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

Patient >1 yr with wheeze presents:

*avoid oral steroids in episodic wheezers (wheezers only with colds). Oral steroids play a role in treating acute exacerbations in multiple trigger wheezers (asthma, eczema, allergies)

Consider other diagnoses:

- · Cough without a wheeze
- foreign body
- croup

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· bronchiolitis

ASSESSMENT	Low Risk MILD - GREEN	Intermediate Risk MODERATE - AMBER	High Risk SEVERE - RED	IMMEDIATELY LIFE- THREATENING - PURPLE
Behaviour	Alert; No increased work of breathing	Alert; Some increased work of breathing	May be agitated; Unable to talk freely or feed	Can only speak in single words; Confusion or drowsy; Coma
O2 Sat in air	≥ 95%; Pink	≥ 92%; Pink	< 92%; Pale	< 92%; Cyanosis; Grey
Heart Rate	Normal	Normal	Under 5yr >140/min Over 5 yr >125/min	Under 5yr >140/min Over 5 yr >125/min Maybe bradycardic
Respiratory	Normal Respiratory rate Normal Respiratory effort	Under 5 yr <40 breaths/min Over 5 yr <30 breaths/min Mild Respiratory distress: mild	Under 5 yr >40 breaths/min Over 5 yr >30 breaths/min Moderate Respiratory distress:	Severe Respiratory distress Poor respiratory effort: Silent chest Marked use of accessory muscles
Peak Flow ^o (only for children > 6yrs with established technique)		recession and some accessory muscle use	moderate recession & clear accessory muscle use	and recession PEFR <33% I/min best/predicted or
	PEFR >75% I/min best/predicted	PEFR 50-75% I/min best/predicted	PEFR <50% I/min best/predicted	too breathless to do PEFR

Normal Values

Respiratory Rate at rest [b/min]

1-2vrs 25-35 >2-5 yrs 25-30 >5-12 yrs 20-25 >12 yrs 15-20

Heart Rate [bpm]

1-2yrs 100-150 >2-5 yrs 95-140 >5-12 yrs 80-125 >12 yrs 60-100

Ref: Advanced Paediatric Life Support 5th Edition. Life Advance Support group edited by Martin Samuels; Susan Wieteska Wiley Blackwell/2011 BMJ Books

ACTION IF LIFE

THREATENING

Repeat Salbutamol 2.5 - 5 mg via Oxy-

gen-driven nebuliser whilst arranging

immediate hospital admission - 999

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
- 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

AMBER ACTION

Salbutamol (check inhaler technique)

- x 10 'puffs' via inhaler and spacer
- Reassess after 20 30 minutes
- · Oral Prednisolone within 1 hour for 3 days if known asthmatic

<2 years - avoid steroids if episodic wheeze. 10mg/day if multiple trigger wheezer.*

IMPROVEMENT?

Lower threshold for referral to ospital if concerns about socia

circumstances/ability to cope at

threatening asthma attack

2-5 years 20 mg/day Over 5 years 30-40 mg/day

URGENT ACTION

Refer immediately to emergency care by 999

Alert Paediatrician

- Oxygen to maintain O, Sat > 94%, using paediatric nasal cannula if available
- Salbutamol 100 mcg x 10 'puffs' via inhaler & spacer OR 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
- · 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

YES

Follow Amber Action if:

- · Relief not lasting 4 hours
- Symptoms worsen or treatment is becoming less effective

Hospital Emergency Department / Paediatric Unit

° To calculate Predicted Peak Flow-measure the child's height and then go to www.peakflow.com



FOLLOWING ANY ACUTE EPISODE, THINK:

- . Asthma / wheeze education and inhaler technique
- 2. Written Asthma/Wheeze action plan 3. Early review by GP / Practice Nurse -

consider compliance

NO

This guidance has been reviewed and adapted by care professionals across SYB with consen from the Hampshire development groups

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Management – Primary Care and Community Setting

Glossary of Terms			
ABC	Airways, Breathing, Circulation		
APLS	Advanced Paediatric Life Support		
AVPU	Alert Voice Pain Unresponsive		
B/P	Blood Pressure		
CPD	Continuous Professional Development		
CRT	Capillary Refill Time		
ED	Hospital Emergency Department		
GCS	Glasgow Coma Scale		
HR	Heart Rate		
MOI	Mechanism of Injury		
PEWS	Paediatric Early Warning Score		
RR	Respiratory Rate		
WBC	White Blood Cell Count		