Antimicrobial Stewardship Program
Empiric Treatment Guidelines for Common Infections in Adults
August 2020, 4th Edition

**Note:** All doses contained in this document should be adjusted for renal function (refer to the Antimicrobial Stewardship Program Adult Dosing Guidelines Pocket-card [10-110-6004])

### CNS Infections

#### Clinical Key Points
- When culture susceptibilities available change to PATHOGEN-DIRECTED therapy
- Consider dexamethasone 10 mg IV q6h x 4 days; 1st dose before or with 1st dose of antibiotics
- Draw blood cultures prior to 1st dose of antibiotics

<table>
<thead>
<tr>
<th>Indication</th>
<th>Typical Pathogen(s) (Duration of therapy)</th>
<th>Empiric Treatment (in order of preference)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bacterial Meningitis</strong></td>
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</tr>
</tbody>
</table>
| Age 18 to 50 years | *S. pneumoniae* *(10 to 14 days)*  
*N. meningitidis* *(7 days)*  
*H. influenzae* *(7 to 10 days)* | Ceftriaxone 2 g IV q12h + Vanco 25 mg/kg IV load, then 15 mg/kg IV q8 to 12h (target trough = 15 to 20)  
If severe cephalosporin allergy (anaphylaxis) | Vanco as above + Meropenem 2 g IV q8h |
| **Bacterial meningitis** |
| Age greater than 50 years, pregnant, immunocompromised, diabetes, renal failure | *S. pneumoniae* *(10 to 14 days)*  
*N. meningitidis* *(7 days)*  
*L. monocytogenes* *(21 days)*  
*Enterobacteriaceae* *(21 days)* | Ceftriaxone + Vanco (both as above) + Ampicillin 2 g IV q4h  
If severe penicillin and/or cephalosporin allergy (anaphylaxis) | Vanco as above + Meropenem 2 g IV q8h + SMX-TMP 5 mg/kg (TMP) IV q6h |
| **Health care-Associated and/or Head Trauma**  
(e.g. Post-neurosurgery, shunt, drain, intrathecal pump placement, skull fracture or penetrating trauma) | As above *(10 to 14 days)*  
*P. aeruginosa* *(10 to 14 days)*  
Other gram negative bacilli *(10 to 14 days)*  
*S. epidermidis, S. aureus* *(10 to 14 days)*  
Fracture: *H. flu, Grp A strep* *(10 to 14 days)* | 1. Vanco as above + Ceftazidime**  
2 g IV q8h  
or  
2. Vanco + Meropenem (both as above) |
| **Suspected Viral encephalitis** | Herpes Simplex Virus 1 & 2 *(14 to 21 days)*  
Varicella Zoster Virus *(10 to 14 days)* | Acyclovir 10 to 15 mg/kg (obese pts BMI 30 or higher use adjusted body wt [AdjBW])  
If VZV suspected use 15 mg/kg |

For **Sepsis**: Adult Sepsis Order Set: [10-111-5102](#)  
For **Febrile Neutropenia**: Adult Febrile Neutropenia Order Set: [10-111-5100](#)

**Abbreviations**
- **Vanco** = Vancomycin; **SMX-TMP** = Sulfamethoxazole-Trimethoprim;  
- **Cipro** = Ciprofloxacin; **Pip-Tazo** = Piperacillin-Tazobactam;  
- **Amoxi-Clav** = Amoxicillin-Clavulanate; **Azithro** = Azithromycin  
- **Gent** = Gentamicin; **Tobra** = Tobramycin;  
- **Metro** = Metronidazole, **Clinda** = Clindamycin  
- **IBW** = ideal body weight  
- **AdjBW** = IBW + 0.4(total body wt - IBW)
## Community-acquired Pneumonia (CAP) refer to order set: 10-111-5094

