New paper supports hydrogen peroxide vapour (HPV) efficacy

Infection rates in hospitals significantly reduced by using hydrogen peroxide vapour technology, reports latest scientific study. A marked decrease was observed for C difficile, MRSA, VRE and ESBL following the room/environmental disinfection treatment and ongoing improvements in hand hygiene.

Published in the American Journal of Infection Control, the paper by Kim Horn MPH and Jonathan A. Otter PhD shows the result of a before-after study conducted from October 2010 to September 2013. The impact of the implementation of HPV room disinfection combined with improved hand hygiene on discharge of patients infected with C. difficile, MRSA, VRE (vancomycin-resistant enterococci) and ESBL (extended-spectrum β-lactamase) was measured.

The study reports a reduction in infection rates for all the targeted pathogens. Since the introduction of HPV room disinfection and improvements in hand hygiene, C. difficile infection rates have dropped by 47%. VRE cases have reduced by 95%. As per ESBL infections, the study also noted a 94% reduction which can mainly be explained by enhanced hand hygiene. The MRSA rates were halved but this result wasn’t statistically significant.

The paper also refers to other studies which have obtained similar results when using the HPV technology. The authors concluded, “We report substantial and sustained reductions in the rate of key hospital pathogens including CDI, VRE, and ESBL associated with the introduction of HPV and improvements in hand hygiene.”

Commenting on the results, Martin Whiting, marketing director at Bioquell said, “These findings continue to support the substantial weight of evidence that HPV technology can help deliver successful patient outcomes. Whilst not all HPV technology has the same efficacy, bioquelling with 35% hydrogen peroxide sets the standard that can make a real difference.”

Resources:


Notes to editors

About Bioquell

Bioquell specialise in the design, manufacture and application of complete bio-decontamination solutions for airborne and surface contamination in the healthcare, life sciences, food production and defence sectors. Bioquell's unique hydrogen peroxide vapour (HPV) bio-decontamination technology has been used across the globe to eradicate problematic bacteria, viruses and fungi, throughout a wide range of applications. Deployment of Bioquell's HPV process provides residue-free, safe and repeatable
sterilisation of rooms, buildings, equipment and sensitive electronics. It is a clear alternative when replacing traditional decontaminants such as formaldehyde or chlorine-based products.

Bioquell also provides bespoke chemical, biological, radioactive and nuclear (CBRN) filtration equipment for different applications in the defence industry. This equipment is complemented by integral air conditioning systems and auxiliary power units. For more information, please visit www.bioquell.com.

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