

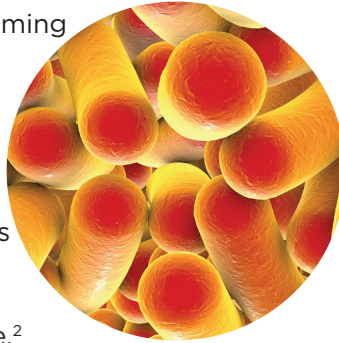
# *Clostridioides difficile*

*Infections on the Rise*

## Facts About *Clostridioides difficile*

### What is it?

*Clostridioides 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.<sup>1</sup> Today, *C. difficile* is one of the most common infections found in hospitals and long-term care facilities. In fact, *C. difficile* has been a possible factor in hundreds of deaths in Ontario hospitals alone.<sup>2</sup>



### 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.<sup>3</sup> 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 Public Health Agency of Canada (PHAC) "Infection Control Guideline Series for Healthcare Acquired Infections" 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?

PHAC recommends the following infections prevention and control measures:<sup>4</sup>

1. Organizational controls by having policies, procedures and programs specifically for the prevention of *C. difficile* infection.
2. Triage - Emergency Departments and Acute Assessment Settings
3. Assessment of symptomatic patients.
4. Surveillance of the early reporting of symptomatic patients.
5. Laboratory testing/reporting to identify *C. difficile* or its toxins
6. Contact precautions should be implemented empirically for patients with acute diarrhea, suspected or confirmed to be *C. difficile* 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. The Globe and Mail. Powell N, Walters J. <https://www.theglobeandmail.com/news/national/c-difficile-possible-factor-in-463-ontario-hospital-deaths/article1056968/>. Accessed March 27, 2019.

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

4. PHAC. Clostridium Difficile Infection. Infection Prevention and Control Guidance for Management in Acute Care Settings. <https://www.canada.ca/en/public-health/services/infectious-diseases/nosocomial-occupational-infections/clostridium-difficile-infection-prevention-control-guidance-management-acute-care-settings.html>. Accessed December 21, 2020.

# 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.<sup>5</sup>
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.<sup>6</sup> Investigate the use of enhanced disinfection methods such as Clorox Total 360® System to supplement your manual cleaning and disinfection protocols.

Clorox Healthcare® Bleach		
<p><b>Germicidal Wipes</b>                      Health Canada DIN No. 02465671                      15.2 cm x 12.7 cm (5" x 6") Clinical Wipes, 6/150 ct., Item No. 01557                      17.1 cm x 22.8 cm (6.75" x 9") Multi-purpose Wipes, 6/70 ct., Item No. 01308                      30.4 cm x 30.4 cm (12" x 12") Terminal Wipes, 2/110 ct., Item No. 01309                      30.4 cm x 30.4 cm (12" x 12") Terminal Wipes Refill, 2/110 ct., Item No. 01310</p>		
<p><b>Germicidal Cleaners</b>                      Health Canada DIN No. 02469278                      6/946 mL Pull-Top, Item No. 01416</p>		
<p><b>Fuzion®</b>                      Health Canada DIN No. 02459744                      9/946 mL Spray, Item No. 01671</p>		
<p><b>Spore Defense™ for use with Clorox® Total 360® Electrostatic Sprayer</b>                      Health Canada DIN No. 02494663                      4/3.78 L Item No. 01742</p>		

5. 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.

6. 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.