### Clinical Key Points
- Avoid using same class of antibiotics if used within previous 3 MONTHS
- When culture susceptibilities available change to PATHOGEN-DIRECTED therapy
- Broader empiric regimens used when certain CO-MORBIDITIES present: Heart, lung, liver disease; diabetes; alcoholism; malignancies; asplenia; immunosuppression
- Consider IV ➔ PO step down if afebrile x 24 to 48 hr, GI tract functioning, hemodynamically stable and clinical improvement while on IV treatment

<table>
<thead>
<tr>
<th>Indication</th>
<th>Typical Pathogen(s)</th>
<th>Empiric Treatment (in order of preference)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAP Outpatient (previously healthy)</strong></td>
<td>S. pneumoniae</td>
<td>1. Amoxicillin 1 g PO TID x 1 day then 500 mg PO TID x 4 to 6 days or 2. Doxycycline 100 mg PO BID x 5 to 7 days</td>
</tr>
<tr>
<td>CURB-65: score 0 to 1</td>
<td>M. pneumoniae</td>
<td></td>
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<tr>
<td></td>
<td>C. pneumoniae</td>
<td></td>
</tr>
<tr>
<td><strong>CAP Outpatient (comorbidities present - see above)</strong></td>
<td>As above</td>
<td>1. Amoxi-Clav 875 mg PO BID + Doxycycline 100 mg PO BID x 5 to 7 days or 2. Amoxi-Clav as above x 5 to 7 days + Azithromycin€ 500 mg PO daily x 3 days</td>
</tr>
<tr>
<td>CURB-65: score 0 to 1</td>
<td>H. influenzae</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M. catarrhalis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legionella spp</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enterobacteriaceae</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S. aureus (IVDU)</td>
<td></td>
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<tr>
<td><strong>CAP Inpatient</strong></td>
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<td></td>
</tr>
<tr>
<td>Mild/Moderate CURB-65: score 2</td>
<td></td>
<td></td>
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<tr>
<td>€Consider baseline ECG to assess QTc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As above</td>
<td></td>
<td>1. Ampicillin 1 g IV q6h + Doxycycline** 100 mg PO BID or 2. Ceftriaxone 2 g IV q24h + Doxycycline** 100 mg PO BID [**alt = Azithro€ 500 mg PO/IV daily x 3 days] Step down to PO for total duration of 7 days</td>
</tr>
<tr>
<td><strong>CAP Inpatient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe (ICU) CURB-65: score 3 to 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>€Consider baseline ECG to assess QTc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Above</td>
<td></td>
<td>1. Ceftriaxone 2 g IV q24h x 7 days + Azithro€ 500 mg IV/PO daily x 3 days or 2. If recent macrolide use: Ceftriaxone 2 g IV q24h + Moxifloxacin€ 400 mg IV/PO q 24h x 7 days</td>
</tr>
<tr>
<td>MRSA/ Pseudomonas risk</td>
<td>1. Ceftriaxone 2 g IV q24h x 7 days + Azithro€ 500 mg IV/PO daily x 3 days or 2. If recent macrolide use: Ceftriaxone 2 g IV q24h + Moxifloxacin€ 400 mg IV/PO q 24h x 7 days</td>
<td></td>
</tr>
<tr>
<td>CONSULT Pharmacist or ID specialist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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- Gent = Gentamicin; Tobra = Tobramycin;
- Metro = Metronidazole, Clinda = Clindamycin IBW = ideal body weight
- AdjBW = IBW + 0.4(total body wt - IBW)
Hospital-acquired (HAP) & Ventilator-associated pneumonia (VAP)

**Clinical Key Points**

- **RISK FACTORS** for multi-drug resistant microbes: prior IV antibiotics within 90 days, recent antibiotic use within 30 days; prolonged hospital stay (5 days or more), septic shock, ARDS or acute renal replacement therapy prior to VAP onset
- When culture susceptibilities available change to **PATHOGEN-DIRECTED** therapy
- Consider **DISCONTINUE** empiric therapy if lower resp. tract cultures negative at 48 to 72hr and clinical improvement
- Consider IV ➔ PO step down (see criteria under Community-acquired Pneumonia)

