# PRE-OPERATIVE ANTIBIOTIC PROPHYLAXIS GUIDELINES

<table>
<thead>
<tr>
<th>TYPE OF OPERATION</th>
<th>RECOMMENDED DRUGS</th>
<th>SERIOUS PCN ALLERGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. BREAST BIOPSY OR MASTECTOMY</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op (Increase dose to 2 gms for obese patients)</td>
<td>Erythromycin??</td>
</tr>
<tr>
<td>II. CARDIAC SURGERY</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op or Cefuroxime 1.5 gm IV 30 minutes pre-op and q12h x 3 doses (Increase doses of both drugs to 2 gms for obese patients)</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 3 doses</td>
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<tr>
<td>a. Valve Replacement</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op and q8h x 5 doses or Cefuroxime 1.5 gm IV 30 minutes pre-op and q12h x 3 doses (Increase doses of both drugs to 2 gms for obese patients)</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 3 doses</td>
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<td>b. CABG</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op and q8h x 5 doses or Cefuroxime 1.5 gm IV 30 minutes pre-op and q12h x 3 doses (Increase doses of both drugs to 2 gms for obese patients)</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 3 doses</td>
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<tr>
<td>c. Pacemaker Insertion</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op and q8h x 2-5 doses</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 1-3 doses</td>
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<tr>
<td>d. AICD Insertion</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op and q8h x 2-5 doses</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op and</td>
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### III. GASTROINTESTINAL PROCEDURES

#### a. Esophageal Surgery

<table>
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<tr>
<th>Risk Level</th>
<th>Antibiotics Recommended</th>
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<td>Normal risk</td>
<td>None</td>
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<tr>
<td>High risk (H\textsubscript{2} blocker, decreased gastric acidity, hemorrhage, gastric obstruction, gastric bypass, or PEG tubes)</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op</td>
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#### b. Gastric Surgery

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<td>Normal risk</td>
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<td>High risk (H\textsubscript{2} blocker, decreased gastric acidity, hemorrhage, gastric obstruction, gastric bypass, or PEG tubes)</td>
<td>Cefazolin 1 gm IV 30 minutes pre-op (Increase dose to 2 gms for obese patients)</td>
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#### c. Small Bowel

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<th>Antibiotics Recommended</th>
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<tbody>
<tr>
<td>Cefazolin 1 gm IV 30 minutes pre-op (Increase dose to 2 gms for obese patients)</td>
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<td>Clindamycin 600 mg IV 30 minutes pre-op</td>
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#### d. Elective Colorectal Case

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<tr>
<th>Step</th>
<th>Instructions</th>
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<tr>
<td>1</td>
<td>Mechanical prep</td>
</tr>
<tr>
<td>2</td>
<td>Neomycin and Erythromycin at 1pm, 2pm and 11pm on the day prior to surgery</td>
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<tr>
<td>3</td>
<td>Cefoxitin 1 gm IV 30 minutes pre-op (Increase dose to 2 gms for obese patients)</td>
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<td>Neomycin and Erythromycin at 1pm, 2pm and 11pm on the day prior to surgery</td>
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<td>3</td>
<td>Clindamycin 600 mg IV and Gentamicin 1.7 mg/kg IV 30 minutes pre-op</td>
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e. Emergent Colorectal Case  
Cefoxitin 1 gm IV 30 minutes pre-op and q8h x 2 doses  
(Gentamicin 1.7 mg/kg IV and Metronidazole 500 mg IV 30 minutes pre-op)  
(Increase dose to 2 gms for obese patients)

f. Appendectomy (nonruptured)  
Cefoxitin 2 gm IVPB 30 minutes pre-op  
Gentamicin 1.7 mg/kg and Metronidazole 500 mg IV 30 minutes pre-op

g. Elective Splenectomy  
None

h. Biliary Surgery  
Cefazolin 1 gm IV 30 minutes pre-op or Cefoxitin 1 gm IV 30 minutes pre-op  
(Gentamicin 1.7 mg/kg IV and Cefoxitin 1 gm IV 30 minutes pre-op)  
(Increase dose of both drugs to 2 gms for obese patients)

i. Penetrating Abdominal Trauma  
Cefoxitin 2 gm IV 30 minutes pre-op  
Gentamicin 1.7 mg/kg IV and Clindamycin 900 mg IV 30 minutes pre-op

j. Nonvascular Abdominal Surgery NOT Involving a Viscus  
None

k. Hernia Repair  
None

IV. GYNECOLOGIC AND OBSTETRICAL

a. Hysterectomy (vaginal or abdominal), Retropubic Urethropexy, Tension-free Vaginal Tape, Abdominal Sacralcolpopexy,  
Cefazolin 1 gm IV 30 minutes pre-op and q8h x 1 dose only if case lasts longer than 3 hours or > 1500ml blood loss  
(Metronidazole 500 mg IV 30 minutes pre-op)  
(Increase dose to 2 gms for obese patients)
A&P Repair, Operative Hysteroscopy, Myoma Resection, or Endometrial Ablation

b. C-section

Cefazolin 1 gm IV after cord clamped, and add q8h x 2 doses for high risk cases (prematurity, ROM, ruptured membranes, and active labor)

