Pediatric and Neonatal Antibiotic Surgical Prophylaxis Guideline

1. The start of the infusion for all prophylactic antibiotics should be within 60 minutes prior to incision, except for vancomycin & ciprofloxacin which should be within 120 minutes.

2. The pre-op dose of antibiotic prophylaxis must be counted as part of the 24-hour duration. This results in <24 hours of post-op prophylaxis. For example, if cefazolin is given as pre-op prophylaxis x 1 dose and then prescribed as 1gm IV Q8h for post-op prophylaxis, the patient should receive no more than 2 post-op doses.

3. Many procedures are suitable to receive only a single pre-operative dose of antibiotic prophylaxis. Studies addressing duration of prophylaxis have failed to show any benefit of prophylaxis given after wound closure.

4. If ≥ 30 mL/kg (up to 50 kg) or 1.5L (patients ≥ 50 kg) of blood is lost intra-operatively, surgical prophylaxis antibiotics should be re-dosed.

5. Post-operative antibiotics (oral or IV) prescribed for an indication other than surgical prophylaxis must have adequate documentation of the indication in the medical record so it will not be interpreted as post-op prophylaxis upon review.

6. The Pediatric Antibiotic Surgical Prophylaxis guideline may not be an appropriate reference for patients weighing >60 kg or older than 16 years old. The Adult Antibiotic Surgical Prophylaxis guideline remains available if needed.
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<th>Procedure</th>
<th>Preferred Regimen</th>
<th>Severe Beta-Lactam Allergy</th>
<th>MRSA Colonization</th>
<th>Intraoperative Re-dosing (until wound closure)*</th>
<th>Post-operative Re-dosing</th>
</tr>
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<tbody>
<tr>
<td>Cardiac (CT surgery/procedure excluding cardiac catheterization)</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 900 mg if ≥60 kg OR Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
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<td>Cefazolin = 4 hr Clindamycin = 6 hr Vancomycin = n/a Should not exceed 48 hours including pre-op dose</td>
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<td>Thoracic</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 900 mg if ≥60 kg OR Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
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<tr>
<td>Neurosurgery (Elective craniotomy, intrathecal baclofen shunt or ventricular shunt placement)</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg OR Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
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<td>Cefazolin = 4 hr Clindamycin = 6 hr Vancomycin = n/a Should not exceed 24 hours including pre-op dose</td>
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<tr>
<td>Skull base surgery</td>
<td>Cefepime 50 mg/kg if &lt; 40 kg 2g if ≥40 kg Metronidazole 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg + Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td>Gentamicin 2.5 mg/kg + Metronidazole 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg + Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td>Cefepime 50 mg/kg if &lt; 40 kg 2g if ≥40 kg + Metronidazole 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg + Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td>Gentamicin 2.5 mg/kg + Metronidazole = n/a + Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td>Cefepime = 4 hr Gentamicin = 8 hr Metronidazole = n/a Vancomycin = n/a Should not exceed 24 hours including pre-op dose</td>
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<td>Procedure</td>
<td>Preferred Regimen</td>
<td>Severe Beta-Lactam Allergy</td>
<td>Without severe Beta-lactam allergy</td>
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<td>Orthopedic (Clean operations involving hand, knee, and not involving implantation of foreign materials)</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg OR Vancomycin (for hip procedures) 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
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<tr>
<td>Orthopedic (internal fixation of fractures, hip repairs, implantation of materials including prosthetic joint and spinal procedures with and without instrumentation)</td>
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<tr>
<td>Head and Neck (Clean, without entry into aerodigestive tract)</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Head and Neck [Clean w/ placement of prosthesis (excludes typanostomy tubes), incision through oral oropharyngeal mucosa]</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Cefazolin = 4 hr Clindamycin = 6 hr Gentamicin = 8 hr Vancomycin = n/a</td>
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<tr>
<td>Head and Neck (Clean, contaminated , with entry into aerodigestive tract, major intraoral surgery)</td>
<td>Ampicillin-sulbactam 50 mg/kg if &lt; 67 kg 2g if 67-120kg; Dose based on ampicillin component</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Ampicillin-sulbactam = 2 hr Clindamycin = 6 hr</td>
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<tr>
<td>Percutaneous procedure</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Lymph Node Dissection</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<td>Preferred Regimen</td>
<td>Severe Beta-Lactam Allergy</td>
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<tr>
<td>Soft tissue/bone procedure (no mucosal involvement)</td>
<td>Cefazolin 50 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
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<td>Cefazolin = 4 hr Clindamycin = 6 hr Vancomycin = n/a</td>
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<td>Gastrointestinal Esophageal and Gastroduodenal</td>
<td>Cefazolin 30 mg/kg if &lt;67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
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<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Cefazolin = 4 hr Clindamycin = 6 hr Gentamicin = 8 hr Vancomycin = n/a</td>
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<tr>
<td>Appendectomy</td>
<td>Ceftriaxone* 50 mg/kg if &lt; 40 kg 2g if ≥40 kg + Metronidazole 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg OR Cefazolin** 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Metronidazole 15 mg/kg if &lt;67 kg 1000 mg if ≥67 kg + Ciprofloxacin 10 mg/kg if &lt;40 kg 400 mg if ≥40 kg OR Cefazolin** 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Ciprofloxacin 10 mg/kg if &lt;40 kg 400 mg if ≥40 kg OR Cefazolin** 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Ceftriaxone = n/a Cefazolin = 4 hr Clindamycin = 6 hr Metronidazole = n/a Vancomycin = n/a **If &gt;1 hours since ceftriaxone (or ciprofloxacin or vancomycin) + metronidazole, use cefazolin or clindamycin</td>
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<td>EGD with/without biopsy</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Liver, biliary tract, and gallbladder (Open and elective, high-risk laparoscopic)</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
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<tr>
<td>Liver, biliary tract, and gallbladder (Elective, low-risk laparoscopic)</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
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<tr>
<td>Liver biopsy</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
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<td>Splenectomy</td>
<td><strong>Cefazolin</strong></td>
<td>30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td><strong>Clindamycin</strong> 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg</td>
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<td><strong>Clindamycin</strong></td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg</td>
<td>+ <strong>Cefazolin</strong> 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
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<td>+ <strong>Cefazolin</strong> = 4 hr + <strong>Clindamycin</strong> = 6 hr + <strong>Vancomycin</strong> = n/a</td>
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<td>Small Bowel (Nonobstructed)</td>
<td><strong>Cefazolin</strong></td>
<td>30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td><strong>Clindamycin</strong> 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td><strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td><strong>Cefoxitin</strong> = 2 hr <strong>Cefazolin</strong> = 4 hr <strong>Clindamycin</strong> = 6 hr <strong>Gentamicin</strong> = 8 hr <strong>Metronidazole</strong> = n/a <strong>Vancomycin</strong> = n/a</td>
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<td><strong>Clindamycin</strong></td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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<td>Small Bowel (Obstructed)</td>
<td><strong>Cefoxitin</strong></td>
<td>40 mg/kg if &lt; 50 kg 2g if ≥50 kg OR <strong>Cefazolin</strong> + 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg + <strong>Metronidazole</strong> 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg</td>
<td><strong>Clindamycin</strong> 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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<td><strong>Clindamycin</strong></td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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</tr>
<tr>
<td>Colorectal (uncomplicated, nonperforated)</td>
<td><strong>Cefoxitin</strong></td>
<td>40 mg/kg if &lt; 50 kg 2g if ≥50 kg OR <strong>Cefazolin</strong> + 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg + <strong>Metronidazole</strong> 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg</td>
<td><strong>Clindamycin</strong> 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td><strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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<td><strong>Clindamycin</strong></td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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<tr>
<td>Colonoscopy involving biopsy</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
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<tr>
<td>Penetrating abdominal trauma</td>
<td><strong>Cefoxitin</strong></td>
<td>40 mg/kg if &lt; 50 kg 2g if ≥50 kg</td>
<td><strong>Clindamycin</strong> 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td><strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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</tr>
<tr>
<td></td>
<td><strong>Clindamycin</strong></td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Cefoxitin</strong> 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>+ <strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
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</tr>
</tbody>
</table>

