

Emergency setting – Adult asthma guidelines all health professionals

ASSESSMENT OF SEVERITY				
	Mild	Moderate	Severe	Life threatening
Pulse	< 100/min	100–120/min	> 120/min	Any of severe +/- Relative Bradycardia SpO ₂ < 90% Fatigue. Does not talk Altered mentation ↓ Rate / depth of breathing / paradoxical movement
Respiratory rate	10 – 18	18 – 25	> 25	
FEV1 % predicted best	> 75%	50 – 75%	< 50% / <1litre	
Speech	Sentences	Phrases	Words	
Wheeze intensity	Variable	Moderate - loud	Often quiet	
Accessory muscles	Minimal	In use	Marked use	
SpO ₂	> 95%	90 – 95%	≤ 90%	

TREATMENT GUIDE				
	Mild	Moderate	Severe	Life threatening
Medical review	Resident on admission	Registrar on admission	Consultant ED, ICU or Medicine	
Oxygen	O ₂ to achieve sats > 94% Monitor arterial blood gases in severe, life threatening and those not responding			
IV Access		IV cannula if deteriorating	IVI 0.9% NaCl	IVI 0.9% NaCl
BRONCHODILATORS 1. Salbutamol Inhaler/ spacer <i>(IV not recommended)</i> Nebuliser	Give up to 16 puffs, one puff at a time, with breath-hold or tidal breathing. Give in lots of 4, two mins apart. Repeat as required			
	Up to 16 puffs stat then 3 – 4 hrly	Up to 16 puffs stat then up to ¼hrly PRN	Up to 16 puffs stat then up to ¼hrly PRN	
			1ml (5mg/ml) in 2ml NaCl Consider ¼ hrly or continuous	Continuous until marked clinical improvement
2. Adrenaline			IM 300 – 500mcg (0.3 – 0.5ml of 1:1000) Consider IV infusion	
3. Ipratropium Nebuliser			500mcg 6 hrly	
4. Magnesium Sulphate				Consider single dose IV 2g bolus over 20 mins
STEROIDS Oral IV	Short term Prednisolone oral 0.5 – 1.0 mg/kg up to 50mg <i>Tapering is not recommended</i>			
		Hydrocortisone: Consider IV 200mg 6 hrly til improved/able to absorb oral Dexamethasone, Methylprednisolone, other IV acceptable		
Investigations		CXR if deteriorating	ABG, FBP, U&E, BSL, CXR	
Observations	½ hrly SpO ₂ , respiratory and vital signs until stable Spirometry	¼ hrly SpO ₂ , respiratory and vital signs until stable Spirometry	Continuous ECG, SpO ₂ , respiratory and vital signs until stable	Continuous ECG, SpO ₂ , respiratory and vital signs until stable
Comfort	Nurse in upright position of comfort. Provide pillows over bedside table			
Education	Commences from admission			
Discharge management	Home if FEV ₁ > 75% of Personal Best. Consider admission if has risk factors	Consider admission if FEV ₁ < 75% of PB with risk factors or not responding	Admit under Physician. Consider ICU/ nurse special	Stabilise & transfer to ICU/ nurse special
Referral	GP appointment made for within 5 days of discharge. Consider Respiratory Physician and Respiratory CNC or Asthma Educator			
Discharge medication	Beta ₂ Agonists Use on an as required basis		Consider need for Long Acting Beta ₂ Agonist	
	Steroids Inhaled Consider Prednisolone 0.5 -1.0 mg/kg up to 50mg daily 7 – 10 days & GP review within 5 days		Consider combination therapy ie. Steroid/ LABA Prednisolone 0.5 – 1.0 mg/kg up to 50mg daily for 7 – 10 days and review by GP within 5 days	