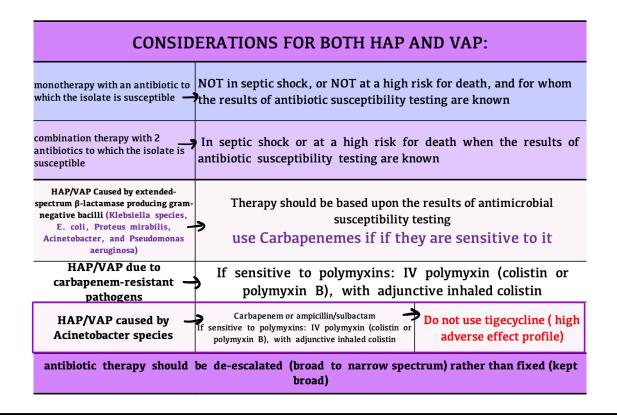
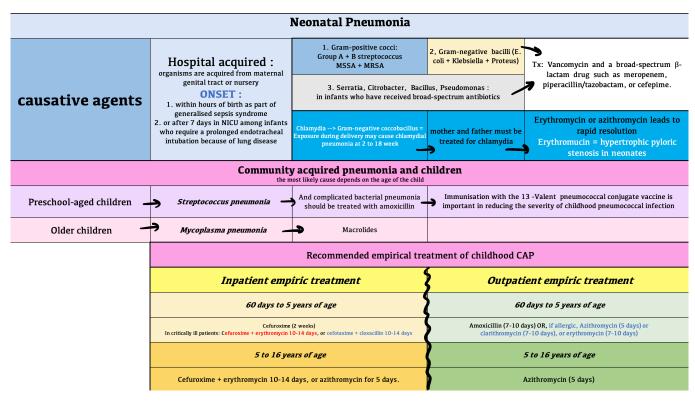
Community-acquired pneumonia					
Most common causative agents Pts w/ CAP must be treated w/ empirical agent that covers all of those	S. pneumoniae, C. pneumoniae, M. pneumoniae, S. aureus, H. influenza, Legionella species, Moraxella catarrhalis, Respiratory viruses				
DURATION OF TREATMENT :	a minimum of 5 days, and should be afebrile for 2-3 days Longer duration if initial empiric treatment wasn't effective and complicated by extra pulmonary infx like meningitis and endocarditis	Timing for first antibiotic dose for patients admitted through the emergency department the first antibiotic dose should be administered while still in the emergency department			
Recommendations depend on:	1.The treatment setting: inpatient/outpatient 2. The severity of infection. 3. The presence of comorbidities. 4. The presence of risk factors for drugresistant pathogens.				
Outpatient settings		Other	informations		
pts w/o Comorbid conditions or risk factors for drug resistant pathogens	MONOTHERAPY: Amoxicillin/Doxycycline/Macrolide (Azithro, Clarithromycin)	Macrolide monotherapy has shown resistance and should not be used if local rates of pneumococcus resistance is greater than 25%			
pts w/ comorbid conditions : Heart/kidney/Lung/Malignancy /DM/ Immunosuppression	MONOTHERAPY: Respiratory fluroquinolone (Levo, Moxi, Gemifloxacine) OR COMBINATION THERAPY: <amoxicillin-clavulanate cephalosporine="" or=""> PLUS <macrolide doxycycline="" or=""></macrolide></amoxicillin-clavulanate>				
inpatient settings					
pts w/ non severe pneumonia	B-Lactam PLUS Macrolide OR Fluroquinolone aloneALTERNATIVE	B-Lactams : Cefotaxime/ Cef	triaxone/ Ampicillin-Sulbactam		
pts w/ Severe pneumonia PARENTERAL THERAPY	Only Combination B-Lactam PLUS <macrolide fluroquinolone="" or=""></macrolide>	a normally functioning gastrointestinal tract	are clinically stable have no other active medical ontinued care		
	MRSA COVER: Vancomycin or LineZolid	WHEN TO COVER MRSA + PSEUDOMONAS in your empiric therapy ? MRSA and P. aeruginosa are not common causative agents those are the risk factors indictes giving agents that covers them : 1. Prior respiratory isolation of the pathogen. 2. Hospitalization with receipt of parenteral antibiotics within the last 3 months. 3. locally validated (epidemiology) prevelance of those pathogens in community			

