

**Determine
CAP Severity**

Septic shock

OR

Respiratory
failure
requiring
mechanical
ventilation

OR

3 of the
following:

- RR>30
- confusion
- BUN>20
- WBC<4K
- Plts<100
- T<36
- hypotension
- multi-lobar infiltrates

Non-severe CAP and no
risk factors for MRSA or
Pseudomonas*

Severe CAP and no risk
factors for MRSA or
Pseudomonas*

**Penicillin
Allergy?**

**Penicillin
Allergy?**

if no ← → if yes

None

None or Mild

Severe

None or Mild

Severe

**Ampicillin/
Sulbactam
+
Azithromycin**

**Ceftriaxone
+
Azithromycin**

Levofloxacin

**Ceftriaxone
+
Azithromycin**

**Aztreonam
+
Levofloxacin**

PO Option:
Augmentin +
Azithromycin

PO Option:
Cefuroxime +
Azithromycin

Alternative: Vancomycin +
Aztreonam + Azithromycin

CAP IT AT 5 DAYS: if patient has resolution of vital sign abnormalities, is at baseline mental status, and tolerating PO

*Assess for Penicillin allergy and:

MRSA risk factors (recent hospitalization + received parenteral antibiotics in the last 90 days OR prior history of MRSA)
Pseudomonas risk factors (recent hospitalization + received parenteral antibiotics in the last 90 days OR prior history of Pseudomonas infection or structural lung disease)

In non-severe CAP, obtain sputum and blood cultures if the patient has risk factors for MRSA or Pseudomonas infection. Only initiate empiric coverage if the patient has recent isolation of MRSA or Pseudomonas.

If risk of MRSA or Pseudomonas:

- **No Penicillin Allergy:** Cefepime or Piperacillin/tazobactam + Azithromycin
- **Mild Penicillin Allergy:** Cefepime + Azithromycin
- **Severe Penicillin Allergy:** Levofloxacin + Aztreonam (de-escalate to 1 agent based on susceptibility)

Obtain MRSA Nasal PCR if treating empirically with Vancomycin, and consider discontinuation if PCR is negative.