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<tr>
<th>Indication</th>
<th>Typical Pathogen(s)</th>
<th>Empiric Treatment (in order of preference)</th>
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<tbody>
<tr>
<td>Infection occurring 72 hours or less since admission</td>
<td></td>
<td>Refer to empiric treatment for CAP inpatient</td>
</tr>
<tr>
<td><strong>HAP</strong> (infection occurring greater than 72 hrs after admission)</td>
<td>S. pneumoniae, H. influenzae, S. aureus, E. Coli, K. pneumoniae</td>
<td></td>
</tr>
<tr>
<td>No risk factors (listed above*) for MDR microbes</td>
<td>MRSA suspected or known history</td>
<td>Add Vancomycin 25 mg/kg IV load, then 15 mg/kg IV q8 to 12h x 14 days (min.) for confirmed MRSA</td>
</tr>
<tr>
<td>*Consider baseline ECG to assess QTc</td>
<td>See above RISK FACTORS*</td>
<td></td>
</tr>
<tr>
<td><em><em>HAP - Risk factors</em> for MDR microbes including MRSA</em>*</td>
<td>As above</td>
<td></td>
</tr>
<tr>
<td>P. aeruginosa, K. pneumoniae (ESBL), Acinetobacter spp.</td>
<td>1. Pip-Tazo 4.5 g IV q6h +/- Vancomycin as above x 7 days# or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Meropenem 1 g IV q8h +/- Vancomycin as above x 7 days</td>
<td></td>
</tr>
<tr>
<td>(ESBL suspected or known history)</td>
<td>(ESBL suspected or known history)</td>
<td></td>
</tr>
<tr>
<td><strong>HAP in ICU or VAP</strong></td>
<td>As above</td>
<td>1. Pip-Tazo 4.5 g IV q6h + (Cipro 400 mg IV q8h x 7 days# or gent/tobra see order set 10-111-5336)</td>
</tr>
<tr>
<td>Infection occurring greater than 48 hrs after intubation</td>
<td>If severe penicillin (anaphylaxis) allergy</td>
<td>1. Meropenem 1 g IV q8h + (Cipro as above x 7 days# or gent/tobra see order set 10-111-5336)</td>
</tr>
<tr>
<td></td>
<td><strong>If culture positive for stenotrophomonas maltophilia</strong></td>
<td>SMX-TMP 2 DS tab PO/via tube TID x 14 days</td>
</tr>
<tr>
<td></td>
<td>MRSA suspected or known history</td>
<td>Add Vancomycin 25 mg/kg IV load, then 15 mg/kg IV q8 to 12h x 14 days (min.) for confirmed MRSA</td>
</tr>
<tr>
<td></td>
<td>See above RISK FACTORS*</td>
<td></td>
</tr>
</tbody>
</table>
### Aspiration Pneumonia

**Clinical Key Points**
- Routine addition of anaerobic coverage for suspected aspiration pneumonia is not recommended unless lung abscess or empyema is suspected.
- **NO ROLE for prophylactic antibiotics post aspiration – REASSESS patient 24 to 48 hrs after, if CXR abnormality PLUS above risk factors, consider antibiotics.
- **RISK FACTORS** for anaerobes: poor oral hygiene, severe periodontal disease or putrid sputum.

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</tr>
</thead>
<tbody>
<tr>
<td>Community Acquired or Nursing Home</td>
<td>S. pneumonia, H. Influenza, Enterobacteriaceae, S. aureus, Strep spp., Oral anaerobes§</td>
<td>No risk of anaerobes (after 72 hrs of IV reassess for PO step down)</td>
</tr>
<tr>
<td>Hospital acquired (if recent ventilator support and or multiple antibiotics previously)</td>
<td>Polymicrobial: S. pneumonia, H. Influenza, Enterobacteriaceae, S. aureus, Oral anaerobes, P. aeruginosa§, M. catarrhalis</td>
<td>Mild/moderate with no recent antibiotic use: As for community acquired above</td>
</tr>
<tr>
<td>Aspiration Pneumonitis (aspiration of gastric contents)</td>
<td>Sterile</td>
<td>No antibiotics recommended**</td>
</tr>
</tbody>
</table>

