catalanotti, Lowell General Hospital)
87% reduction in ICU VRE infection rates, **combined VRE+MRSA+*C. diff* infection rates reduced 29% facility wide** and **61% in ICU**, 390 bed days generated, $730,000 saved	*AJIC*/October 2015 (Vianna, South Seminole Hospital - Orlando Health)
Significant reductions in burn unit ORs and patient room contamination, **longest duration with no cases of hospital acquired *C. diff* infections in burn ICU in 2 years**	BURNS/In Press November 2016 (Green, San Antonio Military Medical Center)
100% reduction in total joint SSIs and $290,990 saved in 12 months	*AJIC*/September 2015 (Fornwalt, Trinity Medical Center)
57% reduction in *C. diff* infection rates in an LTAC	*AJIC*/September 2015 (Miller)
70% reduction in ICU *C. diff* infection rates	*AJIC*/September 2015 (Nagaraja, Westchester Medical Center)
20% reduction in *C. diff* + MDRO infection rates, 22% of discharge rooms treated	*AJIC*/June 2014 (Haas, Westchester Medical Center)
57% reduction in MRSA infection rates after 18 months	*JIP*/June 2013 (Simmons, Moses Cone Health)
53% reduction in *C. diff* infection rates after 12 months	*AJIC*/May 2013 (Levin, Cooley Dickinson Hospital)
Environmental	***Peer Reviewed Environmental Studies***
Elimination of Ebola (>4 log) and Anthrax (>3 log), >6-log reduction of MRSA, CRE, *MDR-A. baumanii*, and more	*SAJID*/April 2016 (Stibich, CNB/CSIC-Spain & TXBiomed Biosafety Level 4 Lab-US)
5 log reduction of MRSA, VRE, *Acinetobacter* and CRE in 10 minutes	*AJIC*/March 2016 (Hosein, Queen's Hospital - Romford UK)
Xenex **effective even in absence of manual cleaning**	*AJIC*/April 2015 (Jinadatha, Central Texas VA Health Care System)
• **99.6% reduction** in real-world hospital bioburden • Xenex efficacy **not affected by shading**, pathogen concentration, or surface protein load	*ICHE*/January 2015 (Nerandzic, Louis Stokes Cleveland VA Medical Center)
Bleach removed 70% of ***C. diff*** spores while no-bleach clean **plus Xenex removed 95%**	*JMM*/January 2015 (Ghantoji, MD Anderson Cancer Center)
• **7X** more effective than traditional cleaning • **16X** more effective at deactivating MRSA • **23%** faster than traditional cleaning	*BMC Infectious Diseases*/April 2014 (Jinadatha, Central Texas VA Health Care System)
Xenex **eliminated all VRE** from the environment	*ICHE*/March 2011 (Stibich, MD Anderson Cancer Center)
HCAHPS Improvement	***Peer Reviewed Published Study***
HCAHPS score increased from 52nd percentile to 78th percentile **(10% increase)** for 3 qtrs after Xenex patient awareness campaign	*Risk Management and Healthcare Policy*/January 2014 (Fornwalt, Trinity Medical Center)

XENEX LIGHTSTRIKE™ GERM-ZAPPING ROBOTS™

XENEX EFFECTIVENESS

EFFICACY AND REAL-WORLD EFFECTIVENESS

Microorganism

Acinetobacter baumannii
Aspergillus niger (black mold)
Bacillus cereus spores
Bacillus pumilus spores
Bacillus subtilis spores
Candida albicans
****Clostridium difficile "C. diff"* spores (NAP1)**
Carbapenem-resistant *Enterobacteriaceae* (CRE)
Escherichia coli & *E. coli* (KREC)
Infectious bursal disease virus (IBDV)
Klebsiella oxytoca
Klebsiella pneumoniae
Middle East Respiratory Syndrome-Coronavirus (MERS-CoV)
***Methicillin-resistant *Staphylococcus aureus* (MRSA)**
MS2 bacteriophage virus
Mycobacterium fortuitum
Mycobacterium tuberculosis
Feline calicivirus (norovirus surrogate)
Pseudomonas aeruginosa
Proteus mirabilis
Proteus morganii
Proteus vulgaris
****Staphylococcus aureus***
Staphylococcus epidermidis
***Vancomycin-resistant *enterococci* (VRE)**
Vaccinia virus
Vesicular stomatitis virus (VSV)