Notes: Cefazolin = 4 hr Clindamycin = 6 hr Vancomycin = n/a
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<tr>
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</thead>
<tbody>
<tr>
<td>Ruptured viscus (regarded as treatment, not prophylaxis), Exploratory laparotomy</td>
<td>Cefoxitin 40 mg/kg if &lt; 50 kg 2g if ≥50 kg + Gentamicin 2.5 mg/kg OR Ceftriaxone + 50 mg/kg if &lt; 40 kg 2g if ≥40 kg Metronidazole 15 mg/kg if &lt; 67 kg 1000 mg if ≥67 kg</td>
<td>Clindamycin 10 mg/kg if &lt; 60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120 kg; 1.5g if ≥120 kg + Cefoxitin 40 mg/kg if &lt; 50 kg 2g if ≥50 kg</td>
<td>Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120 kg; 1.5g if ≥120 kg + Gentamicin 2.5 mg/kg</td>
<td>Cefoxitin = 2 hr Ceftriaxone = n/a Gentamicin = 6 hr Metronidazole = n/a Vancomycin = n/a</td>
</tr>
<tr>
<td>Reproductive Tract – Female</td>
<td>Cefoxitin 40 mg/kg if &lt; 50 kg 2g if ≥50 kg</td>
<td>Clindamycin 10 mg/kg if &lt; 60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120 kg; 1.5g if ≥120 kg + Cefoxitin 40 mg/kg if &lt; 50 kg 2g if ≥50 kg</td>
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<td>Urologic Tract</td>
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<tr>
<td>Clean procedure without entry into urinary tract: open or laparoscopic (orchiopeaxy, circumcision)</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120 kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt; 60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120 kg; 1.5g if ≥120 kg + Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120 kg; 3g if ≥120 kg</td>
<td>Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120 kg; 1.5g if ≥120 kg + Gentamicin 2.5 mg/kg</td>
<td>Cefazolin = 4 hr Ceftriaxone = 6 hr Gentamicin = 8 hr Metronidazole = n/a Vancomycin = n/a</td>
</tr>
<tr>
<td>Clean procedure with entry into urinary tract: open or laparoscopic (hypospadias repair, partial nephrectomy, ureteral re-implant, pyeloplasty)</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120 kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt; 60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt; 67 kg 1g if 67-120 kg; 1.5g if ≥120 kg + Gentamicin 2.5 mg/kg</td>
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<td>Cefazolin = 4 hr Ceftriaxone = 6 hr Gentamicin = 8 hr Metronidazole = n/a Vancomycin = n/a</td>
</tr>
<tr>
<td>Elective, urethral instrumentation, pre-op culture positive</td>
<td>Based on culture</td>
<td>Based on culture</td>
<td>Based on culture</td>
<td>Based on culture</td>
<td>Based on culture</td>
</tr>
<tr>
<td>Procedure</td>
<td>Preferred Regimen</td>
<td>Severe Beta-Lactam Allergy</td>
<td>MRSA Colonization</td>
<td>Intraoperative Re-dosing (until wound closure)*</td>
<td>Post-operative Re-dosing</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>Emergent, urethral instrumentation</strong></td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>Gentamicin 2.5 mg/kg</td>
<td>Cefazolin = 4 hr Clindamycin = 6 hr Gentamicin = 8 hr</td>
</tr>
<tr>
<td><strong>Procedure involving implanted prosthesis (e.g. testicular prosthesis)</strong></td>
<td>Cefazolin 30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg + Gentamicin 2.5 mg/kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
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<td>Cefazolin = 4 hr Clindamycin = 6 hr Gentamicin = 8 hr Vancomycin = n/a</td>
</tr>
<tr>
<td><strong>Procedure involving entry into intestine: open or laparoscopic (MACE, Monti, Augmentation cystoplasty, Illeal Conduit)</strong></td>
<td>Cefoxitin 40 mg/kg if &lt; 50 kg 2g if ≥50 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Cefoxitin = 2 hr Clindamycin = 6 hr Gentamicin = 8 hr Vancomycin = n/a</td>
</tr>
<tr>
<td><strong>Clean-contaminated Urologic/cutaneous fistula repair</strong></td>
<td>Cefoxitin 40 mg/kg if &lt; 50 kg 2g if ≥50 kg</td>
<td>Clindamycin 10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Vancomycin 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + Gentamicin 2.5 mg/kg</td>
