

Guideline for Antimicrobial Use in

PNEUMONIA at West Park Healthcare Centre**HOSPITAL-ACQUIRED PNEUMONIA (HAP) or
VENTILATOR-ASSOCIATED PNEUMONIA (VAP)****1. Empiric Antimicrobial Regimens**

- Selection of empiric therapy must take into account the patient's **antimicrobial exposure history**. If a patient has been treated ***within the last 3 months*** with one class of antibiotics, choose an agent(s) from another class of antibiotics when possible.
- Consider the patient's historical sputum C&S results prior to selecting empiric treatment.
- Usual dosages are provided below; adjust in renal impairment.
- Most patients with HAP or VAP may be treated for 7 days for all bacteria.

HAP or VAP	1 st Line Empiric Therapy	Alternative Empiric Therapy
MILD-MODERATE		
<ul style="list-style-type: none"> - NO hypotension, sepsis syndrome, rapid progression of infiltrates or end-organ dysfunction - IV route is preferred if unable to tolerate oral therapy, or if there is concern of poor GI absorption or evidence of more severe disease. 	Amoxicillin-clavulanic acid 875/125 mg PO q12h or Ceftriaxone 1 g IV q24h - <i>If suspected pathogens include:</i> <u>Anaerobes (i.e., aspiration)¹</u> - add Metronidazole 500 mg PO/IV q12h	Levofloxacin 750 mg PO/IV q24h <i>If suspected pathogens include:</i> <u>Anaerobes (i.e., aspiration)¹</u> - change to Moxifloxacin 400 mg PO/IV q24h
	<i>If AT RISK for MDR organisms</i> Piperacillin-tazobactam 4.5 g IV q6h <i>If suspected pathogens include:</i> <u>ESBL or ampC organism in the past year or MDR <i>P. aeruginosa</i></u> - change to Meropenem 1 g IV q8h <u>MRSA</u> - add Vancomycin 15 mg/kg IV q12h	<i>Alternative for severe systemic/cutaneous adverse reaction to beta-lactams:</i> Levofloxacin 750 mg PO/IV q24h <i>If suspected pathogens include:</i> <u>Anaerobes¹</u> - add Metronidazole 500 mg PO/IV q12h <u>MRSA</u> - add Vancomycin 15 mg/kg IV q12h
SEVERE		
<ul style="list-style-type: none"> - WITH hypotension, sepsis syndrome, septic shock, rapid progression of infiltrates or end-organ dysfunction 	Meropenem 1 g IV q8h <i>If suspected pathogens include:</i> <u>MRSA</u> - add Vancomycin 15 mg/kg IV q12h <u>Colonized with MDR gram-negative organism</u> - add a second agent from a different class (i.e., ciprofloxacin or levofloxacin)	Levofloxacin 750 mg IV q24h <i>If suspected pathogens include:</i> <u>Anaerobes¹</u> - add Metronidazole 500 mg PO/IV q12h <u>MRSA</u> - add Vancomycin 15 mg/kg IV q12h
Note: ¹ Patients on CCC and LTV units with enteral tubes and tracheostomies, who are at risk of colonization with fecal organisms, may warrant extended anaerobic coverage beyond oral anaerobes. Ceftriaxone and levofloxacin may not adequately cover for these organisms.		