Acute Asthma / Wheeze Pathway (not for Bronchiolitis)
Clinical Assessment / Management Tool for Children & Young People Older than 1 year old with Acute Wheeze

Management – Primary Care and Community Setting

**ASSESSMENT**

<table>
<thead>
<tr>
<th>Low Risk</th>
<th>Intermediate Risk</th>
<th>High Risk</th>
<th>IMMEDIATELY LIFE-THREATENING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MILD - GREEN</strong></td>
<td><strong>MODERATE - AMBER</strong></td>
<td><strong>SEVERE - RED</strong></td>
<td><strong>PURPLE</strong></td>
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**Behaviour**
- Alert: No increased work of breathing
- Alert: Some increased work of breathing
- May be agitated; Unable to talk freely or feed

**O2 Sat in air**
- ≥ 95%; Pink
- ≥ 92%; Pink
- < 92%; Pale
- < 92%; Cyanosis; Grey

**Heart Rate**
- Normal
- Under 5yr >140/min
- Under 5yr >140/min
- Under 5yr >140/min

**Respiratory**
- Normal Respiratory rate
- Under 5yr <40 breaths/min
- Under 5yr <30 breaths/min
- PEFR >75% l/min best/predicted

**Peak Flow** (only for children > 6 yrs with established technique)
- PEFR <50% l/min best/predicted
- PEFR 50-75% l/min best/predicted
- PEFR 75-100% l/min best/predicted
- PEFR >100% l/min best/predicted

**Following Any Acute Episode, Think:**
- Considering other diagnoses:
  - Cough without a wheeze
  - Foreign body
  - Croup
  - Bronchiolitis

**GREEN ACTION**
- Salbutamol 2.5 ‘puffs’ via inhaler & spacer (check inhaler technique) - use higher dose if Tx started by parent as per asthma action plan.
- Advise – Person prescribing ensure it is given properly
  - Continue Salbutamol 4 hourly as per instructions on safety netting document.
  - Provide:
    - Appropriate and clear guidance should be given to the patient/carer in the form of an Acute exacerbation of Asthma/Wheeze safety netting sheet.
    - If exacerbation of asthma, ensure they have a personal asthma plan.
    - Confirm they are comfortable with the decisions / advice given and then think “Safeguarding” before sending home.
    - Consider referral to acute paediatric community nursing team if available.

**AMBRE ACTION**
- Salbutamol (check inhaler technique) x 10 ‘puffs’ via inhaler & spacer
- Reassess after 20 – 30 minutes
- Oral Prednisolone within 1 hour for 3 days if known asthma
- <2 years - avoid steroids if episodic wheeze. 10mg/day if multiple trigger wheezer.*
- 2-5 years 20 mg/day
- Over 5 years 30-40 mg/day

**URGENT ACTION**
- Salbutamol 2.5 – 5 mg via Oxygen-driven nebuliser whilst arranging immediate hospital admission - 999

**Refer immediately to emergency care by 999**

**Green Action (if life threatening)**
- Alert Paediatrician
  - Oxygen to maintain O₂ Sat > 94%, using paediatric nasal cannula if available
  - Salbutamol 100 mcg x 10 ‘puffs’ via inhaler & spacer
  - Salbutamol 2.5 – 5 mg Nebulised
- Repeat every 20 minutes whilst awaiting transfer
- If not responding add Ipratropium 20mcg/dose - 8 puffs or 250 micrograms/dose nebulised mixed with the salbutamol.
- Oral Prednisolone start immediately: 2-5 years 20 mg/day Over 5 years 30-40 mg/day
- Paramedics to give nebulised Salbutamol, driven by O₂, according to protocol
- Stabilise child for transfer and stay with child whilst waiting
- Send relevant documentation

**IMPROVEMENT?**
- Lower threshold for referral to hospital if concerns about social circumstances/ability to cope at home or if previous severe/ threatening asthma attack

**FOLLOWING ANY ACUTE EPISODE, THINK:**
- Asthma / wheeze education and inhaler technique
- Written Asthma/Wheeze action plan
- Early review by GP / Practice Nurse – consider compliance

**ABMRS ACTION**
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**Action if life threatening**
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**To calculate Predicted Peak Flow - measure the child’s height and then go to www.peakflow.com**
<table>
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<tr>
<th>Glossary of Terms</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABC</td>
<td>Airways, Breathing, Circulation</td>
</tr>
<tr>
<td>APLS</td>
<td>Advanced Paediatric Life Support</td>
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<tr>
<td>AVPU</td>
<td>Alert Voice Pain Unresponsive</td>
</tr>
<tr>
<td>B/P</td>
<td>Blood Pressure</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuous Professional Development</td>
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<tr>
<td>CRT</td>
<td>Capillary Refill Time</td>
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<tr>
<td>ED</td>
<td>Hospital Emergency Department</td>
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<tr>
<td>GCS</td>
<td>Glasgow Coma Scale</td>
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<tr>
<td>HR</td>
<td>Heart Rate</td>
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<tr>
<td>MOI</td>
<td>Mechanism of Injury</td>
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<tr>
<td>PEWS</td>
<td>Paediatric Early Warning Score</td>
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<tr>
<td>RR</td>
<td>Respiratory Rate</td>
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<tr>
<td>WBC</td>
<td>White Blood Cell Count</td>
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