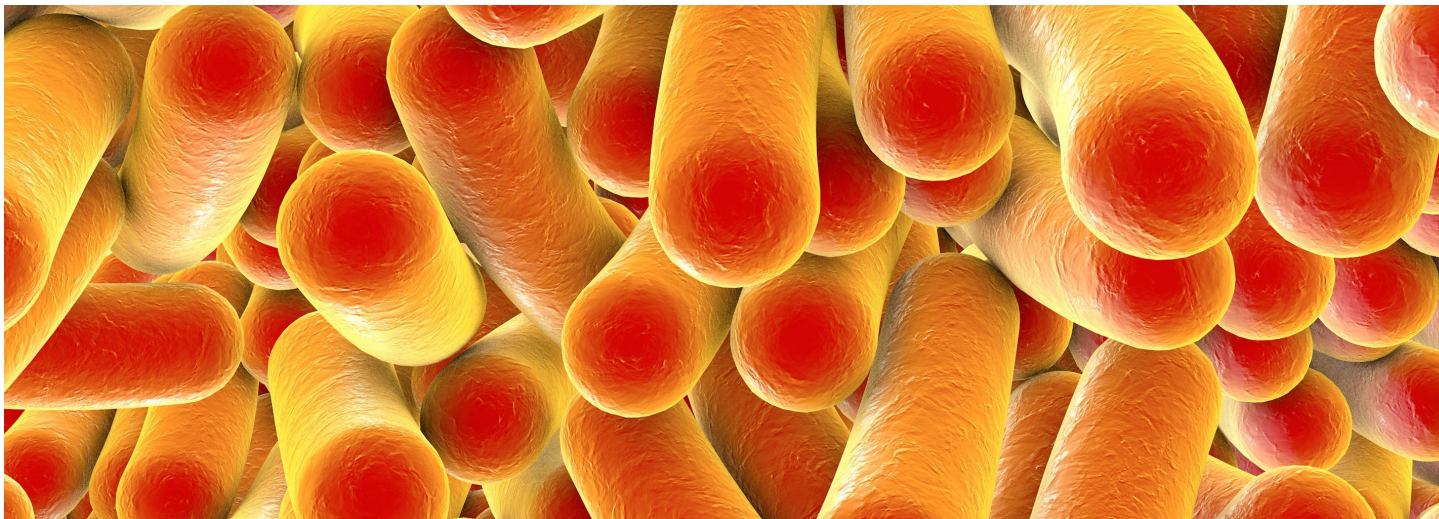


Clostridium difficile

Infections on the Rise



Facts About Clostridium difficile

What is it?

Clostridium difficile (*C. difficile*) is a spore-forming bacterium capable of causing gastrointestinal conditions ranging from diarrhea to colitis. Twenty years ago, *C. difficile* infections (CDI) were primarily limited to patients who were receiving long-term antibiotic therapy. Today, *C. difficile* is one of the most prevalent causes of healthcare-associated infections in the United States. According to a 2015 report released by the Centers for Disease Control and Prevention (CDC),¹ nearly 500,000 Americans suffer from *C. difficile* infections in a single year, in which 1 in 5 CDI patients exhibit relapse.¹

Transmission and treatment

C. difficile spores are found in the intestines and, because diarrhea is associated with CDI, the spores are found in feces. Spores can be shed into the environment and are easily transmitted between patients, often through transient contamination of a healthcare worker's hands. Studies have shown that viable *C. difficile* spores can persist in the healthcare environment for months if surfaces are not properly cleaned and disinfected.² A susceptible person can become infected if they touch contaminated surfaces and then touch their mouth. Antibiotics can be used to treat a *C. difficile* infection and, in some severe cases, the person may need surgery to remove the infected part of the intestines.

Who is at risk?

The risk of contracting a *C. difficile* infection increases in the elderly and in patients with previous antibiotic use, gastrointestinal surgery, immunocompromising conditions, and long stays in healthcare settings such as hospitals and nursing homes.

Decontamination of environmental surfaces

C. difficile spores are resistant to many commonly used disinfectants and even alcohol-based hand sanitizers. Because *C. difficile* patients can shed spores into the environment even after symptoms stop, adherence to the CDC "Guidelines for Environmental Infection Control in Health Care Facilities" is critical to help reduce the spread of *C. difficile* spores.

How can I help prevent the spread of *C. difficile*-associated disease in hospitals and other healthcare settings?

The CDC recommends six steps for prevention:³

1. Prescribe and use antibiotics carefully.
2. Use proper diagnostic tests for accurate results to prevent the spread of *C. difficile*.
3. Rapidly identify and isolate patients with *C. difficile*.
4. Wear gloves and gowns when treating *C. difficile* patients.
5. Clean *C. difficile* rooms with an EPA-registered disinfectant with claims against *Clostridium difficile* spores.
6. When a *C. difficile* patient transfers, notify the new facility of the infection.