**Risk of Anaerobes**:
- 1. Amoxi-Clav 875 mg PO BID x 7 days
- 2. Ceftriaxone 2 g IV daily + metronidazole 500 mg PO BID x 7 days

### Dental Infections

**Clinical Key Points**
- Prolonged use of chlorhexidine is **NOT** recommended as it may result in selection of resistant oral microbes.
- Assess for IV → PO step down after 24 to 48 hr of IV treatment.

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| Endodontic/periodontal abscess                 | Polymicrobial (normal oral flora) e.g. aerobic (gram positive and negative) and anaerobic bacteria | 1. Incision and Drainage  
2. Pen V 600 mg PO QID +/- metronidazole 500 mg PO BID x 7 days  
*Penicillin allergy (anaphylaxis):*  
• Clindamycin 300 mg PO QID x 7 days |
| Facial space infection                         | Polymicrobial (normal oral flora) e.g. aerobic (gram positive and negative) and anaerobic bacteria | 1. Incision and Drainage  
2. Pen G 2 million units IV q4 to 6h + metro 500 mg IV q12h x 10 days (consider oral step down after 24 to 48 hr)  
3. Outpatient: Ceftriaxone 2 g IV q24h + metro 500 mg PO BID x 10 days (consider oral step down after 24 to 48 hr)  
Severe (septic):  
• Pip/Tazo 3.375 g IV q6h x 10 days (consider oral step down after 24 to 48 hr)  
*Penicillin allergy (anaphylaxis):*  
• Meropenem 1 g IV q8h x 10 days (consider oral step down after 24 to 48 hr) |
**Clinical Key Points**

- When culture susceptibilities available change to **PATHOGEN-DIRECTED** therapy
- **DISCONTINUE** antibiotics at day 4 to 7 if adequate **SOURCE CONTROL** achieved and good clinical response
- If inadequate clinical response at day 4 to 7, consider **DIAGNOSTIC INTERVENTIONS**
- Antibiotics should be discontinued within **24 HOURS** in the following:
  - Acute appendicitis WITHOUT perforation, abscess or peritonitis
  - Bowel injury due to penetrating or blunt trauma repaired WITHIN 12HR

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<tr>
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</table>
| Community-acquired (Mild/moderate)      | Strep sp. 
Enterobacteriaceae (E. Coli, Klebsiella sp., Proteus sp, Serratia sp.) 
Anaerobes (B. Fragilis, Clostridium sp., fusobacterium sp. Lactobacillus sp., peptostreptococcus sp.) | 1. Cefazolin** 2 g IV q8h + Metronidazole 500 mg PO/IV q12h 
[**alt. Ceftriaxone 2g IV q24h] or 2. Cipro 500 mg PO BID or 400 mg IV q12h + Metronidazole as above |
| Community-acquired (Severe)             | As above                                                                           | 1. Piperacillin-Tazobactam 3.375 g IV q6h or 2. Cipro 500 mg PO BID or 400 mg IV q12h + Metronidazole as above or 3. Meropenem 1g IV q8h |
| Healthcare associated, complicated or recurrent | As above 
Acinetobacter 
MDR gram neg bacilli | 1. Pip-Tazo 3.375 g IV q6h or 2. Meropenem 1g IV q8h |
|                                          | If MRSA suspected or known history                                                  | Add Vancomycin 25 mg/kg IV load, then 15 mg/kg IV q8 to 12h                      |

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# Clinical Key Points

- **DISCONTINUE** current antibiotics if possible
- **DISCONTINUE** anti-peristaltics, laxatives, pro-motility agents, anti-inflammatory (NSAIDs)
- If present, **REASSESS** need for Proton Pump Inhibitor or Histamine-2 Receptor Antagonist

