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

**Special Pediatric Considerations**

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

## Risk Factors

- 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
- Elevated WBC, SCR
- Fever
- Abdominal pain/tenderness
- History of GI tract surgery
- Gastrostomy or jejunostomy tube; prolonged NG tube insertion
- Diaper use in older children
- Renal insufficiency
- Diarrhea before testing for CDI

## Preventative Measures

- 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

## Signs & Symptoms

- Abdominal pain/tenderness
- ≥ 3 watery/unformed stools in a 24 hour period
- Fever
- Decreased albumin
- Elevated WBC, SCR

## Laboratory Findings

- 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

## Signs & Symptoms

- <2 years old (see above)
- Laxative or tube feeding use within previous 24-48 hours

## Laboratory Findings

- Discontinue PPI, H2 blockers if no ongoing indication. Avoid use of antiperistalsis agents (loperamide, atropine/diphenoxylate, bismuth subsalicylate).

## Antibiotic Selection

<table>
<thead>
<tr>
<th>Determining Severity</th>
<th>First Recurrence (Non-Severe)</th>
<th>Second or Greater Recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBC &gt;15, SCR &gt;1.5, Shock, Ileus, Toxic Megacolon, OR Hypotension</td>
<td>Vancomycin 10 mg/kg PO QID (max 125 mg/dose) x14 days</td>
<td>Vancomycin 10 mg/kg PO (max 125 mg/dose) x14 days, followed by 4 week taper:</td>
</tr>
<tr>
<td>NO Non-severe</td>
<td>- Vancomycin 10 mg/kg PO BID (max 125 mg/dose) x7 days, then</td>
<td>- Vancomycin 10 mg/kg PO QD (max 125 mg/dose) x7 days, then</td>
</tr>
<tr>
<td>YES Severe OR Fulminant</td>
<td>Vancomycin 10 mg/kg PO/PR QID (max 500 mg/dose)</td>
<td>Vancomycin 10 mg/kg PO QD (max 125 mg/dose) x7 days, then</td>
</tr>
<tr>
<td>Metronidazole 7.5 mg/kg PO TID (max 500 mg/dose)</td>
<td>10 days*</td>
<td>Vancomycin 10 mg/kg PO/PR QID (max 500 mg/dose) PLUS Metronidazole 10 mg/kg IV TID (max 500 mg/dose)</td>
</tr>
<tr>
<td>10 days*</td>
<td>Consult Pediatric Surgery</td>
<td>Consider for referral for fecal microbiota transplantation after multiple recurrences with standard antibiotic treatment and discussion with pediatric ID and pediatric gastroenterology.</td>
</tr>
</tbody>
</table>

## 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.