

Asthma Guidelines for adults (age ≥ 17 years)

Supporting the diagnosis and management
of asthma within General Practice

Approved by BLMK Area Prescribing Committee (APC):
September 2025

Next review due: September 2027

*These guidelines are aimed for use by suitably trained healthcare
professionals working within Bedfordshire, Luton and Milton Keynes*

Contents

Introduction	3
Diagnosis of asthma	4
Asthma Management.....	5
Self-care	5
Access to healthcare	5
Co-morbidities	5
Environment	5
Asthma Management – Inhaler Treatment: SABA free regimen (NICE / BTS / SIGN).....	6
Asthma Management – Inhaler Treatment – Traditional SABA regimen	7
Asthma Management – Inhaler treatment.....	8
Prescribing Tips	8
Inhaler choice:	8
Sustainability	8
Inhaler Choice Formulary Guide	9
ICS dosages for people age ≥12 years.....	10
Template for asthma review	11
Management of acute asthma in adults in general practice ^{6,7}	12
When to refer	13
Uncontrolled / severe asthma AAC consensus pathway	13
Resources	14
Resources for people with asthma and carers	14
Resources for Adolescents.....	14
Resources for healthcare professionals.....	14
Miscellaneous information	14
References	15

Introduction

6.4% of people aged 6 years and over in Bedfordshire, Luton & Milton Keynes (BLMK) have asthma.¹ It is commonly misdiagnosed, as it may present with a range of symptoms and physical examination may be normal.² Objective tests may also be normal when the person is not experiencing a flare of symptoms.

The impact of asthma is not evenly spread, with people living in more deprived areas tending to have higher rates of asthma-related emergency hospital admissions.¹

Asthma is dangerous. In BLMK there are over 20 deaths due to asthma every year, resulting in a rate of 3.07 deaths per 100,000 people. This compares unfavourably to the England average of 2.36 per 100,000, (data based on 2017 to 2019.)

Asthma deaths³:

- are largely attributable to avoidable factors
- often occur before hospital admission
- occur in patients with 'mild, moderate or severe' asthma

Management of asthma should be collaborative, support self-management and include the provision of a personalised action plan.

What's new?

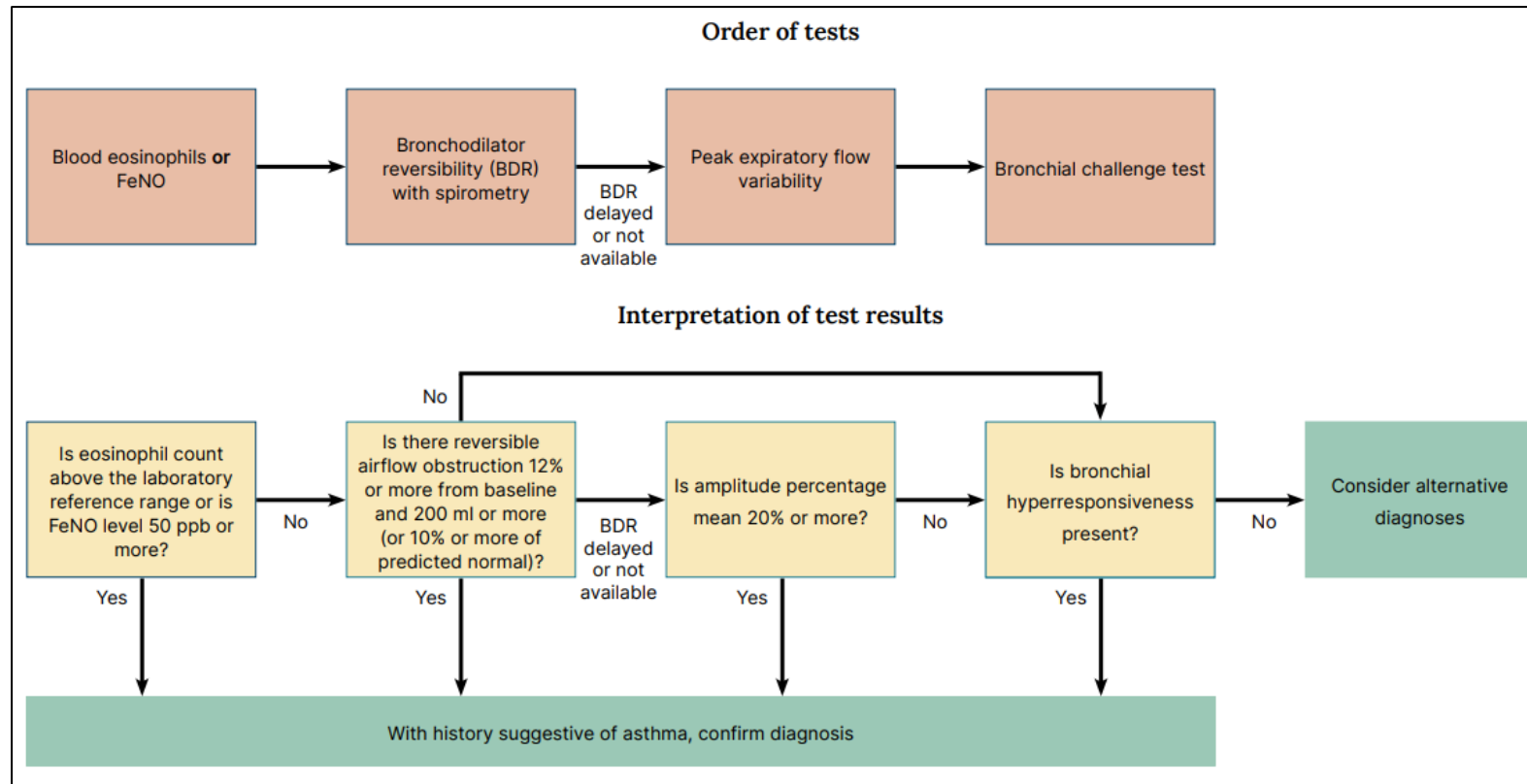
This update includes changes following the publication of the NICE/BTS/SIGN guideline⁴ in 2024. Notably to the number and order of objective tests needed to support diagnosis in primary care. Also some updates to the inhaler management, which was previously based on the 2023 GINA Report Global strategy for asthma.⁵