<table>
<thead>
<tr>
<th>CDI Severity</th>
<th>Empiric Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st episode non-severe (WBC less than 15 and SrCr less than or equal to 1.5 x baseline)</td>
<td>1. Metronidazole 500 mg PO/NG TID x 10 to 14 days. (If no improvement by day 4 or intolerant to PO metro, change to option 2) or 2. Vancomycin 125 mg PO/NG QID x 10 to 14 days</td>
</tr>
<tr>
<td>Severe (WBC greater than 15, or acute kidney injury (SrCr greater than 1.5 x baseline), or hypoalbuminemia)</td>
<td>Vancomycin 125 mg PO/NG QID x 10 to 14 days</td>
</tr>
<tr>
<td>1st Recurrence/relapse</td>
<td>1. Vancomycin 125 mg PO/NG QID x 10 to 14 days (use if initial episode treated with metro) 2. Vancomycin taper regimen - see below for dosing (use if initial episode treated with vanco)</td>
</tr>
<tr>
<td>Recurrence/relapse (2nd or more)</td>
<td>Vancomycin 125 mg PO/NG QID x 14 days then taper over 4 weeks e.g. 125 mg BID x 7 days, 125 mg daily x 7 days, 125 mg q2 days x 7 days, 125 mg q3d x 7 days</td>
</tr>
<tr>
<td>Fulminant (toxic megacolon, perforation, ileus, sepsis/hypotension or shock shock or peritonitis)</td>
<td>Vancomycin 500 mg PO/NG QID x 10 to 14 days + metronidazole 500 mg IV q8h x 10 to 14 days (if ileus or unable to take via PO/NG give vanco 500 mg in 100 mL NS retention enema QID rectally R/A daily)</td>
</tr>
</tbody>
</table>

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### Urinary Tract Infections (UTI) in Non-pregnant Adults

#### Clinical Key Points
- Malodorous/cloudy urine alone is **NOT** a sign/symptom of UTI and is **NOT** an indication for urine cultures.
- Positive urine cultures in asymptomatic patients should **NOT** be treated **EXCEPT** in pregnancy or prior to urologic/gynecologic surgery.
- Delirium or change in behaviour **REQUIRES** clinical assessment to **RULE OUT** dehydration, adverse effect of new medication, trauma, hypoxia, hypoglycemia or other infection (do not assume UTI).
- Urine cultures should **ALWAYS** be collected mid-stream or by in/out catheter.
- Risk factors for ESBL**: frequent hospitalizations, residence in care facility, advanced age, male gender, frequent and or recent (within 30 day) antibiotic use, and recurrent UTIs.

#### Symptoms:
- New onset or worsening urgency, dysuria, incontinence, fever, rigors, altered mental status, malaise, flank pain, costovertebral angle tenderness, acute hematuria, and/or pelvic discomfort.

