

# Paediatric Acute Wheeze Management Flowchart

Title: Paediatric Acute Wheeze Management Flowchart			
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<b>Author/s:</b>	Consultant Respiratory Paediatrician Asthma Nurse Specialist Asthma Nurse Specialist Paediatric Pharmacist		
<b>Executive Lead:</b>	Associated Medical Director		
<b>Target Audience:</b>	All clinical staff looking after children with acute wheeze		
<b>Supersedes:</b>	Respiratory Medicine: Flowchart for Management of Acute Wheeze or Asthma (2016)		
<b>Keywords (min. 5):</b>	Wheeze, paediatric, respiratory, asthma, emergency, breathing		

# Paediatric Acute Wheeze Management Flowchart

## Version Control

Date	Author	Version/Page	Reason for change
April 2016	Consultant Respiratory Paediatrician	Old format	Update

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# Paediatric Acute Wheeze Management Flowchart

## 1.0 Purpose

To provide a consistent approach for the management of acute wheeze

## 2.0 Scope

All children presenting with acute wheeze within NHS Lothian

## 3.0 Definitions

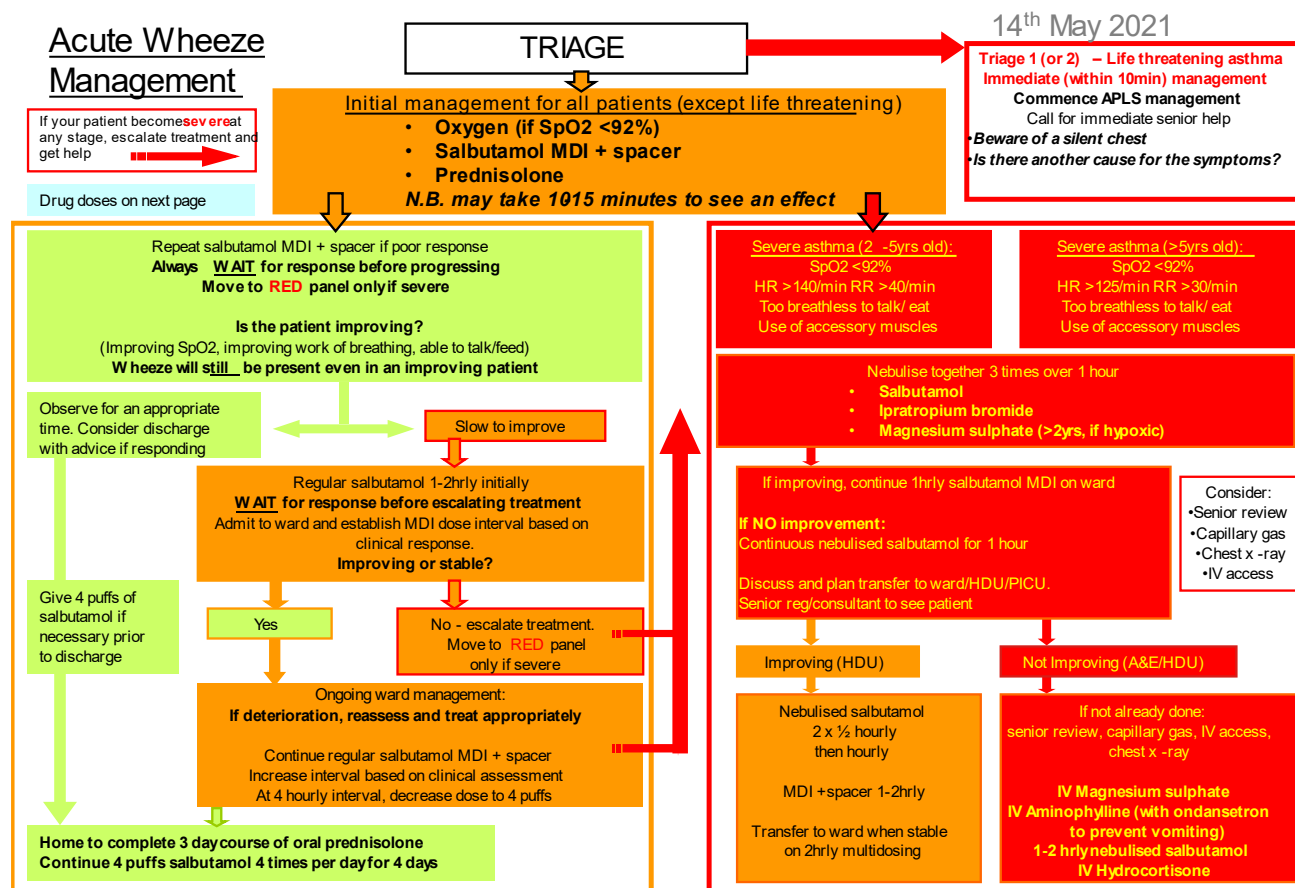
Acute wheeze – clinical assessment of work of breathing, heart rate, oxygen saturations. The diagnosis is confirmed on auscultation of the chest.

## 4.0 Roles and responsibilities

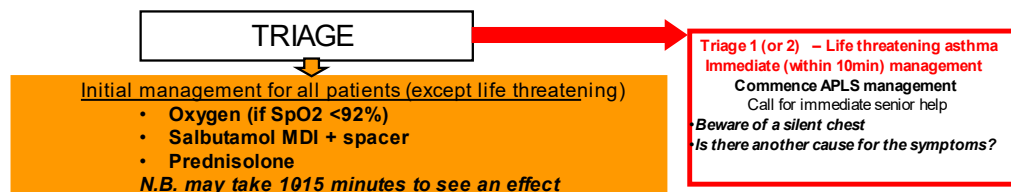
All clinical staff have a role in providing prompt and sensible care to these children and young people.

