
First Hospital Light Fixture to Kill Bacteria



Indigo-Clean, a light fixture that uses Continuous Environmental Disinfection technology to continuously kill harmful bacteria linked to hospital acquired infections (HAIs) was introduced by Kenall Manufacturing at the annual meeting of the Association for Professionals in Infection Control and Epidemiology (APIC) in Nashville.

According to the Centers for Disease Control and Prevention (CDC), 1 in 25 hospital patients in the U.S. have at least one infection contracted in the health care setting. Approximately 1.7 million illnesses and 99,000 deaths in acute care hospitals in the U.S. are due to HAIs and they add nearly \$35-45 billion to health care costs each year. HAIs not only cost to treat but can also result in financial penalties for hospitals under the Affordable Care Act.

This new technology inactivates a wide range of micro-organisms including MRSA (Methicillin-resistant *Staphylococcus aureus*), *C.difficile* and VRE (Vancomycin-resistant *Enterococcus*). Manufactured through an exclusive licensing agreement with the University of Strathclyde in Glasgow, Scotland, Indigo-Clean operates continuously, without an operator and kills bacteria in the air and on the surface.

"Indigo-Clean represents a breakthrough in helping to reduce HAIs," said Jim Hawkins, CEO of Kenall. "It bolsters current disinfection efforts by infection preventionists and environmental services professionals in the fight against HAIs."

It uses a narrow spectrum of visible indigo-coloured light at an output of 405 nanometres (nm) on the light spectrum. This High-Intensity Narrow Spectrum (HINS) light is absorbed by molecules within bacteria and produces a chemical reaction that kills them. While lethal for the pathogens, Indigo-Clean is not harmful for patients and staff.

The technology used in Indigo-Light has been studied extensively in more than 20 peer-reviewed academic publications and 30 conference presentations. The HINS-light project was voted U.K. Research Project of the Year in 2011 by Times Higher Education magazine. The team of researchers at Strathclyde that developed the technology have spent over 13 years researching and developing it. Now, the partnership with Kenall in the U.S. could open up a new chapter for this innovation and can ensure the product is commercially available for use.

Currently, the methods used to disinfect the healthcare environment are episodic and short-lived but Indigo-Clean continuously treats the air as well as hard and soft surfaces. It does not require a trained operator as it works automatically and continuously.

Source: [University of Strathclyde, Glasgow](#)

Image Credit: University of Strathclyde, Glasgow

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