#### Table: Empiric Treatment

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<tr>
<th>Indication</th>
<th>Typical Pathogen(s)</th>
<th>Empiric Treatment (in order of preference)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uncomplicated cystitis</strong> (premenopausal female with no urological abnormalities or co-morbidities)</td>
<td><em>Enterobacteriaceae</em> (predominently <em>E. coli</em>) <em>Enterococcus sp.</em></td>
<td>1. Nitrofurantoin (MacroBID®) 100 mg PO BID x 5 days [<strong>ONLY USE if CrCl 40 mL/min or greater</strong>] or 2. SMX-TMP 1 DS tab po BID x 3 days or 3. trimethoprim 100 mg PO BID x 3 days</td>
</tr>
<tr>
<td><strong>Complicated cystitis</strong> (all males, females 65 yrs and older or with urologic abnormalities or co-morbidities)</td>
<td>As above (higher risk for resistant organisms)</td>
<td>1. SMX-TMP as above x 10 days or 2. Amoxi-Clav 875 mg PO BID x 10 days or 3. Nitrofurantoin as above x 10 days (if use in males CrCl must be greater than 60 mL/min; rule out prostatitis) 4. Cefixime 400 mg PO daily x 10 days or 5. Cipro 500 mg PO BID x 7 days</td>
</tr>
<tr>
<td><strong>Mild pyelonephritis</strong> (outpatient)</td>
<td>As above</td>
<td>1. Cefixime 400 mg PO daily x 10 to 14 days or 2. Cipro 500 mg PO BID x 7 days</td>
</tr>
<tr>
<td><strong>Moderate pyelonephritis</strong> (inpatient) Obtain blood cultures x2 prior to 1st dose</td>
<td>As above</td>
<td>1. Cefotaxime 2 g IV q8h x 10 to 14 days (step down to oral when stable) or 2. Cipro 500 mg po BID x 7 days</td>
</tr>
<tr>
<td><strong>Urosepsis/severe pyelonephritis</strong> (Blood cultures x 2 as above)</td>
<td>As above; refer to Sepsis order set 10-111-5102</td>
<td>1. Pip-Tazo 3.375 g IV q6h (step down to oral when stable)</td>
</tr>
<tr>
<td>**ESBL <strong>suspected/known</strong> (all severities)</td>
<td></td>
<td>1. Meropenem 1 g IV q8h (step down to oral cipro if culture sensitive or fosfomycin 3 g PO q3 days x 3 doses)</td>
</tr>
<tr>
<td><strong>ESBL outpatient treatment</strong></td>
<td></td>
<td>1. Fosfomycin 3 g PO q3 days x 3 doses or 2. Ertapenem 1 g IV q24h x 10 to 14 days (consult pharmacist or ID physician)</td>
</tr>
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Catheter-associated UTI (CA-UTI)

**Diagnosis:** Presence of SIGNS/SYMPTOMS (see below) plus positive urinalysis and GROWTH of 1 or more bacterial species in a single catheter urine specimen or midstream void within 48 hr of catheter removal.

### Clinical Key Points
- **DO NOT** collect urine culture in absence of symptoms
- **DO NOT** treat a positive culture in absence of symptoms
- **DISCONTINUE** catheter as soon as appropriate
- When culture susceptibilities available change to PATHOGEN-DIRECTED therapy

### Symptoms:
- **New onset:** fever, rigors, malaise, lethargy, altered mental status with NO OTHER CAUSE, flank pain, CVA tenderness, acute hematuria or pelvic discomfort
- If catheter recently removed (48 hrs) ➔ dysuria, urgency or frequency, suprapubic pain/tenderness (in addition to above symptoms)
- Spinal cord injury patients ➔ increased spasticity, sense of unease or autonomic dysreflexia

### Catheter Replacement
- Assess continued need for catheter – remove if possible
- If catheter still indicated and has been in place for greater than 2 weeks, replace and repeat urine culture prior to starting antibiotics

### Culture and Sampling
- Obtain urine sample for analysis and culture from new catheter prior to antimicrobial therapy
- If catheter removed, collect sample voided mid-stream

### Typical Pathogen(s)

**Short-term catheter:** *E.Coli, Klebsiella, Serratia, Citrobacter, Enterobacter, enterococcus, coag. neg staph*

**Long-term catheter:** As above (often polymicrobial), *pseudomonas, proteus, morganella, providencia*

### Empiric Treatment
(treat for 7 days if prompt response; 10 to 14 days if delayed response)

**Mild/Moderate:**
Cefixime 400 mg po daily or Amoxicillin-Clavulanate 875 mg po BID or Ciprofloxacin 500 mg po BID

**Severe (febrile/systemically unwell):**
1. Ampicillin 1 to 2 g IV q6h + (Ceftazidime 2g IV q8h or Gentamicin/Tobramycin 5 to 7 mg/kg (IBW) IV q24h
2. Piperacillin-Tazobactam 3.375 g IV q6h +/- Gentamicin/Tobramycin 5 to 7 mg/kg (IBW) IV q24h (septic)

