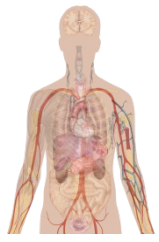
Pneumonia

Community-Acquired

Hospital-Acquired

Aspiration



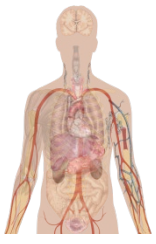
Community-Acquired Pneumonia

Calculate the CRB-65 score:

Parameter	Criteria	Add to Score
Confusion	**New** disorientation to person, place, or time	+1
Respiratory Rate	≥ 30 breaths per minute	+1
Blood Pressure	SBP < 90 mmHg or DBP < 60 mmHg	+1
Age ≥ 65 years		+1

Total Score: Click the calculated value

0	1	2	3	4
Mild	Mild	Moderate	Severe	Severe



Mild CAP – CRB-65 = 0-1

Patients with CRB-65 scores of 0 (30d mortality of 0.6%) or 1 (30d mortality of 2.7%) should be considered for outpatient oral therapy. Patients admitted to hospital do not require IV therapy, unless they are unable to take or absorb oral medication.

Preferred therapy

Drug	Dose	Route	Duration
Amoxicillin	500 mg or 1000 mg TID	PO	5 days

Penicillin/amoxicillin allergic with no severe delayed reaction to β-lactams (e.g. SJS, TENS, DRESS)

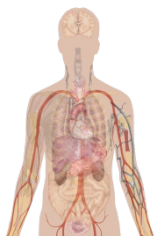
Drug	Dose	Route	Duration
Cefuroxime	500 mg TID	PO	5 days

If severe penicillin/amoxicillin & cefuroxime allergy

Drug	Dose	Route	Duration
Doxycycline	100 mg BID	PO	5 days

Parameter	Add
Confusion	+1
Respiratory Rate	+1
Blood Pressure	+1
Age >65	+1

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3



Moderate CAP – CRB-65 = 2

Patients with CRB-65 scores of 2 (30d mortality of 6.8%) may be discharged home or admitted to hospital. Oral therapy is preferred, but IV therapy may be appropriate with step-down to oral therapy as soon as possible. Quinolones are recommended only in exceptional circumstances and should not be prescribed routinely.

Preferred therapy, choose ONE of:

Drug	Dose	Route	Duration
Amoxicillin-clavulanate	875 mg BID	PO	5 days
Cefuroxime	500 mg TID	PO	5 days

→If unable to tolerate PO or IV therapy required

Ceftriaxone	1 g q24h	IV	5 days

→If atypical infection suspected, **ADD** ONE of:

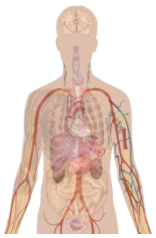
Azithromycin	500 mg daily	PO or IV	3 days
Doxycycline	100 mg BID	PO	5 days

Second-line (if penicillin/cefuroxime/ceftriaxone allergy)

Moxifloxacin	400 mg daily	PO or IV	5 days

Parameter	Add
Confusion	+1
Respiratory Rate	+1
Blood Pressure	+1
Age >65	+1

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3



Severe CAP – CRB-65 = 3-4

Patients with CRB-65 scores of 4 or 5 (30-day mortality of 27.8%) are considered to have severe disease. Patients could be managed on the ward or in the ICU. IV therapy should be started with dual therapy recommended for most patients.

Preferred therapy

Drug	Dose	Route	Duration
Ceftriaxone	2 g q24h	IV	5 days
AND ONE of:			
Azithromycin	500 mg q24h	PO or IV	3 days
Doxycycline	100 mg BID	PO	5 days

Second-line (if ceftriaxone allergy)

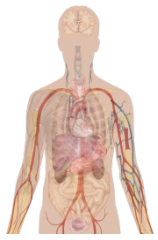
Moxifloxacin	400 mg daily	PO or IV	5 days

→ If MRSA or other Gram+ resistant organism suspected, **ADD**:

Vancomycin	Load 25-30 mg/kg, then 15 mg/kg q8-12h	IV	7 days (min.) Up to 14 days if bacteremia

Parameter	Add
C onfusion	+1
R espiratory Rate	+1
B lood Pressure	+1
Age >65	+1

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3



Hospital-acquired Pneumonia (HAP)

Hospital-acquired pneumonia can be categorized into early onset vs. late onset.

- Early onset ≤4 days – See Community-acquired Pneumonia
- Late onset >4 days – Develops after 4 days of hospitalization
- Usual pathogens for HAP include Enterobacterales

Preferred therapy (late onset HAP with no risk factors)

Drug	Dose	Route	Duration
Ceftriaxone	1 g q24h	IV	7 days
Cefuroxime	500 mg TID	PO	7 days
Moxifloxacin	400 mg q24h	PO/IV	7 days

Preferred therapy (late onset HAP - <3 months broad spectrum antibiotics, lung disease, immunosuppression)

Piperacillin-tazobactam	3.375 g q6h	IV	7 days
Meropenem	500 mg q6h	IV	7 days

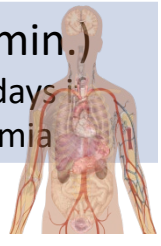
Step-down option (based on susceptibilities or as empiric therapy)

Amoxicillin-clavulanate	875/125 mg BID	PO	As above
Cefuroxime (if penicillin allergic)	500 mg TID	PO	As above

→ If MRSA or other Gram+ resistant organism suspected, **ADD**:

Vancomycin	Load 25-30 mg/kg, then 15 mg/kg q8-12h	IV	7 days (min.) Up to 14 days if bacteremia

Age >65	+1



Aspiration Pneumonia

Aspiration of gastric contents can cause a pneumonitis (inflammatory reaction) that is not infectious and does not require antibiotic therapy. Aspiration pneumonia is usually associated with radiographic infiltrates in the RLL, and clinical and systemic symptoms of pneumonia.

Preferred therapy (mild to moderate)

Drug	Dose	Route	Duration
Amoxicillin-clavulanate	875 mg BID	PO	7 days
Ceftriaxone	1 g q24h	IV	7 days

→ If risk factors for anaerobes (poor oral hygiene, periodontal disease, putrid sputum), **ADD**:

Metronidazole	500 mg q12h	PO/IV	7 days

Preferred therapy (hospital-acquired – severe)

Piperacillin-tazobactam	3.375 g q6h	IV	7 days
Meropenem	500 mg q6h	IV	7 days

Second-line (if allergic to preferred therapy)

Moxifloxacin	400 mg daily	PO or IV	5 days

Parameter	Add
C$_{onfusion}$	+1
R$_{espiratory\ Rate}$	+1
B$_{lood\ Pressure}$	+1
$_{Age>}$65	+1

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3