### Acute Wheeze & Asthma - Children under 5 years

**Patients with Life-threatening Features Must Be Transferred to Hospital on a 999 Call**

#### Assess the severity on initial presentation
- At any stage has the child had any features of life-threatening/severe asthma?
- The severity should be based on the worst set of vital signs/features of asthma.

<table>
<thead>
<tr>
<th>Initial presentation</th>
<th>YAS/ED/PAR</th>
<th>Heart Rate</th>
<th>Respiratory Rate</th>
<th>SaO</th>
<th>FiO2</th>
<th>Recessions?</th>
</tr>
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</table>

| Coma? | Yes | Yes | Exhaustion? | Yes | No | |
| Silent chest? | Yes | No | Confusion? | Yes | No | |
| Poor respiratory effort? | Yes | No | Able to complete sentences? | Yes | No | |

#### Life-threatening
- **SaO <92% plus any of**
  - Silent chest
  - Cyanosis
  - Poor resp effort
  - Bradycardia
  - Confusion/coma
  - Apnoeas in infants

- **AIRWAY & BREATHING**
  - Check airway
  - Give O2 via face mask to maintain SaO above 95%
  - Give Salbutamol nebuliser 2.5 mg (nebulise on oxygen if available)
  - Give Ipratropium nebuliser 0.25mg if poor response to Salbutamol

- **15-20 MIN - RE-ASSESS AFTER INITIAL NEBULISER**
  - HR: RR:
  - SaO on air: PEFR:
  - Recessions or use of accessory muscles:
    - If signs of Life-threatening Features go to Life-threatening Pathway
    - If severe features, continue as below
      - Repeat nebulised Salbutamol 2.5-5mg
      - Give oral Prednisolone (use soluble)
      - 20mg to infant under 3 years
      - 30mg to children over 3 years
      - Contact Paediatrics on-call
      - Transfer patient to hospital within 1 hour

- **ALL INFANTS UNDER 2 YEARS WITH SEVERE FEATURES AT ANY TIME MUST BE ADMITTED**

#### Severe
- **SaO <92%**
- **HR >130**
- **RR >50**
- **Use of accessory muscles**
- **Too breathless to talk / eat**

- **AIRWAY & BREATHING**
  - Check airway
  - Give O2 via face mask to maintain SaO above 95%
  - Give Salbutamol nebuliser 5 - 10 puffs via spacer

- **15-20 MIN - RE-ASSESS AFTER BRONCHODILATOR**
  - HR: RR:
  - SaO on air: PEFR:

- **Recessions or use of accessory muscles:**
  - If signs of Life-threatening Features go to Life-threatening Pathway
  - If Moderate Features continue here

- **Repeat inhaled Salbutamol 5 - 10 puffs via spacer**
  - Give oral Prednisolone (use soluble)
  - (20 mg under 3 years, 30 mg over 3 years & over)

- **1 HOUR – RE-ASSESS PATIENT**
  - If signs of Life-threatening Features go to Life-threatening Pathway
  - If HR & RR normal, no increased work on breathing & SaO > 95% on air, go to Mild Pathway and see overleaf for Continuing Care Advice

#### Moderate
- **SaO ≥93%**
- **No features of severe asthma**
- **Able to take feeds**

- **AIRWAY & BREATHING**
  - Check airway
  - Give O2 via face mask to maintain SaO above 95%
  - Give Salbutamol nebuliser 2.5 mg and nebulise on O2 if available

- **Contact Paediatric on-call**
- **Transfer to hospital within the hour**

#### Mild
- **SaO >95%**
- **No increased work of breathing**
- **HR within normal limits**

- **INITIAL MANAGEMENT**
  - Give usual bronchodilator via a spacer
  - If not already taking bronchodilator give 2-5 puffs of Salbutamol via a spacer

- **15-20 MIN - RE-ASSESS THE PATIENT**
  - HR: RR:
  - SaO on air: PEFR:

- **Recessions or use of accessory muscles:**
  - If signs of Life-threatening Features go to Life-threatening Pathway
  - If moderate features go to Moderate Pathway

- **If HR & RR normal, no increased work on breathing & SaO > 95% on air, go to Mild Pathway and see overleaf for Continuing Care Advice**
Acute Wheeze & Asthma - Children under 5 years

PATIENTS WITH LIFE-THREATENING FEATURES MUST BE TRANSFERRED TO HOSPITAL ON A 999 CALL

CONTINUING CARE ADVICE

Before the patient leaves your surgery

1. The patient must be stable, have a heart rate within normal limits for their age, have no recessions or use of accessory muscles.
2. Any patient who had signs of severe acute wheeze/asthma at presentation to primary care MUST be reviewed within 24 hours and advised re OOH service.
3. All infants under 2 years who present with signs of severe acute wheeze/asthma MUST be admitted.
4. If patient received nebulised bronchodilator before presentation consider review in 6-8 hours for reassessment.
5. If patient presented with recessions consider discharge on oral Prednisolone for 20-30mg for 3-5 days.
6. If patient has re-attended the surgery within 24 hours they should be fully reassessed and their Care Plan reviewed.

Consider referral for admission/extended observation if any of the following

1. Signs of severe asthma at initial presentation.
2. Significant co-morbidity.
3. Taking oral steroids prior to presentation.
5. Previous near fatal attack/brittle asthma.
6. Psychological problems/learning difficulties.
7. Poor social circumstances.

When the patient leaves your surgery

1. Ensure the patient has an adequate supply of inhalers and oral medications.
2. Check inhaler technique and ensure the patient has a spacer.
3. Give the patient/carer a copy of their management plan with explanation of how to use it.
4. Ensure the patient/carer is clear about their treatment.