<td>Cefoxitin = 2 hr Clindamycin = 6 hr Gentamicin = 8 hr Vancomycin = n/a</td>
</tr>
<tr>
<td><strong>Indwelling bladder catheter insertion/removal</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* Recommended re-dose times are based on pediatric patients with normal renal function. For pediatric patients with reduced renal function, please contact pharmacy for re-dose guidance.
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Preferred Regimen</th>
<th>Severe Beta-Lactam Allergy</th>
<th>MRSA Colonization</th>
<th>Intraoperative Re-dosing (until wound closure)*</th>
<th>Post-operative Re-dosing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidney +/- Pancreas</td>
<td><strong>Cefazolin</strong></td>
<td><strong>Clindamycin</strong></td>
<td><strong>Vancomycin</strong></td>
<td><strong>Vancomycin</strong></td>
<td>Should not exceed 24 hours including pre-op dose</td>
</tr>
<tr>
<td></td>
<td>30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg + Fluconazole (if high risk of fungal infection)</td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td>15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td><strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg + <strong>Gentamicin</strong> 2.5 mg/kg</td>
<td><strong>Cefazolin</strong> = 4 hr <strong>Clindamycin</strong> = 6 hr <strong>Gentamicin</strong> = 8 hr <strong>Vancomycin</strong> = n/a</td>
</tr>
<tr>
<td>Skin and Soft Tissue</td>
<td><strong>Cefazolin</strong></td>
<td><strong>Clindamycin</strong></td>
<td><strong>Vancomycin</strong></td>
<td><strong>Vancomycin</strong></td>
<td>Should not exceed 24 hours including pre-op dose</td>
</tr>
<tr>
<td></td>
<td>30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
<td>10 mg/kg if &lt;60 kg 600 mg if ≥60 kg</td>
<td>15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td><strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td><strong>Cefazolin</strong> = 4 hr <strong>Clindamycin</strong> = 6 hr <strong>Vancomycin</strong> = n/a</td>
</tr>
<tr>
<td>Hernia repair (ventral, inguinal)</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
</tr>
<tr>
<td>Hernia repair w/ mesh placement</td>
<td><strong>Cefazolin</strong></td>
<td><strong>Clindamycin</strong></td>
<td><strong>Vancomycin</strong></td>
<td><strong>Vancomycin</strong></td>
<td>Should not exceed 24 hours including pre-op dose</td>
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<td></td>
<td>30 mg/kg if &lt; 67 kg 2g if 67-120kg; 3g if ≥120 kg</td>
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<td><strong>Vancomycin</strong> 15 mg/kg if &lt;67 kg 1g if 67-120kg; 1.5g if ≥120kg</td>
<td><strong>Cefazolin</strong> = 4 hr <strong>Clindamycin</strong> = 6 hr <strong>Vancomycin</strong> = n/a</td>
</tr>
<tr>
<td>Biopsy (lymph node, muscle, bone marrow)</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
</tr>
<tr>
<td>Central venous catheter insertion</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
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<tr>
<td>I&amp;D of abscess</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>n/a</td>
</tr>
<tr>
<td>Likely Pathogens/Type of Procedure</td>
<td>Recommended Antibiotic</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-----------------------------------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Neonatal (≤72 hours of age) – all major procedures</strong></td>
<td>Ampicillin 50 mg/kg PLUS Gentamicin 4 mg/kg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B Streptococcus, enteric gram negative bacilli, enterococci, coagulase negative staphylococci</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Neonatal (>72 hours of age) – all major procedures** | Esophageal/gastroduodenal/jejunal: Cefazolin  
Gastrochisis abdominal closure: Cefazolin  
Ileal/colorectal: Ampicillin/gentamicin/metronidazole  
NEC: Ampicillin/gentamicin/metronidazole |
| Prophylaxis targeted to operative site, nosocomial or colonizing organisms | |
### NEONATAL DOSING SCHEDULE FOR PRE-OPERATIVE ANTIBIOTICS

