Acute Asthma / Wheeze Pathway (not for Bronchiolitis)

Clinical Assessment / Management Tool for Children & Young People Older than 1 year old with Acute Wheeze





Normal Values

Respiratory Rate

at rest [b/min]

>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

Repeat Salbutamol 2.5 - 5 mg via Oxy-

gen-driven nebuliser whilst arranging

immediate hospital admission - 999

ACTION IF LIFE

THREATENING

25-35

1-2vrs

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

Oct 2011 • Final Version: May 2016 • Review Date: May 2018

· bronchiolitis



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

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	Under 5 yr <40 breaths/min Over 5 yr <30 breaths/min	Under 5 yr >40 breaths/min Over 5 yr >30 breaths/min	Severe Respiratory distress Poor respiratory effort: Silent chest
Peak Flow ^o (only for children > 6yrs with established technique)	Normal Respiratory effort	Mild Respiratory distress: mild recession and some accessory muscle use	Moderate Respiratory distress: moderate recession & clear accessory muscle use	Marked use of accessory muscles and recession
	PEFR >75% I/min best/predicted	PEFR 50-75% I/min best/predicted	PEFR <50% I/min best/predicted	PEFR <33% I/min best/predicted or too breathless to do PEFR

AMBER ACTION 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

ospital if concerns about socia circumstances/ability to cope at

IMPROVEMENT?

Lower threshold for referral to

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

threatening asthma attack

YES

wheezer.*

2-5 years 20 mg/day

Over 5 years 30-40 mg/day

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

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

NO

his guidance was written in collaboration with the SE Coast SCN and involved extensive consultation with healthcare professionals in Wessex

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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	