# Paediatric Viral Induced Wheeze and Acute Asthma Treatment Pathway

- This guideline 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 according to BTS criteria (see below) and treatment initiated according to severity.
- Prehospital ambulance bronchodilator treatment should be considered when making decisions about ongoing therapy options

#### 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 team is concerned that their patient is deteriorating, obtain help from a senior team member.

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







#### Back2Back (B2B) Therapy: Mild - Moderate 3 x **Salbutamol** plus Severe **Ipratropium Bromide** oxygen driven nebulisers **Start B2B Therapy\*** 10 puffs Salbutamol delivered one after the other Escalate to ST3+ doctor or 100mcg MDI via credentialed ACP spacer\* WITH REASSESSMENT Place on continuous BETWEEN EACH monitorina · Oral steroids within Use 'ED Asthma 2-16 Paeds' Reassess in 15 mins hour (known Care plan for prescribing ease asthmatic/atopic history) \*MgSo4 could be added to nebs see full NO Improving? asthma guideline YES Reassess in 15 mins Increased severity score\* Reassess hourly for NO \*If only increased HR ask for senior next 3 hours review before escalating management Improving? **Deterioration?** YES Remains well @ 3hrs **Complete B2B Review 15 minutes from YES** completion Discharge Home NO No change in original Written plan severity score. Improving? Viral wheeze Repeat 10 puffs Salbutamol Asthma Check inhaler technique Refer to paeds on-call Refer to Paeds • Recommend parents May consider inhaled burst Remain on continuous seek primary care review therapy (3 x 10 puffs at 15min intervals) monitoring in 2 working days Admission once spaced to 1hour between nebulisers

# **LIFE THREATENING**

Access the life threatening asthma guideline here

Call Paediatrics/2222 immediately

#### If not improving:

- Repeat Salbutamol neb
- Ensure oral steroids given
- Escalate to ED Cons/Paeds
- Consider IV therapy as per life threatening asthma

### Drug Doses Salbutamol Nebs

1-4yr 2.5mg 5yrs+ 5mg

## **Ipratropium Bromide Nebs**

1-11yr 250mcg 12yr+ 500mcg

#### Prednisolone \*

Once daily 3 - 5 days

<2 years – 10mg

2-5 years - 20mg

>5 years -30-40mg

≥12 years: 40–50 mg

\*If not tolerated dexamethasone can be used, see here for **dosing** and here for **meta-analysis**