<table>
<thead>
<tr>
<th>Antimicrobial Agent</th>
<th>Neonatal Dose</th>
<th>Re-dosing Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ampicillin</td>
<td>50 mg/kg</td>
<td>12 hr or 8 h if &gt;3kg and &gt;7d</td>
</tr>
<tr>
<td>Cefazolin</td>
<td>25 mg/kg</td>
<td>12 hr or 8 h if &gt;3kg and &gt;7d</td>
</tr>
<tr>
<td>Clindamycin</td>
<td>7.5 mg/kg</td>
<td>12 hr or 8 h if &gt;3kg and &gt;7d</td>
</tr>
<tr>
<td>Gentamicin</td>
<td>&lt;29 wk GA: 5 mg/kg, &gt;30 wks GA: 4 mg/kg</td>
<td>NA</td>
</tr>
<tr>
<td>Metronidazole</td>
<td>&lt;1.2 kg: 7.5 mg/kg, &gt;1.2 kg: 15 mg/kg</td>
<td>NA</td>
</tr>
<tr>
<td>Piperacillin/tazobactam*</td>
<td>PNA&lt;7d: 100 mg/kg, PNA 8-28 d: 80 mg/kg</td>
<td>12 hr or 8 h if &gt;3kg and &gt;7d</td>
</tr>
<tr>
<td>Vancomycin</td>
<td>10 mg/kg</td>
<td>12 hr</td>
</tr>
<tr>
<td>Fluconazole</td>
<td>6 mg/kg</td>
<td>NA</td>
</tr>
</tbody>
</table>

*piperacillin/tazobactam dosing is based on piperacillin component

### References
