

# Study proves new technology kills bacteria

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Results from a comprehensive multi-site clinical trial demonstrated that the use of antimicrobial copper surfaces in intensive care unit rooms reduced the amount of bacteria in the rooms by 97 percent and resulted in a 41 percent reduction in the hospital acquired infection rate.

According to researchers, this study is one of the first to demonstrate the value of a passive infection control intervention, one that does not rely on staff or patients remembering to take action. The results will be presented on Friday, October 21 at the 2011 Annual Meeting of the Infectious Diseases Society of America in Boston.

Objects in hospital patient rooms are a potential breeding ground for bacteria that cause infections. According to Dr. Michael Schmidt, Vice Chairman of Microbiology and Immunology at the Medical University of South Carolina, and a researcher on this study, bacteria on ICU room surfaces are responsible for up to 80 percent of patient infections. The results of this study demonstrate that reducing the amount of bacteria in the patient's environment significantly lowers the risk of infection.

Hospital patients have a 1:20 chance of developing an infection, and of those who do become ill, 1:20 have chance of dying. The CDC estimates that in the U.S., hospital acquired infections kill 100,000 people and cost \$45 billion annually.

The study was funded by the U.S. Department of Defense and took place at Memorial Sloan Kettering Cancer Center in New York, the Medical University of South Carolina, and the Ralph H. Johnson VA Medical Center, both in Charleston. As part of the study, common objects such

as bed rails, overbed tray tables, nurse call buttons and IV poles, were replaced with antimicrobial copper versions.

Independent laboratory testing has demonstrated that when cleaned regularly, antimicrobial copper products kill greater than 99.9% of the following [bacteria](#) within two hours of exposure: MRSA, VRE, [Staphylococcus aureus](#), Enterobacter aerogenes, [Pseudomonas aeruginosa](#), and E. coli O157:H7. For a complete listing of approved EPA public health claims for antimicrobial copper, please visit [www.antimicrobialcopper.com](http://www.antimicrobialcopper.com). Study results are to be submitted to the U.S. Environmental Protection Agency for review and approval. Because many factors contribute to the risk of infection, individual results may vary.

Provided by Kellen Communications

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