Clorox Healthcare Announces Enhancements to Bleach Germicidal Disinfectants

Clorox Healthcare® Bleach Germicidal Wipes and Germicidal Cleaners – now effective against emerging viral pathogens and proven to kill C. difficile spores in the presence of soil.

PLEASANTON, Calif., Feb. 27, 2017 – In the fight against healthcare-acquired infections (HAIs), today's healthcare facilities need proven solutions to kill a broad range of infection-causing pathogens, from deadly hospital pathogens like *Clostridium difficile* (*C. difficile*) to new threats posed by emerging viral pathogens.

To ensure its disinfectants continue to meet the highest standards of efficacy, Clorox Healthcare voluntarily tested two of its leading ready-to-use bleach disinfectants using updated U.S. Environmental Protection Agency (EPA) recommended standards, which raise the bar for sporicidal disinfectant efficacy. Today, Clorox Healthcare is proud to announce that Clorox Healthcare® Bleach Germicidal Wipes and Clorox Healthcare® Bleach Germicidal Cleaners are now EPA-registered to kill *C. difficile* spores in three minutes, tested in the presence of a three-part organic soil load,[1] and have gained new disinfection claims for emerging viral pathogens including SARS-associated Coronavirus (SARS-CoV), Middle East Respiratory Syndrome-associated Coronavirus (MERS-CoV) and other common causes of HAIs.

"At Clorox Healthcare, we are dedicated to safeguarding patient environments and continuously strive to ensure our surface disinfectants meet the needs of the ever-changing healthcare environment," says Lynda Lurie, Director – Marketing, Clorox Healthcare. "We made these changes proactively so that healthcare professionals can be prepared for whatever comes through their doors, wherever care is delivered."

Innovating to Protect Against Healthcare Pathogens and Emerging Threats

In an increasingly global and interconnected society, emerging and re-emerging infectious diseases present serious challenges for healthcare facilities. This is especially true of viral pathogens with high potential for hospital-associated transmission, such as SARS-CoV and MERS-CoV, which caused large hospital outbreaks in Saudi Arabia in 2013 and 2014 and in South Korea in 2015.[2,3] Both MERS-CoV and SARS-CoV are included in the World Health Organization 2017 list of priority diseases likely to cause severe outbreaks.[4] Scientific evidence has shown that viruses, including SARS-CoV, MERS-CoV, and certain strains of the influenza virus, can survive on surfaces for extended periods, sometimes up to months, and may play a role in transmission.[5]

The ease of modern travel has only served to increase the risk and potential impact of disease transmission at the domestic and global level, and underscores the need for disinfectants healthcare professionals can trust.

To help safeguard patient environments against emerging and re-emerging threats, Clorox Healthcare® Bleach Germicidal Wipes and Clorox Healthcare® Bleach Germicidal Cleaners are now EPA-registered to kill SARS-CoV, MERS-CoV, Enterovirus D68, the Measles virus, and Influenza A and Influenza B viruses, both of which are major causes of flu in United States.[6] They have also gained disinfecting claims for common causes of HAIs including *Staphylococcus epidermidis* (CoNS), *Candida glabrata* and *Enteroccocus hirae*.

Long trusted for their broad-spectrum disinfection efficacy and utility in *C. difficile* infection prevention protocols, Clorox Healthcare® Bleach Germicidal Wipes are now EPA-registered to kill 58 microorganisms in three minutes or less. Clorox Healthcare® Bleach Germicidal Cleaners are now EPA-registered to kill 50 microorganisms in three minutes or less.

Raising the Bar for Sporicidal Disinfectant Efficacy: Why Testing with Soil Matters

Today, *C. difficile* is one of the most prevalent causes of HAIs in the United States and remains a top priority for hospital leaders nationwide.[7] In fiscal year 2017, *C. difficile* infections will also result in financial penalties for "preventable" HAIs under the Hospital-Acquired Condition Reduction Program, mandated by the Affordable Care Act of 2010.[8]

C. difficile spores, which are found in the intestines and shed via feces, can persist in the environment for months, making surface disinfection a vital component of infection prevention strategies. Since 2009, the EPA has worked to standardize the methodology and regulatory guidance related to disinfectants designed to treat surfaces contaminated with *C. difficile* spores. The latest EPA Interim Guidance, issued in June 2014, updated *C. difficile* testing standards to include using a clinically relevant *C. difficile* strain and measuring disinfection efficacy in the presence of a three-part organic soil load.[9]

"The presence of soil creates a more challenging and more realistic environment for disinfection, given that many studies show surfaces are frequently missed during the pre-cleaning step required by the EPA before disinfection against *C. difficile* spores," says Hedi Modaressi, Department Manager – R&D, Clorox Healthcare. "That's why we proactively tested our ready-to-use bleach germicidal disinfectants using current EPA recommended standards, which more accurately mimic the real-world conditions they need to perform in to help keep the patient environment clean and safe."

The new testing standards create a higher challenge for sporicidal disinfectant efficacy. Through voluntary testing, Clorox Healthcare Bleach Germicidal disinfectants have been able to maintain, and in some cases improve, contact times, killing 99.9999 percent of *C. difficile* spores – the EPA's required threshold for efficacy – within three minutes, even in the presence of the three-part organic soil load.

About Clorox Healthcare
Building on a century-long legacy in cleaning and disinfecting, Clorox Healthcare offers a wide range of products to help stop the spread of infection in healthcare facilities. From comprehensive surface disinfection, including advanced ultraviolet technology, to skin antisepsis, we are committed to providing efficacious solutions to the healthcare community. For more information, visit www.CloroxHealthcare.com or follow @CloroxHealth on Twitter.

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[1] Follow special instructions for cleaning prior to disinfection.
[2] Assiri, A, et al. "Hospital Outbreak of Middle East Respiratory Syndrome Coronavirus." *N Engl J Med* 2013; 369:407-416. http://www.nejm.org/doi/full/10.1056/NEJMoa1306742#t=article.
[3] Chowell, G, et al. "Transmission Characteristics of MERS and SARS in the Healthcare Setting: a Comparative Study." *BMC Medicine* 2015;13:210. https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-015-0450-0.
[4] "List of Pathogens." World Health Organization. http://www.who.int/csr/research-and-development/list_of_pathogens/en/. (Accessed Feb. 8, 2017).
[5] Otter, JA et al. "Transmission of SARS and MERS Coronaviruses and Influenza Virus in Healthcare Settings: the Possible Role of Dry Surface Contamination." *J. Hosp. Infect.* 2016, *92* (3), 235–250.
[6] "Influenza (Flu) Viruses." U.S. Centers for Disease Control and Prevention. https://www.cdc.gov/flu/about/viruses/index.htm. (Accessed Feb. 8, 2017).
[7] Saint, S, et al. "*Clostridium difficile* Infection in the United States: A National Study Assessing Preventive Practices Used and Perceptions of Practice Evidence." *Infect. Control Hosp. Epidemiol.* 2015;36.8:969–971.
[8] "Hospital Value-Based Purchasing." Centers for Medicare & Medicaid Services. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/hospital-value-based-purchasing. (Accessed Feb. 8, 2017).

[9] "Guidance for the Efficacy Evaluation of Products with Sporicidal Claims Against *Clostridium difficile* (June 2014)." U.S. Environmental Protection Agency. https://www.epa.gov/pesticide-registration/guidance-efficacy-evaluation-products-sporicidal-claims-against-clostridium#main-content. (Accessed Feb. 8, 2017).