



## A Not Too DIFFicult

# C. Diff Review

By: Dinh Ho, PA Candidate, Annie Wirtz, PharmD, BCPPS, Elizabeth Monsees, PhD, MBA, RN, CIC, FAPIC

### What is C. diff?

C. diff (also known as **Clostridioides difficile**) is a bacteria commonly found in the environment. Up to **5% of people are colonized** with C. diff meaning the bacteria is present in their bodies, but doesn't cause disease.

### Symptoms

Under certain conditions, C. diff can release **toxins causing an infection** of the large intestines or colon. Patients can experience **mild diarrhea or stomach upset** and in rare cases, severe colon inflammation can be fatal.

### Transmission

C. diff is passed to individuals by **touching contaminated hands of other individuals or surfaces**. **Wash hands often** with soap and water and keep the environment clean with appropriate cleaning supplies as C. diff can remain on surfaces for a long time.

### Antibiotics & C. diff

Antibiotics **deplete normal colon bacteria** which allows C. diff to grow and produce toxins. **Limiting antibiotics** when not needed and minimizing frequency and duration of high-risk antibiotics (i.e., clindamycin, cephalosporins, quinolones) are important ways to prevent C. diff infection (CDI).

### Testing for C. diff

Consider testing patients with  $\geq 3$  unformed stools per day without use of laxatives in the past 48 hours. **Patients < 2 years should not be tested** unless other causes are excluded. C. diff colonization exceeds 40% in this age, leading to false positives. Repeat testing (i.e., test of cure) is not recommended.

### Treatment Guidelines

There have been recent guideline updates for management of CDI. Click [here](#) for the most up to date pediatric guidelines and [here](#) for the most recent adult guidelines (used for teenage/adult-sized patients).

### Management

**For initial episode or 1st recurrence:**

- **Pediatrics:** PO vancomycin or metronidazole
- **Adults:** Fidaxomicin or PO vancomycin. Metronidazole is no longer recommended in the new adult guidelines.
- **Severe or Fulminant CDI:** Oral vancomycin +/- rectal vancomycin and IV metronidazole (if ileus)

### Medication Considerations

- Use **PO vancomycin** because IV vancomycin doesn't achieve high concentrations in the bowel
- PO vancomycin and fidaxomicin have **increased stool penetration** compared to PO metronidazole
- Fidaxomicin is **available at CMH** for specific groups. Consider patient size, age, and insurance coverage



Click [here](#) to take a short quiz



Guest author, Dinh Ho, is a 3rd year Physician Assistant student at UMKC who plans on graduating in May with an interest in primary care. When not studying, she enjoys spending time with her boyfriend, pet cat, Sophie, and trying new restaurants in Kansas City!