Xenex updates protocols for germ-zapping robots in response to Ebola threat

Dealing with highly infectious diseases like Ebola is often like a logic problem. Disinfecting rooms is hard enough, but what about protective suits? True, they greatly reduce the chances of infection, but getting them off can bring the risk straight back again if the suit isn't decontaminated first. Texas-based Xenex has created protocols that conform to those of the US Centers for Disease Control and Prevention (CDC) for its a line of robots that use UV lamps that to decontaminate hospital rooms and protective clothing exposed to the Ebola virus, so they can be safely removed.

Xenex robots use the company's Full Spectrum ultraviolet radiation system to disinfect areas and protective clothing before workers remove them, which greatly reduces the chance of infection from handling the outside of the suits and gloves. According to Xenex, its robots are more effective than conventional mercury UV lamps, can disinfect an area in five to ten minutes, are easily integrated into existing hospital procedures, and protective garments can be disinfected and made safe to remove in five minutes. Not to mention that using robots for the task means fewer people are exposed to the danger.

The system uses a high-intensity xenon UV lamp that pulses in the ultraviolet C band covering 200 to 280 nanometers twice a second, as opposed to a mercury lamp's 258 nanometers. This broad waveband penetrates the microbe's cell walls and fuse its DNA, rendering it incapable of reproduction. The company claims that the rays can destroy not only the Ebola virus, but also Clostridium difficile (C.diff), Methicillin-resistant Staphylococcus aureus (MRSA), Enterovirus D68, VRE, and other bacteria, viruses, molds, fungi, and spores. The company says that it is as effective as chemical disinfectants, but without the toxic side effects.

"Hospitals across the country may handle suspected Ebola cases so it's critical for every facility to have a comprehensive plan in place to ensure the safety of healthcare workers, patients and the general public," says Dr. Mark Stibich, co-founder and Chief Scientific Officer of Xenex. "We created this Ebola protocol using our experience in over 250 hospitals, as well as laboratory data on the effectiveness of Xenex's germ-zapping robots on Ebola-type viruses. Patients, communities, and hospital employees want reassurance their hospital is utilizing the most advanced technology available to protect them."

Source: http://www.gizmag.com/xenex-ebola-robot/34393/

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