Clinical caveats in selecting an empiric antibiotic regimen						
The administration of antibiotics shouldn't be delayed for the purpose of performing diagnostic tests		3 When an appropriate and adequate initial antibiotic regiment is a started the duration of therapy should be shortened except for pseudomonas aeruginosa				
4 False negative cultures occurs in patients who have been taking antibiotics for 24 t-72 hours before collection of respiratory specimens	5 / Innaied antiniotics maybe lised adilinct to	6 Organisms like E. coli / Klebsiella Enterobacter = produce extended- spectrum beta-lactamase these are usually susceptible to carbapenems				

Hospital-Acquired pneumonia Treatment duration: 7-day course/Except if it's pseudomonas = 2 weeks						
causative agents	P. aeruginosa, S. aureus (MSSA, MRSA), Klebsiella pneumoniae, E. coli. Others: Serratia marcescens, Stenotrophomonas maltophilia, and Acinetobacter	ONLY A SUGGESTION : PTS W/ HAP NON-VAP TO BE TREATED ACCORDING TO MICROBIOLOGICAL STUDIES RATHER THAN BEING TREATED EMPIRICALLY				
	MSSA should be covered UNLESS patient has high risk factors for MRSA: 1. IV antibiotics within the preceding 90 days 2.exposure to a hospital unit where more than 20% of the s.aureus isolates are MRSA 3.high risk of death need for ventilatory support due to septic shock					
Empiric	High risk for MRSA infection 🛶	vancomycin or linezolid (same as VAP)				
treatment	No risk factors for MRSA infection + Proven MSSA	oxacillin, nafcillin, or cefazolin				
for HAP	MSSA (Empiric)	piperacillin-tazobactam, cefepime, levofloxacin, imipenem, or meropenem				

Ventilator-associated pneumonia Treatment duration: 7-day course/Except if it's pseudomonas = 2 weeks					
causative agents	P. aeruginosa, S. aureus (MSSA, MRSA), Stenotrophomonas maltophilia, Acinetobacter Enterobacteriaceae (E. coli, Klebsiella, Enterobacter, Citrobacter) are less commonly seen in VAP than in hospitalacquired pneumonia (HAP).				
Empiric treatment for VAP = Cover for S. aureus, Pseudomonas aeruginosa, and other gram-negative bacilli	Empiric for MSSA/ Pseudomonas USE ANTI-PSEUDOMONAL AGENTS:	Piperacillin-tazobactam, cefepime, levofloxacin, imipenem, or meropenem			
	Proven MSSA (culture results) However if u used one of the Anti pseudomonals - you don't need to switch to those	Oxacillin, nafcillin, or cefazolin			
	MRSA —	vancomycin or linezolid LINEZOLID OVER VANCOMYCIN WHEN : 1. pts w/ renal insufficiency 2. pts infected w/ MIC MRSA			
	If patient has structural lung disease increasing the risk of gram-negative infection (cystic fibrosis or bronchiectasis)				
	A single antibiotic with activity against pseudomonas should be administered EXCEPT in patients with risk factors for multi- drug-resistant organisms = 2 antipseudomonal agents are recommended	1. IV antibiotic use within the preceding 90 days 2. septic shock or ARDS proceeding VAP onse. five or more days of hospitalisation prior to VAP onset 3. acute renal replacement therapy prior to VAP onset 4. patient is located in a unit where more than 10% of gram-negative isolates are resistant 5. patient in ICU where antibiotic sensitivity rates are not available			
	limit the use aminoglycosides and colistin : used only for gram negative bacilli that proved to be sensitive	In VAP the use of inhaled ABX is limited: Aminoglycosides and colistin (polymixins) — should be limited, used only after isolation of MO-> and it's evident that it's susceptible to those agents?? Because they have poor penetration to lung tissue and very nephrotoxic/ so if other agents could be used then avoid those — given for no more than 5 days w/ high tx failure risk — also if given inhaled u must give them IV at the same time	suggested to use both inhaled and systemic antibiotics, rather than inhlaed antibiotics alone e.g: Colistin inhalation PLUS Polymyxin B parenteral		





Good Luck Manar Saddam