Metronidazole 500 mg IV after cord clamped

Abortion

1) 1st trimester

Penicillin G 2 million units IV 30 minutes pre-op

Doxycycline 100 mg IV 30 minutes pre-op and 200 mg PO 2 hours post-op

or

Doxycycline 100 mg IV 30 minutes pre-op and 200 mg PO 2 hours post-op

2) 2nd trimester

Cefazolin 1 gm IV 30 minutes pre-op

Metronidazole 500 mg PO x 3 doses

(Increase dose to 2 gms for obese patients)

or

Doxycycline 300 mg PO post-op

d. Uncomplicated D&C

None

None

e. Tubal Ligation

None

None

f. Cystocele/Rectocele Repair

None

None

V. HEAD & NECK

a. Tonsillectomy

None

b. Oral or Pharyngeal Incisions

Clindamycin 600 mg IV ±

Clindamycin 600 mg IV ±
Gentamicin 1.7 mg/kg IV 30 minutes pre-op  Gentamicin 1.7 mg/kg IV 30 minutes pre-op  
or  
Cefazolin 2 gm IV 30 minutes pre-op

pre-op  pre-op

c. Rhinoplasty  None  None

VI. NEUROSURGERY

a. Craniotomy  Cefazolin 1-2 gms IV 30 minutes pre-op  Vancomycin 1 gm IV to finish 30-90 minutes pre-op  
or  
Vancomycin 1 gm IV to finish 30-90 minutes pre-op

b. Shunts  
1) Infection rate < 10% None None

2) Infection rate > 10%  
TMP 160 mg + SMX 800 mg IV 30 minutes pre-op and q12h x 3 doses  
TMP 160 mg + SMX 800 mg IV 30 minutes pre-op and q12h x 3 doses

c. Spinal Fusion  None  None

d. Laminectomy  None  None

VII. OPHTHALMIC SURGERY

a. Retinal and Vitreal Procedures  Topical 5% povidone/iodine prep  Same

b. Strabismus Surgery  Topical 5% povidone/iodine prep, and repeated post-op  Same
c. Pediatric Procedures  
   Ciloxan or Ocuflox drops instilled q15min x 4 pre-op and topical 5% povidone/iodine prep  
   Same

d. Glaucoma Procedures (trabeculectomy or tube shunt)  
   Topical 5% povidone/iodine prep  
   Same

e. Cataract Surgery  
   Ciloxan 1 drop instilled 1 hour pre-op, and 1 drop of topical 5% povidone/iodine prep instilled just before surgery  
   Same

f. Glaucoma with Cataract Surgery  
   Ciloxan drops instilled pre-op, and topical 5% povidone/iodine prep  
   Same

VIII. ORTHOPEDIC PROCEDURES

a. Hip Arthroplasty or Joint Replacement  
   Cefazolin 1-2 gm IV 30 minutes pre-op and q8h x 5 doses  
   Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 3 doses

b. Joint Replacement (other than hip)  
   Cefazolin 1-2 gm IV 30 minutes pre-op ± 1 dose 8 hours later (use 2 gms for obese patients or when a tourniquet is used in knee surgery)  
   Vancomycin 1 gm IV to finish 30-90 minutes pre-op ± 1 dose 12 hours later

c. Open Reduction of Closed Fracture  
   Cefazolin 1 gm IV 30 minutes pre-op (use 2 gms if obese) ± q8h x 3 doses  
   Vancomycin 1 gm IV to finish 30-90 minutes pre-op ± q12h x 2 doses

d. Lower Extremity Amputation  
   Cefoxitin 2 gms IV 30 minutes pre-op  
   None

e. Arthroscopic Surgery  
   None  
   None

f. Spinal Fusion  
   None  
   None
<table>
<thead>
<tr>
<th>IX. THORACIC (Non-Cardiac)</th>
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<tbody>
<tr>
<td>a. Lobectomy or Pneumonectomy</td>
<td>Cefazolin 1-2 gm IV 30 minutes pre-op and q8h x 2 doses</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op</td>
</tr>
<tr>
<td>b. Penetrating Thoracic Trauma or Chest Tube Placement for Trauma</td>
<td>None</td>
<td>None</td>
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<thead>
<tr>
<th>X. UROLOGIC PROCEDURES</th>
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<tbody>
<tr>
<td>a. Prostatectomy</td>
<td>Ciprofloxacin 500 mg PO or 400 mg IV 30 minutes pre-op</td>
<td>Ciprofloxacin 500 mg PO or 400 mg IV 30 minutes pre-op</td>
</tr>
<tr>
<td>b. Transrectal Prostate Biopsy</td>
<td>Ciprofloxacin 500 mg PO or 400 mg IV 30 minutes pre-op</td>
<td>Ciprofloxacin 500 mg po or 400 mg IV 30 minutes pre-op</td>
</tr>
<tr>
<td>c. Procedures with Infected Urine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Urine C&amp;S available</td>
<td>Based on urine C&amp;S</td>
<td>Based on urine C&amp;S</td>
</tr>
<tr>
<td>2) Urine C&amp;S not available</td>
<td>Ciprofloxacin 500 mg PO or 400 mg IV 30 minutes pre-op</td>
<td>Ciprofloxacin 500 mg PO or 400 mg IV 30 minutes pre-op</td>
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<tr>
<th>XI. VASCULAR SURGERY</th>
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<tbody>
<tr>
<td>a. Abdominal Aorta, AV Fistula, Dialysis Access, or Peripheral Vascular</td>
<td>Cefazolin 1-2 gm IV 30 minutes pre-op, and q8h x 3 doses</td>
<td>Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 2 doses</td>
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<tr>
<td>b. Groin Procedures</td>
<td>Cefazolin 1-2 gm IV 30 minutes pre-op,</td>
<td>Vancomycin 1 gm IV and Gentamicin</td>
</tr>
</tbody>
</table>
c. Permanent Central Lines (Broviac, Hickman, Portacath, Permacath)

Cefazolin 1-2 gm IV 30 minutes pre-op and q8h x 3 doses

Vancomycin 1 gm IV to finish 30-90 minutes pre-op and q12h x 2 doses

1.7 mg/kg IV to finish 30-90 minutes pre-op

Approved May, 2001
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