*** Rate reductions for these organisms demonstrated in hospital peer reviewed outcome studies.**

Ebola and Anthrax

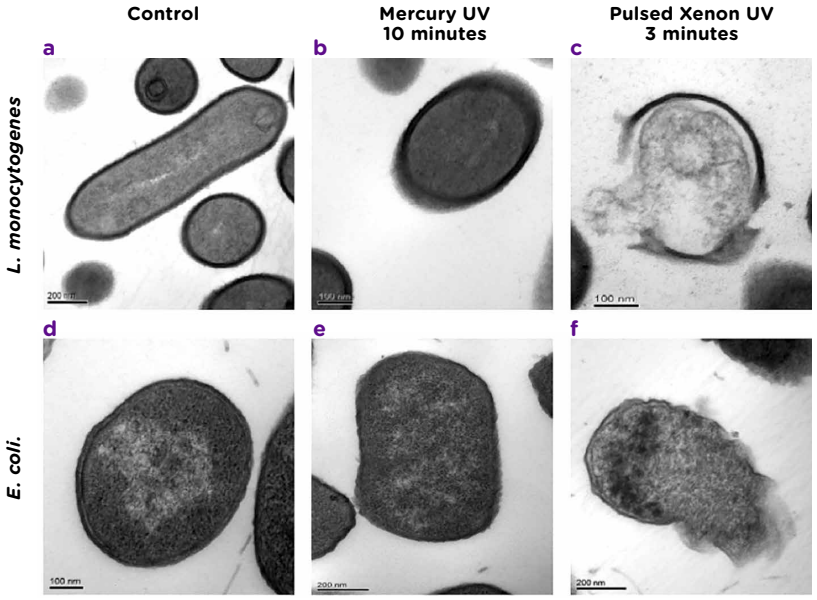
Ebola >4 log reduction in one minute at 1 meter**
Anthrax >3 log reduction in 15 minutes at 1 meter**

*(** Surface disinfection tested at Biosafety Level 4 lab)*

TIME MATTERS

The LightStrike Germ-Zapping Robot™ is the only UV light disinfection technology shown to help hospitals reduce infection rates in multiple peer reviewed published outcome studies. LightStrike **kills C. *diff* spores in 5 minutes.**

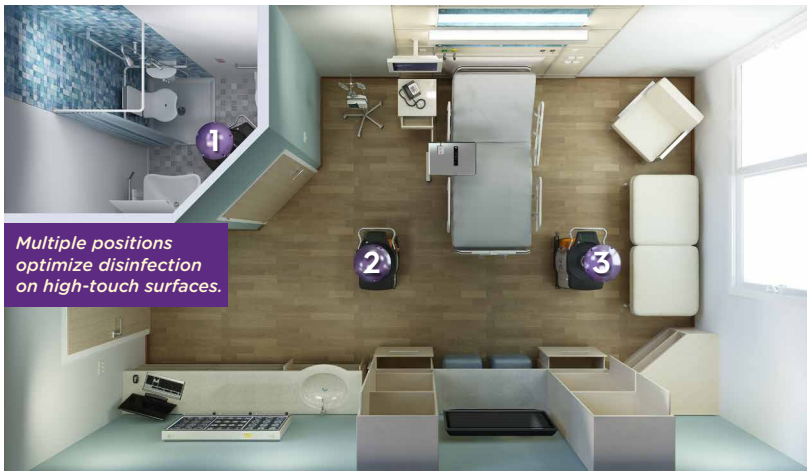
COMPARATIVE CELL DAMAGE[1]



1-Cheigh C-I, Park M-H, Chung M-S, Shin J-K, Park Y-S: Comparison of intense pulsed light- and ultraviolet (UVC)-induced cell damage in *Listeria monocytogenes* and *Escherichia coli* O157:H7. Food Control 2012, 25:654-659.

DISINFECTING WITH LIGHT

Studies show using multiple positions in a room greatly optimizes the germ-killing effectiveness of light.[2]



2-Boyce, J.M., N.L. Havill, and B.A. Moore, *Terminal decontamination of patient rooms using an automated mobile UV light unit*. Infect Control Hosp Epidemiol, 2011. 32(8): p. 737-42.