

## Community Acquired Pneumonia

**Definition:** All pneumonia that does not otherwise meet criteria for Hospital Acquired Pneumonia (pneumonia that develops 48 hours or more after hospital admission), Ventilator Associated Pneumonia (pneumonia that develops 48-72 hours or more after endotracheal intubation), or aspiration pneumonia.

### Initial work-up/assessment:

1. Sputum cultures prior to antibiotics, blood cultures prior to antibiotics in select groups (severe pneumonia, ICU admission, cavitory disease, immunosuppression).
2. Rule out influenza if the right season, and other respiratory viruses (Rapid flu antigen, respiratory viral panel)
3. Scoring systems like CURB-65 or PSI can be used to aid in decision between outpatient and inpatient therapy
4. Consider urine pneumococcal antigen, urine Legionella antigen in severe CAP and in certain patients (such as this with neutropenia, asplenia, obstructive lung disease, or heavy alcohol use)

### Empiric therapy:

#### Inpatient (Non-ICU):

##### First-line therapies:

1. IV ceftriaxone 2g q24h + PO\* azithromycin 500mg daily
2. PO\* levofloxacin 750mg daily

#### Inpatient (ICU):

##### First-line therapies:

1. IV ceftriaxone 2g q24h + PO\* azithromycin 500mg daily OR PO\* levofloxacin 750mg daily
2. Add IV vancomycin or PO\* linezolid (if not bacteremic) if MRSA is suspected (recent history, cavitory lesion, post-influenza bacterial pneumonia, patients with IDU, severe hypoxemia requiring intubation)
3. If *Pseudomonas* suspected, anti-pneumococcal, antipseudomonal beta-lactam (piperacillin-tazobactam, cefepime) + PO\* levofloxacin 750mg daily

Duration: 5-7 days (shorter duration if rapid clinical improvement)

\*IV formulations are available if unable to take PO

#### Outpatient:

##### First-line therapies:

1. PO azithromycin 500mg x1, followed by 250mg daily
2. PO levofloxacin 750mg daily
3. PO macrolide + amoxicillin-clavulanate 875/125mg BID
4. PO macrolide + amoxicillin 1g TID

##### Alternatives:

1. PO doxycycline 100mg BID
2. May use PO cefdinir 300mg BID in place of amoxicillin-clavulanate

Duration: 5-7 days

**Note:** CURB65 score: **C**onfusion, **U**remia (BUN  $\geq$ 19 mg/dL), **R**espiratory Rate ( $>$ 30/min), **B**lood Pressure ( $<$ 90/60 mmHg), **A**ge  $\geq$  65 years  
If more than one point above is positive, hospitalization is recommended.