ANMC *Clostridium difficile* Infection (CDI) Prophylaxis Guideline

Risk Factors

Host	Disruption in flora

• Recent hospitalization or known contact in the community
• Immunocompromised
• Female gender
• Age > 65 yo
	• Prior antibiotics in previous 90 days
	• PPI/H2 Blocker use (Risk of causing *C.difficile*: PPI>H2 Blockers>Antacids)
	• Antineoplastic use in the past 8 weeks
	• Loss of intestinal function
	  ○ Ileus/obstruction
	• Recent procedures
	  ○ Enema/NG Tube/Surgical Procedure

High Risk Antimicrobials

- **3rd/4th/5th generation cephalosporins**
  - Ceftazidime
  - Cefdinir
  - Ceftriaxone
  - Cefpodoxime
  - Cefepime
  - Ceftaroline
- **Clindamycin**
- **Beta-Lactam/Beta-Lactamase Inhibitors**
  - Piperacillin/Tazobactam
  - Ampicillin/Sulbactam
  - Amoxicillin/Clavulanic acid
- **Fluoroquinolones**
  - Levofloxacin
  - Ciprofloxacin
  - Moxifloxacin
- **Carbapenems**
  - Ertapenem
  - Meropenem

Initial Management

- Antimicrobial therapy should be narrowed when possible and treatment should be for the shortest duration clinically necessary
- Discontinue PPIs, H2 Blockers, and antacids if no ongoing indication
  - Exclusion: GI bleed, *H.pylori* infection, gastric/duodenal ulcer, erosive esophagitis, chronic NSAID/steroid use (>20 mg/day prednisone equivalent)

Probiotic Exclusion Criteria

- *Neutropenic*
- *HIV positive w/ CD4 <200*
- *Active malignancy undergoing chemotherapy or radiation*
- *Pancreatitis*
- *Transplant patient on immunosuppressant therapy*
- *Prosthetic heart valve*
- *Ileus, GI obstruction*

High Risk Patients

Criteria	Prophylactic Regimen	Duration
Initiating "high risk" antimicrobial therapy	○ **Lactobacillus rhamnosus GG 1 capsule** PO daily, initiated at time of antimicrobial therapy initiation	○ Continue 7 days after cessation of antimicrobial therapy
C.diff within last 6 months **and** initiating "high risk" antimicrobial therapy	**Adults Only:** ○ **Vancomycin 125 mg** PO BID (prophylaxis dosing)* **PLUS** ○ **Lactobacillus rhamnosus GG** 1 capsule PO daily at time of antimicrobial therapy initiation	○ Vancomycin during antimicrobial therapy ○ Lactobacillus: continue 7 days after cessation of antimicrobial

Considerations

- If ongoing therapy with *C. difficile* predisposing antimicrobial regimen, upon completion of 10-14 days of QID dosing for treatment, may continue enteral vancomycin BID until completion of therapy.
- *Clinical trials utilizing secondary prophylaxis with oral vancomycin were done in the inpatient population

VanHise NW, et al. Efficacy of Oral Vancomycin in Preventing Recurrent *Clostirdium 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.