



Contact: Liz Garman, 202-454-2604
egarman@apic.org

Low levels of resistant bacteria found in Chicago-area ambulances

Washington, DC, March 28, 2012 – Treatment areas of ambulances fared well when tested for dangerous bacteria, according to a new study published in the April issue of the *American Journal of Infection Control*, the official publication of [APIC](#) - the Association for Professionals in Infection Control and Epidemiology. Approximately six percent of sites sampled in Chicago-area ambulances tested positive for *Staphylococcus aureus* (*S. aureus*), a bacterium that can cause serious infections and can easily acquire resistance to potent antibiotics.

A team of researchers from Lewis University in Romeoville, Ill took samples from 26 areas inside of 71 ambulances from 34 different Chicago-area municipalities. The team recovered 100 *S. aureus* isolates from more than 1,800 sites that were sampled (less than six percent). At least one *S. aureus* sample was found in 69 percent of ambulances tested. Of all isolates detected, 77 percent showed resistance to at least one commonly used antibiotic, and 12 percent were identified as the “superbug” known as methicillin-resistant *S. aureus* (MRSA).

The authors state, “Of interest, only 5 of 71 ambulances tested positive for MRSA in at least one location (yielding the 12 MRSA isolates studied). Although there have been few previous studies of front-line advanced life support ambulances, a higher frequency of suspected MRSA in ambulance fleets has been reported previously.”

“These results indicate that first responders are doing a good job of protecting their patients,” adds James Rago, PhD, lead study author and assistant professor of biology at Lewis University. “The research is significant because improper cleaning of these surfaces could be a cause for concern due to the frequency with which emergency medical technicians may touch infected surfaces during patient care, the prevalence of open wounds among burn victims, and the fact that these patients go directly to the hospital where they come in contact with patients with compromised immune systems who are vulnerable to infections.”

The authors conclude, “Given the ease with which *S. aureus* can survive on inanimate surfaces and exchange antibiotic resistance elements, a conscientious approach to the application of existing cleaning techniques, especially in key ambulance sites, needs to continue.”

Full text of the article is available to journalists upon request; contact Liz Garman, APIC, 202-454-2604, egarman@apic.org to obtain copies.

ABOUT AJIC: AMERICAN JOURNAL OF INFECTION CONTROL

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NOTES FOR EDITORS

["Detection and analysis of *Staphylococcus aureus* isolates found in ambulances in the Chicago metropolitan area"](#) by James V. Rago, Ph.D., Lt. Keith Buhs, Viktorija Makarovaite, Esha Patel, Melissa Pomeroy and Chris Yasmine appears in the *American Journal of Infection Control*, Volume 40, Issue 3 (April 2012).

Authors:

James V. Rago, Ph.D. (Corresponding Author)

Lewis University, Department of Biology

Lt. Keith Buhs

Orland Fire Protection District

Viktorija Makarovaite

Lewis University, Department of Biology

Esha Patel

Lewis University, Department of Biology

Melissa Pomeroy

Lewis University, Department of Biology

Chris Yasmine

Lewis University, Department of Biology

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