**ESBL suspected/known (any severity)**
1. Meropenem 1 g IV q8h (step down to cipro if culture sensitive or fosfomycin 3 g PO q2 to 3 days x 3 doses
2. Outpatient: Ertapenem 1 g IV daily x 10 to 14 days (consult pharmacist or ID physician)

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## Skin and Soft Tissue Infections (Cellulitis and Diabetic Foot)

### Clinical Key Points
- Avoid using same class of antibiotics if used within previous 3 MONTHS
- Superficial skin swabs **NOT** recommended
- Cellulitis usually **PROGRESSES** 24 to 48 hr after initiation of treatment **BEFORE** it improves
- **ELEVATE** above the heart, whenever possible
- **STEP DOWN** to PO when resolution of systemic symptoms or no further progression

### Indication | Typical Pathogen(s) | Empiric Treatment (in order of preference)
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**Non-purulent Cellulitis**  
Strep Grp A, B, C, G | Mild/Moderate | 1. Amoxicillin 0.5 to 1 g PO TID x 5 to 7 days **or**  
2. Cephalexin 0.5 to 1 g PO QID x 5 to 7 days

Severe Outpatient | Cefazolin 2 g IV q24h PLUS probenecid 1 g PO daily x 72 hrs then reassess for oral step down x 7 to 10 days total

Suspected necrotizing fasciitis | 1. Vanco 25 mg/kg IV load, then 15 mg/kg IV q8 to 12h + Pip-Tazo 4.5 g IV q6h - Consult surgeon ASAP

**Purulent Cellulitis or Abscess**  
*S. aureus* | Mild | I&D

Moderate | 1. I&D and send for culture  
2. TMP/SMX 1 to 2 tab po BID or doxycycline 100 mg po BID  
Once cultures back refine therapy: if MSSA = Cloxacillin 0.5 to 1 g po QID or cephalexin 0.5 to 1 g po QID x 5 to 10 days

Severe | 1. I&D and send for culture  
2. Vanco 25 mg/kg IV load, then 15 mg/kg IV q8 to 12h  
Once cultures back refine therapy: if MSSA = Cloxacillin 2g IV q6h or cefazolin 2g IV q8h x 5 to 10 days  
Step down to oral therapy once stable

### Diabetic foot infections: Mild: local infection with erythema greater than 0.5 cm and less than or equal to 2 cm around ulcer; Moderate: local infection with erythema greater than 2 cm or deeper infection with NO systemic symptoms; Severe: as moderate PLUS signs of systemic infection

**Diabetic foot ulcer**  
(no sign of infection) | Wound care only – no antibiotics required

**Diabetic foot infection**  
(Mild) ***Try to treat as outpatient***  
*S. aureus*  
Strep sp | 1. Cloxacillin or Cephalexin 0.5 to 1 g PO QID x 1 to 2 wks **or**  
2. Amoxi-Clav 875 mg PO BID (if recent antibiotic use) x 1 to 2 wks

**Diabetic foot infection**  
(moderate)  
**Screen for osteomyelitis**  
*Treat as outpatient if possible*  
As above  
Enterobacteriaceae  
Anaerobes | 1. Amoxi-Clav 875 mg PO BID x 2 to 3 wks **or**  
2. Moxifloxacin 400 mg PO daily x 2 to 3 wks (If beta-lactam allergic)

**Diabetic foot infection**  
(Severe)  
**Screen for osteomyelitis**  
*Outpatient treatment ID consult needed*  
As above | 1. Ceftriaxone 2 g IV q24h + metro 500 mg PO BID x 4 days then reassess or  
2. Pip-Tazo 3.375 g IV q6h x 4 days then reassess **or**  
3. Meropenem 1g IV q8h x 4 days then reassess

MRSA suspected or known (all severities) | 1. **Add** Doxycycline 100 mg PO BID **or**  
2. **Add** SMX-TMP 2 DS tabs PO BID **or**  
3. **Add** Vancomycin 25 mg/kg IV load, then 15mg/kg IV q8 to 12h *(for moderate/severe)* x 4 days then reassess for oral step down therapy