

Clinical Assessment Tool for the Child with Acute Exacerbation of asthma 2-16 Years



Management within Hospital Setting

Table 1: Traffic Light system for identifying severity of Acute Exacerbation of Asthma

	Green – Moderate	Amber – Severe	Red – Life Threatening
Talking	In sentences	Not able to complete a sentence in one breath	Not able to talk
Auscultation	Fair air entry, moderate wheeze	Decreased air entry with marked wheeze	Silent Chest
Respiratory Rate	Within normal range (Ref to table 2)	>40 Breaths/min (2-5 years) >30 Breaths/min (>5 years)	
Heart Rate	Within normal range (Ref to table 2)	>140 beats p/min (2-5 years) >125 beats p/min (>5 years)	
SaO ₂	≥92% in air	<92% in air +/- cyanosis	
PEFR (if possible)	>50% of predicted	33-50% of predicted	<33% of predicted

Table 2: Normal Paediatric Values:

Respiratory Rate at Rest:	Systolic Blood Pressure
2-5yrs 25-30 breaths/min	2-5yrs 80-100 mmhg
5-12yrs 20-25 breaths/min	5-12yrs 90-110 mmhg
>12yrs 15-20 breaths/min	>12yrs 100-120 mmhg
Heart Rate	
2-5yrs 95-140 bpm	
5-12yrs 80-120 bpm	
>12yrs 60-100 bpm	

Table 4: Guidelines for nebuliser

- Significantly low sats despite inhaler and spacer use
- Oxygen Saturations persistently below 92%
- Requiring oxygen
- Unable to use volumatic/spacer device
- Severe respiratory dmistress

Table 3: Predicted Peak Flow: For use with EU / EN13826 scale PEF metres only

Height (m)	Height (ft)	Predicted EU PEFR	Height (m) (L/min)	Height (ft)	Predicted EU PEFR (L/min)
0.85	2'9"	87	1.30	4'3"	212
0.90	2'11"	95	1.35	4'5"	233
0.95	3'1"	104	1.40	4'7"	254
1.00	3'3"	115	1.45	4'9"	276
1.05	3'5"	127	1.50	4'11"	299
1.10	3'7"	141	1.55	5'1"	323
1.15	3'9"	157	1.60	5'3"	346
1.20	3'11"	174	1.65	5'5"	370
1.25	4'1"	192	1.70	5'7"	393

Table 5: Prednisolone Guideline BNF2010-2011

Give **prednisolone** by mouth:
child under 12 years 1–2 mg/kg (max. 40 mg) daily for up to 3 days or longer if necessary, if the child has been taking an oral corticosteroid for more than a few days give prednisolone 2mg/kg (max. 60mg). Child 12-18 years 40-50mg daily for at least 5 days.

This guidance is written in the following context

This assessment tool was arrived at after careful consideration of the evidence available including but not exclusively use BTS Guidelines and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.