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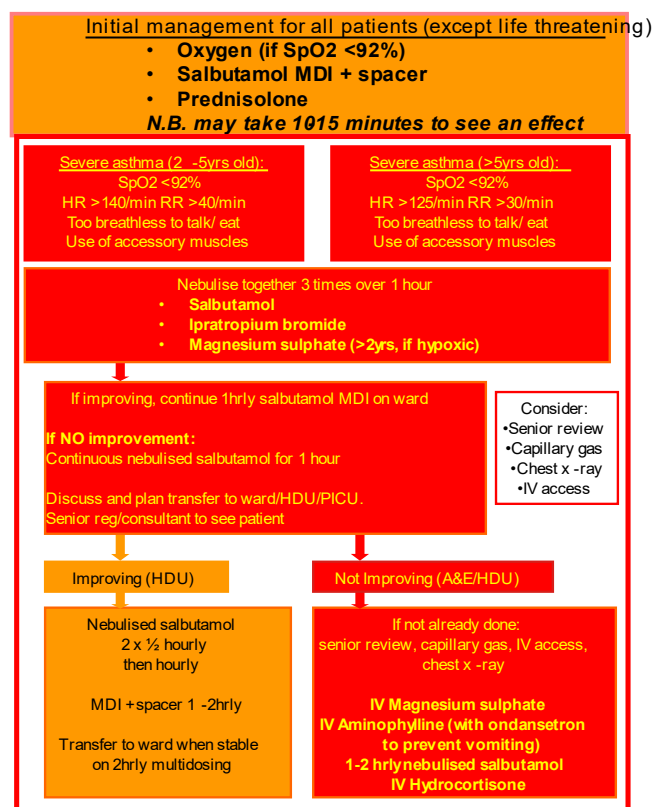
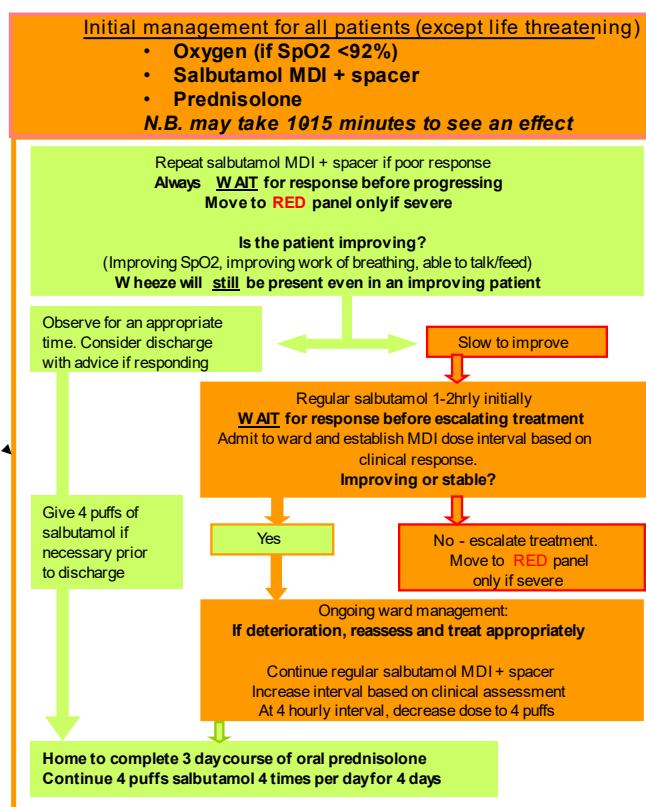
## 5.0 Main content



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## Acute Wheeze Management: Drug Doses

14<sup>th</sup> May 2021

### Initial Management

Oxygen	At least 6L/min via non-rebreathing mask
Salbutamol MDI + spacer (100micrograms per puff)	10 puffs for initial and maintenance treatment 4 puffs once 4 hourly interval reached. To be continued following discharge.
Prednisolone	3 day course as standard. May be varied on advice from senior doctor/nurse specialist
<2yrs	2mg/kg OD (max 20mg)
2-4yrs	20mg OD
5+yrs	40mg OD

### Severe Wheeze

#### Nebulised medication

2-4yrs	
Salbutamol	2.5mg
Ipratropium bromide	250microgram
Magnesium sulphate	154mg

NB. <2 years: no evidence for safety of nebulised magnesium sulphate in children.  
Discuss all nebulised treatment in <2yrs age group with senior colleague.

#### 5+yrs

Salbutamol	5mg
Ipratropium bromide	500microgram
Magnesium sulphate	154mg

### IV medication

Magnesium sulphate injection	40mg/kg over 20 minutes (max 2gram)
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Aminophylline	
Loading dose	5mg/kg (unless on long-acting theophylline)
Continuous dose <12 years	1mg/kg/hr
≥12 years	500mcg/kg/hr

*Aminophylline level - take blood level 4-6 hours after starting aminophylline.  
Aim for plasma concentration of 10-20 mg/L*

Onidansetron (IV or oral)	100micrograms/kg (max 4mg) before starting aminophylline infusion (don't delay aminophylline loading).
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Hydrocortisone	4mg/kg QDS (max 100mg)
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## 6.0 Evidence base

SIGN/BTS guideline 2019

## 7.0 Monitoring and review

May 2024