THE CLOROX COMPANY

NEWS RELEASE

Study Results Show the Efficacy of Improved Hydrogen Peroxide Against Important Healthcare-Associated Pathogens

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OAKLAND, Calif., Oct. 18, 2012 - A new study published in the November issue of Infection Control and Hospital Epidemiology (ICHE), the journal of the Society for Healthcare Epidemiology of America (SHEA), finds for the first time that improved hydrogen peroxide, the active ingredient found in products such as Clorox Healthcare™ Hydrogen Peroxide Cleaner Disinfectants, had a greater log-reduction of organisms at a one-minute contact time than standard hydrogen peroxide and quaternary ammonium compounds (QUATS).

Researchers from the University of North Carolina (UNC) at Chapel Hill evaluated two healthcare hydrogen peroxide products, referred to in the study as containing improved hydrogen peroxide as the active ingredient (at 1.4% H2O2 and 0.5% H2O2). Both products were compared to standard hydrogen peroxide (0.5%, 1.4%, 3%) and a QUAT, at a one-minute contact time.

All of the actives were tested for their efficacy against three of the most common pathogens found in hospitals: community-acquired methicillin-resistant Staphylococcus aureus strain (MRSA), vancomycin-resistant Enterococcus (VRE) and multi-drug resistant Acinetobacter baumannii (MDR A. baumannii). In all tests, the improved hydrogen peroxide active ingredient proved to have a greater log-reduction of organisms to standard hydrogen peroxide and a greater or similar log-reduction to the QUAT tested at a one-minute contact time. UNC scientists will also present the study in a poster session at IDWeek, an infectious disease and epidemiology conference in San Diego, Calif. on Friday, Oct. 19 (abstract #935).

"These findings demonstrate that improved hydrogen peroxide is a new low-level disinfectant option that is low in

toxicity, fast-acting and a suitable choice for regular use to help control the spread of pathogens on common hospital environmental surfaces," said Dr. William A. Rutala, Ph.D., M.P.H., the study's lead researcher, director, Hospital Epidemiology, Occupational Health, and Safety Program at UNC Health Care System.

Introducing Improved Hydrogen Peroxide to Healthcare Settings

Prior to the development of improved hydrogen peroxide, standard hydrogen peroxide was not considered a practical disinfectant for hospital use due to its instability. However, scientific advances have been made to the formulation of hydrogen peroxide products to associated weaknesses such as instability, limited antimicrobial efficacy and long surface contact times.

Healthcare-associated infections (HAIs) from organisms such as those caused by MRSA, VRE and MDR A. baumannii are an ongoing problem for healthcare facilities as they are commonly found in hospitals, easily transmitted to patients and staff and can survive on environmental surfaces for days, or even months. One of the best prevention methods for helping to curb the spread of organisms that cause HAIs is regular environmental surface disinfection with an Environmental Protection Agency (EPA)-registered disinfectant.

"Our study found the improved hydrogen peroxide products were able to kill the pathogens tested in less than one minute, a contact time that is considerably less than the contact time of the QUAT product tested in this study," said David J. Weber, M.D., M.P.H., professor of medicine, pediatrics and epidemiology in the Schools of Medicine and Global Public Health at UNC-Chapel Hill.

Clorox Healthcare™ Hydrogen Peroxide Products Offer Fast, Facility-Wide Disinfection

Clorox's hydrogen peroxide healthcare products are ready-to-use and combine hydrogen peroxide with activators, stabilizers and surfactants to offer fast-acting solutions that are noncorrosive and compatible with many healthcare surfaces and medical equipment.

Clorox Healthcare™ Hydrogen Peroxide Cleaner Disinfectant Wipes and Spray are EPA-registered to kill 37 bacteria and viruses in 30 seconds to one minute, the fastest non-bleach disinfecting time available.1 The products are also EPA-registered to kill norovirus and all of the ESKAPE pathogens, the six organisms responsible for two-thirds of all HAIs: Enterococcus faecium, Staphylococcus aureus, Klebsiella pneumonia, Acinetobacter baumannii, Pseudomonas aeruginosa and Enterobacter species. 2

"These Clorox® disinfectants offer healthcare professionals a better-value, non-bleach product specifically manufactured in sizing options to accommodate the cleaning and disinfecting scenarios within healthcare facilities," said Beata Grabowski, senior director of marketing, Clorox Professional Products Company. "Clorox Healthcare™ Hydrogen Peroxide Cleaner Disinfectants are EPA-registered to kill a total of 41 different microorganisms and are formulated to be used by environmental services' professionals and around patients."

Clorox Professional Products Company contributed product for the ICHE study. Dr. Rutala and Dr. Weber are scientific consultants to Clorox.

About Clorox Professional Products Company

Clorox markets some of the most trusted and recognized brand names for healthcare settings, including Clorox®, DISPATCH® and Citrace®. These Clorox products are fast-acting, EPA-registered disinfectants intended for use by healthcare personnel on environmental surfaces and medical equipment to help reduce the spread of pathogens that cause healthcare-associated infections (HAIs). With the 2012 acquisitions of Aplicare, Inc., a leading manufacturer in the formulation, production and packaging of topical antiseptic and personal care products for healthcare settings, and HealthLink, a company dedicated to providing a wide array of medical products designed for physician's offices, the addition of these two leading providers of infection-control products expands Clorox's healthcare portfolio and reinforces the company's commitment to help stop the spread of healthcare infections. For more information, visit **www.cloroxhealthcare.com**.

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