

### Pneumonia Antibiotic Consensus Recommendations

Non-ICU Patient	ICU Patient	Pseudomonal Risk*
<p><b>β-lactam (IV or IM) Table 2.3 + macrolide (IV or oral) Table 2.5</b></p> <p>Or</p> <p><b>Quinolone monotherapy (IV or oral) Table 2.9</b></p> <p>Or</p> <p><b>β-lactam (IV or IM) Table 2.3 + doxycycline (IV or oral) Table 2.10</b></p> <p>Or</p> <p>If less than 65 with no <i>Risk Factors for Drug-Resistant Pneumococcus</i> (see data element)  Macrolide monotherapy (IV or oral) Table 2.5</p> <p>β-lactam = ceftriaxone, cefotaxime, ampicillin/sulbactam, ertapenem</p> <p>Macrolide = erythromycin, clarithromycin, azithromycin</p> <p>Quinolones = levofloxacin, gatifloxacin, moxifloxacin, gemifloxacin</p>	<p><b>β-lactam (IV) Table 2.3 + macrolide (IV) Table 2.6</b></p> <p>Or</p> <p><b>β-lactam (IV) Table 2.3 + quinolone (IV) Table 2.14</b></p> <p>Or</p> <p><b>If documented β-lactam allergy: Quinolone (IV) Table 2.14 +/- Clindamycin* (IV) Table 2.12</b></p> <p>β-lactam = ceftriaxone, cefotaxime, ampicillin/sulbactam, ertapenem</p> <p>Macrolide = erythromycin, azithromycin</p> <p>Quinolones = levofloxacin, gatifloxacin, moxifloxacin</p> <p>*Clindamycin is optional</p>	<p>These antibiotics would also be acceptable for ICU and Non-ICU patients with pseudomonal risk</p> <p><b>IV antipseudomonal β-lactam Table 2.4 + IV antipseudomonal quinolone Table 2.8</b> (PO quinolone is allowed for Non-ICU only)</p> <p>Or</p> <p><b>IV antipseudomonal β-lactam Table 2.4 + IV aminoglycoside Table 2.11 + either IV antipneumococcal quinolone Table 2.14 Or IV macrolide Table 2.6</b> (PO quinolone is allowed for Non-ICU only Table 2.9)</p> <p>Or</p> <p><b>If documented β-lactam allergy: IV Aztreonam Table 2.7 + IV antipneumococcal quinolone Table 2.14 + IV aminoglycoside Table 2.11</b> (PO quinolone is allowed for Non-ICU only Table 2.9)</p> <p>Antipseudomonal quinolone = ciprofloxacin, levofloxacin</p> <p>Antipseudomonal β-lactam = cefepime, imipenem, meropenem, piperacillin/tazobactam,  Aminoglycoside = gentamicin, tobramycin, amikacin</p> <p>Antipneumococcal quinolone = levofloxacin**, gatifloxacin, moxifloxacin</p> <p>Macrolide = azithromycin, erythromycin</p>

Data collected by the CMS National Pneumonia Project indicate that 78% of Medicare pneumonia patients who were hospitalized during 1998-99 received antibiotics that were consistent with guidelines published at that time. Among the states and territories this ranged from 55% to 87%. Compliance was lower among ICU patients, largely because atypical pathogen coverage was generally not common, but was only recommended for ICU patients. Subsequent revisions have made such coverage recommended for all inpatients.

\*\*Levofloxacin should be used in 750mg dosage when using as an antipneumococcal quinolone for ICU patients with pseudomonal risk.

Note: The dosage listed is specified to reflect clinical expert recommendations. We do not collect dosage information for the purposes of the Pneumonia Project.