

# ANMC *Clostridium difficile* Infection (CDI) Prophylaxis Guideline

## Risk Factors

Host	Disruption in flora
<ul style="list-style-type: none"> <li>Recent hospitalization or known contact in the community</li> <li>Immunocompromised</li> <li>Female gender</li> <li>Age &gt; 65 yo</li> </ul>	<ul style="list-style-type: none"> <li>Prior abx in previous 90 days</li> <li>PPI/H2 Blocker use                             <ul style="list-style-type: none"> <li>Risk of causing <i>C. difficile</i>: PPI&gt;H2 Blockers&gt;Antacids</li> </ul> </li> <li>Antineoplastic use in the past 8 weeks</li> <li>Loss of intestinal function                             <ul style="list-style-type: none"> <li>Ileus/obstruction</li> </ul> </li> <li>Recent procedures                             <ul style="list-style-type: none"> <li>Enema/NG Tube/Surgical Procedure</li> </ul> </li> </ul>

## High Risk Antimicrobials

<ul style="list-style-type: none"> <li><b>3<sup>rd</sup>/4<sup>th</sup> generation cephalosporins</b> <ul style="list-style-type: none"> <li>Ceftriaxone</li> <li>Cefpodoxime</li> <li>Cefepime</li> <li>Ceftazidime</li> <li>Cefdinir</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Clindamycin</b></li> <li><b>Beta-Lactam/Beta-Lactamase Inhibitors</b> <ul style="list-style-type: none"> <li>Piperacillin/Tazobactam</li> <li>Ampicillin/Sulbactam</li> <li>Amoxicillin/Clavulanic acid</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Fluoroquinolones</b> <ul style="list-style-type: none"> <li>Levofloxacin</li> <li>Ciprofloxacin</li> </ul> </li> <li><b>Carbapenems</b> <ul style="list-style-type: none"> <li>Ertapenem</li> <li>Meropenem</li> </ul> </li> </ul>
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## Initial Management

<ul style="list-style-type: none"> <li>Antimicrobial therapy should be narrowed when possible and treatment should be for the shortest duration clinically necessary</li> <li>Discontinue PPIs, H2 Blockers, and antacids if no ongoing indication                             <ul style="list-style-type: none"> <li>Exclusion: GI bleed, <i>H.pylori</i> infection, gastric/duodenal ulcer, erosive esophagitis, chronic NSAID/steroid use (&gt;20 mg/day prednisone equivalent)</li> </ul> </li> </ul>
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## Probiotic Exclusion Criteria

<ul style="list-style-type: none"> <li>Neutropenic</li> <li>HIV positive w/ CD4 &lt;200</li> <li>Active malignancy undergoing chemotherapy or radiation</li> <li>Pancreatitis</li> </ul>	<ul style="list-style-type: none"> <li>Transplant patient on immunosuppressant therapy</li> <li>Prosthetic heart valve</li> <li>Ileus, GI obstruction</li> </ul>
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## High Risk Patients

Criteria	Treatment	Duration
Initiating "high risk" antimicrobial therapy	<ul style="list-style-type: none"> <li><b>Lactobacillus rhamnosus GG 1 capsule PO daily, initiated at time of antimicrobial therapy initiation</b></li> </ul>	<ul style="list-style-type: none"> <li>Continue 7 days after cessation of antimicrobial therapy</li> </ul>
<i>C.diff</i> within last 6 months <b>and</b> initiating "high risk" antimicrobial therapy	<ul style="list-style-type: none"> <li><b>Adults Only: Vancomycin 125 mg PO BID (prophylaxis dosing)*</b></li> <li><b>Lactobacillus rhamnosus GG 1 capsule PO daily at time of antimicrobial therapy initiation</b></li> </ul>	<ul style="list-style-type: none"> <li>Vancomycin during antimicrobial therapy</li> <li>Lactobacillus: continue 7 days after cessation of antimicrobial</li> </ul>

## Notes

<ul style="list-style-type: none"> <li>If ongoing therapy with <i>C. difficile</i> predisposing antimicrobial regimen, upon completion of 10-14 days of QID dosing continue enteral vancomycin BID until completion of therapy</li> <li>*Clinical trials utilizing secondary prophylaxis with oral vancomycin were done in the inpatient population</li> <li>Metronidazole should not be used beyond first recurrence of CDI or long-term due to potential for cumulative neurotoxicity</li> </ul>
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VanHise NW, et al. Efficacy of Oral Vancomycin in Preventing Recurrent *Clostridium difficile* Infection in Patients Treated with Systemic Antimicrobial Agents. *CID*. 2016;63(5):651-3.; Carignan A, et al. Efficacy of Secondary Prophylaxis with Vancomycin for Preventing Recurrent *Clostridium difficile* Infections. *Am J Gastroenterol*. 2016;111:1834-1840.