Humber and North Yorkshire Health and Care Partnership

NHS
York and Scarborough Teaching Hospitals
NHS Foundation Trust

Acute Asthma Pathway

Suspected acute asthma

Progressive worsening of asthma symptoms

- Breathlessness
- Wheeze
- Cough
- Chest tightness

Risk factors for severe disease

- Extremely low birth weight
- Prolonged NICU stay
- Congenital heart disease
- Previous severe attacks
- Attack in late afternoon, at night or early morning
- Representation within 1 month of acute episode
- Already on steroids or high doses ICS
- Food allergy
- Psychosocial stressors

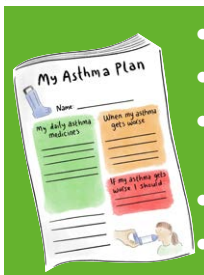
Do the symptoms and/or signs suggest an **immediately life threatening (high risk) illness?**

Consider differentials;

- Pneumonia
- Epiglottitis
- Croup
- Hyperventilation
- Foreign body
- GORD
- Anaphylaxis

	Green – Low Risk	Amber – Intermediate Risk	Red – High Risk
Activity	• Responds normally to social cues • Content/smiles • Stays awake/awakens quickly • Strong normal cry	• Altered response to social cues • No smile • Reduced activity	• Not responding normally or no response to social cues • Unable to rouse or if roused does not stay awake • Weak, high pitched or continuous cry • Appears ill
Skin	• Normal skin colour • CRT <2 secs	• Normal skin colour • Pallor reported by parent/carer • Cool peripheries	• Pale, mottled, ashen • Cold extremities • CRT >3 secs
Respiratory	• No respiratory distress • 1-5y: <40bpm • >5y: ≤ 30bpm • O2 sats: ≥ 95% • No chest recessions • No nasal flaring	• Tachypnoea • Moderate recessions • May have nasal flaring • 1-5y: 40-60bpm • >5y: > 30bpm • O_2 Sats: 92-94%	• Significant respiratory distress • Grunting • Apnoeas • Severe recessions • Nasal flaring • All ages: >60bpm • O_2 Sats: ≤ 92%
PEFR	• >50% best or predicted	• 33-50% best or predicted	• <33% best or predicted
Auscultation	• Good air entry • Mild-moderate wheeze	• Decreased air entry with marked wheeze	• Silent chest
Circulation	• Tolerating 75% of fluid • Occasional cough induced vomiting • Moist mucous membranes	• 50-75% fluid intake over 3-4 feeds • Cough induced vomiting • Reduced urine output • Parental anxiety	• 50% or less fluid intake over 2-3 feeds • Cough induced vomiting frequently • Significantly reduced urine output
	MODERATE	**SEVERE/LIFE THREATENING**	

Acute Asthma Drug Dose		
Prednisolone (oral) 3 days	<2y: 10mg 2-5y: 20mg 5-7y: 30-40mg	>7y: 40mg (1-2mg/kg per dose)
Salbutamol (nebs)	2-5y: 2.5mg >5y: 5mg	
Ipratropium Bromide (nebs)	2-11y: 250 micrograms 12-17y: 500 micrograms	



- Provide PAAP
- Check inhaler technique
- Continue 2-4 puffs every 4h for 24h
- Review in 2 weeks
- Review progress in 48h
- Asthma review within 2 weeks

- Give 2-10 puffs of salbutamol via spacer with facemask
- Keep in waiting room for 30 mins
- Consider prednisolone 1-2mg/kg once daily for 3 days

Improved

Not improved

Same day review

AND

RED ACTION

- Refer immediately to emergency care or paediatric unit – consider 999
- High flow oxygen via face mask to achieve SpO2 >94%
- Give 10 puffs of salbutamol via face mask or via O2-driver nebuliser
- If poor response add nebulised ipratropium bromide
- Continue with further doses of bronchodilator while awaiting transfer

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