Wessex Paediatric Viral Induced Wheeze and Acute Asthma Treatment Pathway





- This pathway is designed for use across Emergency Departments and acute paediatric units by medical and nursing teams.
- It should be used in all children and young people aged > 1 year with a diagnosis of viral induced wheeze or an acute asthma attack.
- All children should be assessed within 15 minutes of arrival according to BTS criteria (see below) and treatment initiated according to severity.
- Prehospital ambulance bronchodilator treatment should be considered when prescribing burst therapy
- The pathway should be used in conjunction with Criteria Led Discharge where appropriate.

Consider the differential diagnosis of wheezing and abnormal breathlessness which include:

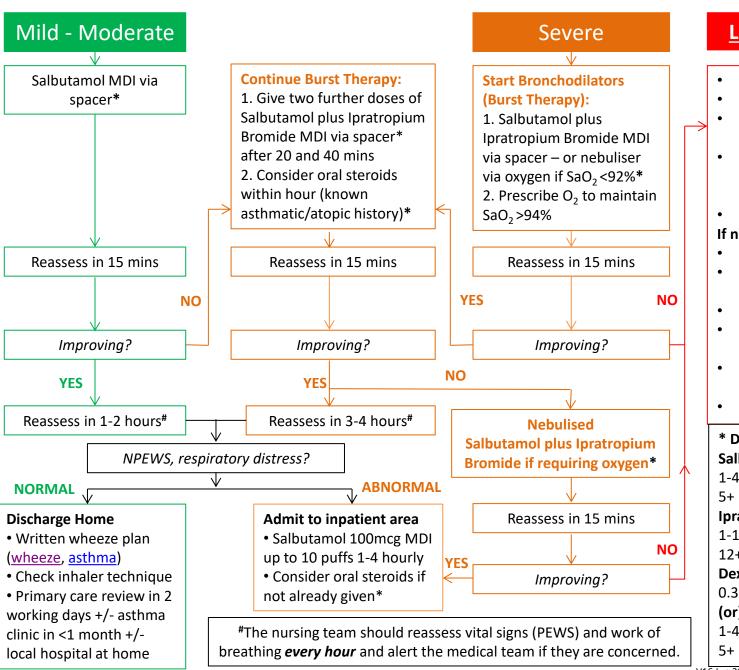
- Anxiety associated breathing pattern disorders such as hyperventilation and inducible laryngeal obstruction
- Infections such as atypical bacterial or viral pneumonia
- Inhaled Foreign body
- · Compression or narrowing of the trachea due to tumour or a congenital abnormality
- Anaphylaxis
- Cardiac failure

Consider the following risk factors for near fatal/fatal asthma:

- Severe wheezing in the context of adverse psycho-social factors
- History of a previous life threatening episode
- Representation within 1 month of a previous acute episode
- Excessive use of bronchodilators prior to seeking medical attention or prehospital IM Adrenaline with ambulance crew

If at any point the treating clinician or nurse is concerned that their patient is deteriorating, obtain help from a senior team member.

Mild - Moderate	Severe	Life Threatening
 SaO₂ ≥92% in air No clinical features of severe Viral Induced Wheeze/Asthma May have some increased work of breathing 	Any one of: • SaO ₂ <92% • Too breathless to talk or eat • Heart rate >140 (1-5y) or >125 (5+)* • Resp rate >40 (1-5y) or >30 (5+) • Use of accessory neck muscles • PEF 33-50% best or predicted *consider impact of prior bronchodilator use on HR before using HR alone to define severe asthma	SaO ₂ <92% plus any of: •Silent chest • Poor respiratory effort • Agitation • Altered consciousness • Cyanosis



LIFE THREATENING

- Move to RESUS/HDU
- Senior medical review
- Prescribe O₂ to maintain SaO₂ > 94%
- Back to back nebulisers -Salbutamol plus Ipratropium Bromide*
- Oral steroids within hour*

If not improving:

- IV access/blood gas
- IV bronchodilators as per <u>SORT guideline</u>
- IV Hydrocortisone
- Consider High Flow Humidified O2
- Consider Anaesthetic / ICU / Outreach / SORT input
- Consider other diagnoses

* Drug Doses Salbutamol

1-4yr 5 puffs or 2.5mg Neb,5+ 10 puffs or 2.5-5mg Neb

Ipratropium Bromide

1-11yr 4 puffs or 250mcg Neb

12+ 8 puffs or 500mcg Neb

Dexamethasone

0.3mg/kg PO x 1 dose

(or) Prednisolone

1-4 yr 10-20mg up to 3 days

5+ 30-40mg up to 3 days

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