British Thoracic Society

Asthma Emergency Assessment Pathway

This Asthma assessment pathway describes 4 high impact actions to deliver the best clinical outcome for patients presenting to hospital with an acute exacerbation of Asthma, based on the severity of their exacerbation. The pathway is designed to be used for patients on arrival to hospital (not just ED), and through their care to Respiratory Review.

Patient cohort : adults (16+) presenting to emergency care with an acute exacerbation of Asthma.

Time: Actions 1-4 should be completed with 120 minutes of arrival.

Patient sticker/Provider Signature/
Date of Completion

COMPLETE FOR PATIENTS ON TRIAGE WITHIN 120 MINUTES

ACTION 1: SEVERITY ASSESSMENT (Triage Review)

Start Clock

All patients: RR, HR, SpO2. Perform ABG if SpO_2 <92%, or if features of severe/life-threatening asthma are present' **Check Peak Flow (PEF)**

TRANSFER TO RESUS OR EQUIVALENT

Near Fatal ☐
Raised PaCO2 and/or Requiring mechanical ventilation with raised inflation pressures

Life Threatening ☐
SpO2 <92% **and** one of the following: Altered consciousness, Exhaustion, Arrhythmia, Hypotension, Cyanosis, Silent Chest, Poor respiratory effort, PEF < 33% best/predicted, PaO2 < 8 kPA, "Normal" PaCO2 of 4.6-6.0 kPa.

Severe Acute ☐
Inability to complete sentences in one breath, RR≥ 25/min, HR ≥ 110/min, PEF 33-50% best/predicted.

Moderate ☐
PEF >50-75% best/predicted

ACTION 2: INITIAL MANAGEMENT

Near Fatal & Life Threatening
Aim oxygen saturations 94-98%.
- ☐ Give prednisolone 40 mg, or IV hydrocortisone 100 mg (if unable to take orally).
- ☐ Give salbutamol 2.5mg and ipratropium 500 microgram / 0.5 mg

Severe Acute
- ☐ Give prednisolone 40mg.
- ☐ Give salbutamol Nebuliser 2.5mg.

Moderate
- ☐ Give prednisolone 40 mg.
- ☐ Up to 10 puffs of salbutamol inhaler via spacer.

ACTION 3: REASSESSMENT (REVIEW SEVERITY) If Not Fully Recovered, Consider Further

15-20 minutes from Action 1

Near Fatal & Life Threatening ☐
- Repeat salbutamol and ipratropium
- Give continuous salbutamol nebuliser 5-10 mg/hr
- *Consider IV magnesium sulphate 1.2-2g over 20 minutes*
- Chest x-ray
- Repeat ABG
- Senior Review Discuss/Refer to critical care team

Signs of severe asthma/PEF <50% ☐
Treat as per life threatening asthma.

Clinically stable and PEF > 75%? ☐
Yes: Potential Discharge
No: Repeat salbutamol nebuliser and further assessment.
- Consider discharge if stable and PEF >75% after observation
- If not fully recovered on reassessment, consider further bronchodilators and observation one hour or more after last bronchodilator

ACTION 4: DECISION TO DISCHARGE OR ADMIT

Aim for 120 minutes

☐
Near Fatal: Admit to Critical Care: Hospital medical team will need to ensure respiratory review within 24 hours

☐
Life Threatening: Admit to Hospital: Hospital medical team will need to ensure respiratory review within 24 hours

Potential Discharge ☐
If patient is ready for discharge, they will need the following:
- Prednisolone 40mg until recovery (min 5 days)
- **ICS/LABA (MART) inhaler**, with technique checked
- Send discharge letter to GP
- Local asthma services reviewed/informed per local pathways

Consider also:
- Review BTS asthma discharge bundle for more information

NSSI