

## Clinical Guidelines for *Clostridium difficile* Infection

### What is *Clostridium difficile* (*C. difficile*)?

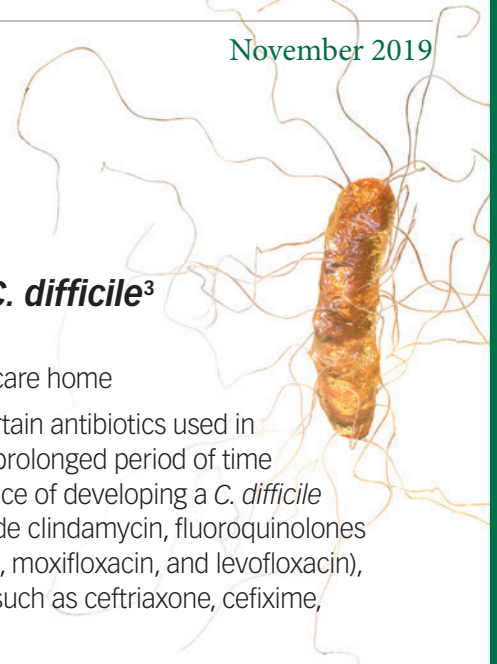
*Clostridium difficile* (*C. difficile*) is a bacterium that causes mild to severe diarrhea and inflammation of the colon. *C. difficile* is the most frequent cause of infectious diarrhea in hospitals and long-term care homes in Canada. It can be severe and recurrent, causing death in over 5% of those infected within 30 days.<sup>1</sup>

### Signs and Symptoms of *C. difficile*<sup>2</sup>

- Residents with non-severe *C. difficile* may present with new-onset diarrhea with greater than three unformed stools in 24 hours, fever, and abdominal pain.
- Residents with severe or fulminant *C. difficile* may present with elevated serum creatinine, markedly elevated white blood cell count, hypotension, shock, megacolon, or ileus.

### Risk factors for *C. difficile*<sup>3</sup>

1. Older age
2. Living in a long-term care home
3. Use of antibiotics: Certain antibiotics used in high doses or over a prolonged period of time will increase the chance of developing a *C. difficile* infection. These include clindamycin, fluoroquinolones (such as ciprofloxacin, moxifloxacin, and levofloxacin), and cephalosporins (such as ceftriaxone, cefixime, and ceftriaxone).
4. Hospitalization
5. Use of acid-suppressing medications (i.e., proton pump inhibitors [PPIs] and histamine H2 blockers, such as pantoprazole, lansoprazole, ranitidine, and famotidine).



### *Clostridium difficile* Treatment Guidelines<sup>1</sup>

TYPE OF EPISODE	FIRST-LINE THERAPY	ALTERNATIVE(S)
Initial – mild to moderate* Initial – severe, uncomplicated	Vancomycin 125 mg po QID for 10–14 days	Fidaxomicin 200 mg po BID for 10 days
Initial – severe, complicated	Vancomycin 125–500 mg po QID for 10–14 days + metronidazole 500 mg IV TID for 5–7 days	Fidaxomicin 200 mg po BID for 10 days with metronidazole 500 mg IV TID if severe allergy to oral vancomycin
First recurrence	Vancomycin 125 mg po QID for 14 days	Fidaxomicin 200 mg po BID for 10 days
Second or subsequent recurrences	Vancomycin prolonged tapered and/or pulsed regimen (e.g., 125 mg po QID for 14 days, 125 mg po TID for 7 days, 125 mg po BID for 7 days, 125 mg po once daily for 7 days, then every 2–3 days for 2–8 weeks)	

\*Note that metronidazole is not a first-line therapy for *C. difficile* in initial mild to moderate episodes and is only recommended as an alternative when vancomycin and fidaxomicin are cost-prohibitive.

**Addendum to the May 2019 newsletter:** Note that the list of medications from the “Key updates in the 2019 Beers Criteria” was intended only to highlight significant additions/changes to the criteria. For example, rivaroxaban was newly added to the 2019 Beers Criteria as an agent to be used with caution due to the risk of GI bleeding and caution in people ≥ 75 years for atrial fibrillation or VTE. It joins dabigatran, which was listed on both the 2015 and 2019 Beers Criteria with this cautionary note.