ANMC Pediatric *Clostridioides (Clostridium) difficile* Infection (CDI) Treatment Guideline

Special Pediatric Considerations

Infants and toddlers have high rates of non-pathologic colonization with *Clostridioides difficile*. **Routine testing is not recommended in children <2 years old.**

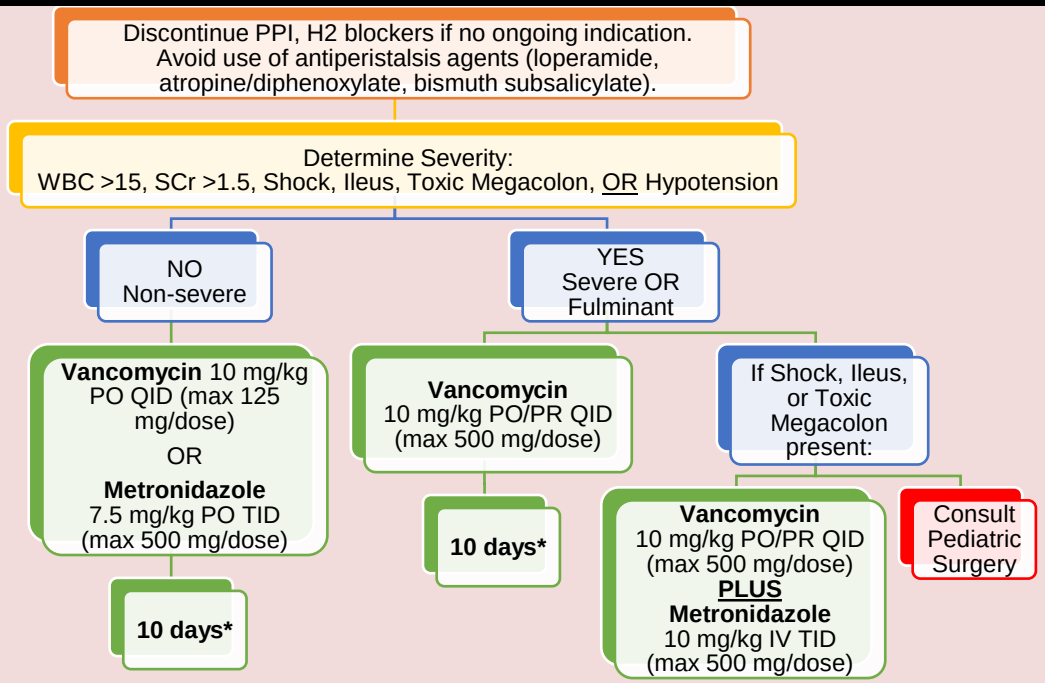
< 1 year of age:	1-2 year(s) of age:	≥ 2 years of age:
• Routine testing is not recommended due to high colonization rates (colonization rates can exceed 40%) • Test if infant has evidence of pseudomembranous colitis or toxic megacolon • Positive test result indicates *possible* CDI → continue to seek alternate diagnoses	• Routine testing is not recommended due to high colonization rates • Excluded other causes of infectious or non-infectious diarrhea before testing for CDI • Positive test result indicates *possible* CDI → continue to seek alternate diagnoses	• Testing is recommended for patients with prolonged or worsening diarrhea AND risk factors or relevant exposures

Risk Factors		Preventative Measures
• Recent hospitalization or known contact in the community • Antibiotics in previous 90 days ○ High risk antibiotics include: 3rd/4th/5th generation cephalosporins, clindamycin, fluoroquinolones, or carbapenems • PPI/H2 Blocker use • Immunocompromised	• Renal insufficiency • Hirschprung disease or other underlying bowel disease • History of GI tract surgery • Gastrostomy or jejunostomy tube; prolonged NG tube insertion • Repeated enemas • Diaper use in older children	• Narrow or discontinue antimicrobial therapy when possible and treat for shortest duration clinically necessary • Discontinue PPIs, H2 Blockers, and antacids if no ongoing indication • Consider Lactobacillus rhamnosus GG for "high risk antimicrobials", see *C. difficile* Prophylaxis Guideline for criteria and exclusions

Clinical Findings

Signs & Symptoms	Confounding Factors – Testing Discouraged	Laboratory Findings
• Abdominal pain/tenderness • ≥ 3 watery/unformed stools in a 24 hour period • Fever • Decreased albumin • Elevated WBC, SCr	• <2 years old (see above) • Laxative or tube feeding use within previous 24-48 hours	• Positive *Clostridioides difficile* DNA amplification test (2 hour turnaround for results), EIA toxin (1 hour turnaround for results); total ~3 hour turnaround for results • Test of cure should not be performed. Repeat tests sent within 7 days will be rejected by microbiology department

Antibiotic Selection



First Recurrence (Non-Severe)

Vancomycin 10 mg/kg PO QID (max 125 mg/dose) x14 days

Second or Greater Recurrence

Vancomycin 10 mg/kg PO QID (max 125 mg/dose) x14 days, followed by 4 week taper:

- **Vancomycin** 10 mg/kg PO BID (max 125 mg/dose) x7 days, then
- **Vancomycin** 10 mg/kg PO QD (max 125 mg/dose) x7 days, then
- **Vancomycin** 10 mg/kg PO QOD (max 125 mg/dose) x7 days, then
- **Vancomycin** 10 mg/kg PO q72hr (max 125 mg/dose) x7 days

Consider for referral for fecal microbiota transplantation after multiple recurrences with standard antibiotic treatment and discussion with pediatric ID and pediatric gastroenterology.

Notes

- *If ongoing therapy with *C. difficile* predisposing antimicrobial regimen, after 10 days of QID PO vancomycin, continue PO vancomycin BID until completion of predisposing antimicrobial therapy regimen.

ANMC Antimicrobial Stewardship Program Approved April 2018; Updated April 2022

Clinical Practice Guidelines for *Clostridium difficile* Infection. *CID*. 2018; AAP Policy Statement: *Clostridium difficile* Infection in Infants and Children. Pediatrics. 2013: 131 (1): 196-200. VanHise NW, et al. Goldenberg JZ, et al. The use of probiotics to prevent *Clostridium difficile* diarrhea associated with antibiotic use. Cochrane Review. 19 December 2017. Miranda-Katz M, Parmar D, Dang R, Alabaster A, Greenhow TL. Epidemiology and Risk Factors for Community Associated *Clostridioides difficile* in Children. *J Pediatr*. 2020 Jun; 221: 99-106.