1. Lessa, F.C. et al. Burden of Clostridium difficile Infection in the United States. *N Engl J Med* 2015; 372:825-834.

2. Kramer, A.; Schwebke, I.; Kampf, G. How long do nosocomial pathogens persist on inanimate surfaces? A systematic review. *BMC Infect. Dis.* 2006, 6, 130.

3. CDC. Healthcare-associated Infections: Clostridium difficile. http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html (Accessed 24 August 2016).

These Clorox Healthcare® Products Kill *C. difficile* Spores*

C. difficile spores can persist in the healthcare environment for months if surfaces are not properly cleaned and disinfected. To ensure robust environment-focused CDI prevention efforts, Clorox Healthcare recommends:

1. Reviewing your sporicidal disinfectant efficacy claims and user instructions to ensure they meet the needs of your facility.
2. Leveraging infection control best practices and guidelines to develop protocols for cleaning and disinfecting surfaces and medical equipment in areas housing CDI patients.⁴
3. Consider expanding the use of sporicidal disinfectants to areas outside of CDI patient care areas to limit the spread of *C. difficile* spores and protect the entire patient population.
4. Studies show that only 50% of surfaces in operating or patient rooms are effectively disinfected.⁵ Investigate the use of enhanced disinfection methods such as UV decontamination systems to supplement your manual cleaning and disinfection protocols.

Clorox Healthcare® Bleach

Germicidal Wipes

EPA Reg. No. 67619-12

6" x 5" Clinical Wipes, 6/150 ct., Item No. 30577
6.75" x 9" Multipurpose Wipes, 6/70 ct., Item No. 35309
6.75" x 9" Germicidal Wipes, Individual 6/50 ct., Item No. 31424
6.75" x 9" Germicidal Wipes, Transport Pack 24/20 ct., Item No. 31469
12" x 12" Terminal Wipes, 2/110 ct., Item No. 30358
12" x 12" Terminal Wipes Refill, 2/110 ct., Item No. 30359



Kills *C. difficile* spores in **3 minutes**

Germicidal Cleaners

EPA Reg. No. 56392-7

6/32 fl. oz. Spray, Item No. 68970
6/32 fl. oz. Pull-Top, Item No. 68832
8/22 fl. oz. Spray, Item No. 68967
6/64 fl. oz. Refill, Item No. 68973
4/128 fl. oz. Refill, Item No. 68978



Kills *C. difficile* spores in **3 minutes**

Fuzion™

EPA Reg. No. 67619-30

9/32 fl. oz. Spray, Item No. 31478



Kills *C. difficile* spores in **2 minutes**

Dispatch® Bleach

Hospital Cleaner Disinfectant Towels with Bleach

EPA Reg. No. 56392-8

6.75" x 8" Wipes Canister, 8/150 ct., Item No. 69150
9" x 10" Wipes Soft Pack, 12/60 ct., Item No. 69260
8" x 10" Wipes Patient Transport Pack, 24/40 ct., Item No. 69240
7" x 8" Wipes Individually Wrapped, 6/50 ct., Item No. 69101



Kills *C. difficile* spores in **3 minutes**

Clorox Healthcare® Optimum-UV Enlight® System



Kills more than 30 HAI-causing pathogens in 5 minutes at 8 feet, including:

- 4-log reduction of *C. difficile* spores
- Greater than 5-log reduction of over 20 pathogens, including MRSA, VRE and CRE

4. Dubberke, E. R. M. M.; Carling, P. M.; Carrico, R. P. R.; Donskey, C. J. M.; Loo, V. G. M. Ms.; McDonald, L. C. M.; Maragakis, L. L. M. M.; Sandora, T. J. M. M.; Weber, D. J. M. M.; Yokoe, D. S. M. M.; et al. Strategies to Prevent Clostridium difficile Infections in Acute Care Hospitals: 2014 Update. *Infect. Control Hosp. Epidemiol.* 2014, 35 (6), 628-645.

5. Carling, P. C.; Parry, M. F.; Von Behren, S. M. Identifying opportunities to enhance environmental cleaning in 23 acute care hospitals. *Infect. Control Hosp. Epidemiol.* 2008, 29 (1), 1-7.

*Use as directed on hard, nonporous surfaces.



For more information, contact your
Clorox sales representative or
Call: 800-234-7700
Visit: www.cloroxhealthcare.com
Email: healthcare@clorox.com

© 2016 Clorox Professional Products Company,
1221 Broadway, Oakland, CA 94612.