

# ANMC Antibiotic Guidelines for Gastrointestinal Surgical Prophylaxis

Suspected Pathogens	Intraoperative Re-dosing Frequency
Polymicrobial process: <i>Staph. aureus</i> <i>Enterobacteriaceae</i> *Anaerobes (including <i>Bacteroides</i> ) <i>Enterococcus sp.</i> <i>Strep. sp.</i> *Anaerobes less significant unless bile duct to bowel anastomosis or fistula present for cholecystectomy patients	<ul style="list-style-type: none"> <li>Cefazolin: 4 hours</li> <li>Clindamycin: 6 hours</li> <li>Gentamicin: N/A</li> <li>Levofloxacin: N/A</li> <li>Metronidazole: N/A</li> </ul>

## Antibiotic Selection

### Treatment Selection

Procedure	Adult Treatment Options	Pediatric Treatment Options
<b>Lower GI Tract</b> <ul style="list-style-type: none"> <li>Colectomy</li> <li>Uncomplicated appendectomy</li> <li>Small bowel obstruction</li> </ul>	<b>Preferred Therapy:</b> <ul style="list-style-type: none"> <li>Cefazolin 2-3gm IV <b>PLUS</b> <ul style="list-style-type: none"> <li>Weight &lt;120 kg: 2gm</li> <li>Weight ≥120 kg: 3gm</li> </ul> </li> <li>Metronidazole 500mg IV</li> </ul> <b>Type I PCN Allergy:</b> <ul style="list-style-type: none"> <li>Levofloxacin 500mg IV <b>PLUS</b></li> <li>Clindamycin 900mg IV</li> </ul>	<b>Preferred Therapy:</b> <ul style="list-style-type: none"> <li>Cefazolin 30 mg/kg/dose IV <b>PLUS</b></li> <li>Metronidazole 10 mg/kg/dose IV</li> </ul> <b>Type I PCN Allergy:</b> <ul style="list-style-type: none"> <li>Gentamicin 2.5 mg/kg/dose IV <b>PLUS</b></li> <li>Clindamycin 10 mg/kg/dose IV</li> </ul>
<b>Gastroduodenal</b> <ul style="list-style-type: none"> <li>Cholecystectomy</li> <li>Whipple</li> <li>Bypass surgery</li> </ul>	<b>Preferred Therapy:</b> <ul style="list-style-type: none"> <li>Cefazolin 2-3 gm IV                             <ul style="list-style-type: none"> <li>Weight &lt;120 kg: 2gm</li> <li>Weight ≥120 kg: 3gm</li> </ul> </li> </ul> <b>Type I PCN Allergy:</b> <ul style="list-style-type: none"> <li>Clindamycin 900mg IV</li> </ul>	<b>Preferred Therapy:</b> <ul style="list-style-type: none"> <li>Cefazolin 30 mg/kg/dose IV</li> </ul> <b>Type I PCN Allergy:</b> <ul style="list-style-type: none"> <li>Clindamycin 10 mg/kg/dose IV</li> </ul>

### CONSIDERATIONS

- Post-operative antibiotic dosing is optional, but if given should be discontinued within 24 hours of surgery
- Bowel preparation with oral antimicrobial decontamination(neomycin) prior to colectomy remains controversial, however, Nichols bowel prep has been revitalized at ANMC and may be considered for elective colorectal resection
- Due to *E.coli* resistance >10%, empiric quinolone use alone is cautioned in high-risk/severe cases

*Antimicrobial Stewardship Program Approved May 2017*