ALGORITHM: COMMUNITY ACQUIRED PNEUMONIA ASSESSMENT & MANAGEMENT IN INFANTS & CHILDREN.

Inclusion Criteria:	Exclusion Criteria:
• All children less than 16yrs of age • Community acquired pneumonia	• Sepsis (Refer to the Paediatric Sepsis Pathway) • Immunocompromised patients (where *Pneumocystis jiroveci* pneumonia should be considered) • Cystic fibrosis • Herpes Simplex Virus pneumonitis • Hospital acquired pneumonia • Congenital heart or lung conditions • Tuberculosis, patients with recent overseas travel and "tropical" pneumonias. • Premature babies who have NOT yet reached "TERM" as per their corrected gestational age. • Aspiration of foreign body and/or gastric contents. • Non-Cystic fibrosis bronchiectasis

Only need to meet 1 of the criteria to be assigned to that severity grade. If multiple blue zone criteria present consider escalating to moderate severity

SEVERITY ASSESSMENT	MILD	MODERATE	SEVERE
Effort of breathing	Nil or Mild increase Blue zone SPOC	Moderate increase Yellow zone SPOC	Severe increase Red zone SPOC
Respiratory Rate	Within normal range for age White zone SPOC	Above range for age Yellow zone SPOC	Continuing to rise, and or evidence of exhaustion Red zone SPOC
Circulation	No tachycardia	Tachycardia	Shock/Red zone SPOC
Oxygen saturation	≥95% in room air	≤95% in room air	Failing to maintain Sp02 ≥95% in 6L FiO2 OR < 90% (in air) Red Zone SPOC
MANAGEMENT	**MILD**	**MODERATE**	**SEVERE**
Oxygen	Not required	Oxygen to maintain saturations above 95%	High flow oxygen (If available warm humidified oxygen)
Antibiotics	Oral antibiotics	IV if requires admission or not tolerating oral	IV Antibiotics
see following pages for specific antibiotic and dose recommendations			
Analgesics	Analgesics if required to relieve discomfort of fever or pain related to the pneumonia		
Hydration	Oral fluids	NG or IV if unable to tolerate oral fluids to maintain hydration	IV Fluids
Social situation	Family able to provide appropriate care at home and can feed normally/tolerate fluids	Family unable to provide appropriate observation at home, unable to feed /tolerate fluids	N/A
INVESTIGATIONS	**MILD**	**MODERATE**	**SEVERE**
Chest X Ray	No	Consider	Yes
Laboratory tests	No	Consider	Yes
Note: Infants <3 months with suspected CAP require full evaluation of sepsis			
DISPOSITION	**MILD**	**MODERATE**	**SEVERE**
Decision to hospitalise is an individual one based on age and clinical factors	Outpatient / may be discharged from ED if all criteria met Admit if < 3 months old or family unable to manage child at home	Consider Admission Consult with SMO or Paediatrician if not clinically improved within 24 hrs and discuss transfer to higher level facility	**Admit, Senior doctor review, escalate as per local CERS** **Consider NETS: 1300 36 2500**

SPECIFIC ANTIBIOTIC & DOSE RECOMMENDATIONS

NEONATES - 3 MONTHS

TREATMENT	MILD	MODERATE	SEVERE
Neonates <7days	BENZYLPENICILLIN 60mg/kg IV every 12hrs PLUS GENTAMICIN 4mg/kg IV once daily	BENZYLPENICILLIN 60mg/kg IV every 12hrs PLUS GENTAMICIN 4mg/kg IV once daily	BENZYLPENICILLIN 60mg/kg IV every 12hrs PLUS GENTAMICIN 4mg/kg IV once daily
Neonates 8 – 28 days	BENZYLPENICILLIN 60mg/kg IV every 6hrs PLUS GENTAMICIN 5mg/kg IV once daily	BENZYLPENICILLIN 60mg/kg IV every 6hrs PLUS GENTAMICIN 5mg/kg IV, once daily	BENZYLPENICILLIN 60mg/kg IV every 6hrs PLUS GENTAMICIN 5mg/kg IV once daily
1 – 3 months	BENZYLPENICILLIN 60mg/kg IV every 6hrs (max dose 1.8g)	BENZYLPENICILLIN 60mg/kg IV every 6hrs (max dose 1.8g)	CEFOTAXIME 50mg/kg IV every 8hrs (max dose 2g) PLUS CLINDAMYCIN 10mg/kg IV every 8 hrs (max dose 450mg) OR LINCOMYCIN 15mg/kg IV every 8hrs (max dose 600mg)

4 MONTHS - 16 YEARS

TREATMENT	MILD	MODERATE	SEVERE
4 months – 16 years	AMOXYCILLIN 15mg/kg oral every 8hrs (max dose 1g)	AMOXYCILLIN 15mg/kg oral every 8hrs (max dose 1g)	CEFOTAXIME 50mg/kg IV every 8hrs (max dose 2g) PLUS CLINDAMYCIN 10mg/kg IV every 8hrs (max dose 600mg) OR LINCOMYCIN 15mg/kg IV every 8hrs (max dose 600mg) ADD VANCOMYCIN 15mg/kg IV every 6 hours (max dose 750mg) if intubated or septic.

4 MONTHS - 16 YEARS

TREATMENT	MILD	MODERATE	SEVERE
Staphylococcus aureus **Pneumonia**			CEFOTAXIME 50mg/kg IV every 8hrs (max dose 2g) OR CEFTRIAXONE 50 mg/Kg /dose every 24 hours (max dose 2 grams) IV or IM PLUS VANCOMYCIN 15mg/kg IV every 6hrs (up to 750mg) *Note: Ceftriaxone NOT recommended in Neonates
Pertussis (suspected or confirmed at any age)	Consider AZITHROMYCIN 10mg/kg oral once daily for 5 days (max dose 500mg) OR CLARITHROMYCIN 7.5mg/kg oral every 12hrs (max dose 250mg) OR ERYTHROMYCIN 10mg/kg oral every 6hrs for 7–14days (max dose 500mg)	Consider AZITHROMYCIN 10mg/kg oral once daily for 5 days (max dose 500mg) OR CLARITHROMYCIN 7.5mg/kg oral every 12hrs (max dose 250mg) OR ERYTHROMYCIN 10mg/kg oral, every 6hrs for 7–14days (max dose 500mg)	Consider AZITHROMYCIN 10mg/kg oral once daily for 5 days (max dose 500mg) OR CLARITHROMYCIN 7.5mg/kg oral every 12hrs (max dose 250mg) OR ERYTHROMYCIN 10mg/kg oral, every 6hrs for 7–14days (max dose 500mg)