Infection preventionists understand what is at stake if their facility’s chosen surface disinfectant does not effectively kill costly health care-associated infection (HAI)-causing pathogens, such as Clostridium difficile (C. difficile). Clostridium difficile-associated diarrhea (CDAD) places financial stress on US hospitals. A study of 170,000 discharges from 477 hospitals from 2009–2011 calculated that a single CDAD case can increase a hospital stay by 4.7 days and add $7,286 to hospital costs.

The US Environmental Protection Agency (EPA) has updated testing guidance for surface disinfectants registered to kill C. difficile spores. Before 2008, disinfectant manufacturers could test against numerous C. difficile spore or vegetative strains to obtain C. difficile disinfection claims. In June 2014, the EPA updated its guidance to include one testing method (ASTM E2197), which recommends use of a three-part organic soil mixture, and clinically relevant C. difficile strain (ATCC 43598). Despite a pre-cleaning step being required for C. difficile disinfection, the test conditions represent more realistic conditions on surfaces where C. difficile spores are present.

UNDERSTAND THE INTERIM EPA GUIDANCE

For C. difficile disinfection efficacy evaluation, the 2014 EPA testing guidance recommends a three-part OECD organic soil mixture containing components commonly found in feces and bodily fluids. The addition of this organic soil load to the disinfectant from the market, adjust their disinfectant formulas, contact times, or dilution ratios and reapply for registration in order to maintain disinfection efficacy claims against C. difficile spores — a process that can take up to 17 months.

STAY AHEAD OF THE CURVE

How can infection preventionists confirm that a disinfecting product with C. difficile kill claims has been tested according to the latest EPA guidance? Currently, there is no requirement for indicating testing methods; however, some manufacturers may reference testing method information on the EPA master label, technical reference materials, or even product labels. Some key statements to look for are:

- Strain: C. difficile strain (ATCC 43598).
- Testing Method: QCT-2 or ASTM E2197.
- Soil Load: In presence of three-part soil load.

Following the publication of the EPA’s 2014 interim guidance, Clorox Healthcare proactively tested our bleach germicidal products because we felt it was imperative to show that our disinfectants meet the set of conditions set forth in the updated guidance.

The EPA has the authority to test any in-market surface disinfectant to ensure efficacy meets current claims. For disinfectants with C. difficile sporidical claims, spot testing of in-market disinfectants will be evaluated using the most recent interim EPA guidance.

Ensuring that surface cleaning and disinfection solutions perform under real-world environmental conditions is imperative. For current Clorox Healthcare customers, making the switch to products tested under the 2014 interim EPA guidelines should be straightforward to implement given the variety of disinfecting product forms that Clorox Healthcare provides. We’ve even gone a step further and standardized our C. difficile contact time to 3 minutes for both Clorox Healthcare® Bleach Germicidal Wipes and Bleach Germicidal Cleaner to enable compliant usage of both products.

Work with your infection control solution providers to ensure your surface disinfectants have been tested using updated testing methods and have demonstrated disinfection efficacy against C. difficile spores in the presence of a 3-part organic soil load. This is an important first step to ensure robust environment-focused CDI prevention strategies. Clorox Healthcare wants you to take the lead in helping you stay ahead of HAI. Learn more at www.cloroxhealthcare.com.

REFERENCES


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Clorox Healthcare®
Do You Know How Effective Your Surface Disinfectant Truly Is?
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