Greener inhalers

Look out for  , denoting more environmentally friendly inhaler choices.

Diagnosis of asthma

Diagnosis should be made primarily on clinical history and supported by an objective test. In adults (≥ 17 years) NICE recommend the following sequencing and interpretation of tests:



Objective tests have significant false positive and false negative rates. Tests are more likely to be positive when the person is symptomatic. Ideally objective tests for asthma should be performed before treatment with ICS is started (as this may lead to normal test results), but do not delay treatment in symptomatic people if objective tests are not available or there is a long wait.

Resources for peak expiratory flow monitoring can be found at [Asthma and Lung UK](#)
[Watch this short video for help calculating PEFR variability](#)

Asthma Management

Self-care		Access to healthcare	
Education	Understanding asthma and how the treatment works is an important aspect of care. See here for resources for people with asthma.	People with asthma who are reviewed regularly have a lower risk of exacerbation. They should be reviewed at least annually, and after dose changes and exacerbations.	GP practice review
Personalised asthma action plans (PAAP)	PAAPs should be collaboratively agreed, regularly updated and include advice on daily management and how to seek help if needed.	Continuity within a practice team helps build relationships and trust and improves asthma care.	Continuity
Smoking, passive smoking and vaping	Ask about smoking, including vaping, and offer smoking cessation advice and support.	Offer flu vaccination annually and offer other vaccinations eg. pneumococcal and COVID-19 or RSV when applicable.	Vaccination
Adherence and technique	Non-adherence may underlie poor asthma control. Ask about adherence and check inhaler prescriptions. Support good technique with education and resources.	Asthma plans should include details of when and where to access urgent care. Review with GP or community asthma team within 48hrs of A&E visit / hospital discharge.	Emergency care
Exercise	Exercise can improve overall asthma control, as well as providing multiple other health benefits. Aim for asthma to be managed to support regular exercise.	Specialist referral is indicated if: • >2 exacerbations requiring oral steroids in past 12m • Asthma is not controlled despite maximal treatment • Asthma is worse at work • Asthma and COPD overlap	Specialist care
Co-morbidities		Environment	
Obesity	Weight management support for overweight / obese people can help with asthma control	People with asthma should try to avoid busy roads and vigorous outdoor exercise on high pollution days	Outdoor pollution
Atopic conditions	Manage hay fever and allergic rhinitis. Use low steroid nasal spray and educate regarding technique. Optimise eczema care.	Damp, mould issues and burning wood, candles and incense may adversely affect asthma. 'Chemical free' or 'allergy friendly' household products limit asthma triggers.	Indoor pollution
Disordered breathing and sleep apnoea	Managing co-morbidities is an important part of asthma care	Triggers include pollen, smoke, emotion, weather changes and pets. Recognising and mitigating triggers reduces risk of attacks and improves control.	Triggers
Acid reflux and heartburn		Using inhalers as prescribed with the correct technique reduces waste, improves control, and reduces need for unplanned care.	Inhalers
Depression and anxiety	Adverse asthma outcomes are associated with depression, anxiety and panic disorder. Ask about psychological wellbeing and offer suitable support.	Non-propellant inhalers, eg. DPIs have a lower carbon footprint and can be used by most people. They require a greater inspiratory effort.	
COPD	Patients with an existing diagnosis of Asthma-COPD overlap should have specialist management.	If symptoms are worse at work, involve specialist care.	Occupational asthma

Asthma Management – Inhaler Treatment: SABA free regimen (NICE / BTS / SIGN)

For **new diagnosis of asthma**, a SABA free regimen should be initiated as below. For current patients on a traditional SABA containing regimen consider switch when asthma is uncontrolled – see overleaf.

Step Up and Down treatment according to control. Review & correct inhaler technique and confirm adherence before stepping up.

Start here

AIR therapy (Anti-inflammatory reliever)	
DPI	Symbicort Turbohaler 200/6 or Fobumix Easyhaler 160/4.5 or DuoResp Spiromax 160/4.5 1 dose PRN
MDI	Luforbec 100/6 or Proxor 100/6 1 puff PRN via spacer (off-label)

Start here if highly symptomatic (eg. regular nocturnal waking) or there are severe exacerbations

Low dose MART	
DPI	Symbicort Turbohaler 200/6 or Fobumix Easyhaler 160/4.5 or DuoResp Spiromax 160/4.5 or Fostair NEXThaler 100/6 1 dose BD and 1 dose PRN
MDI	Luforbec 100/6 or Proxor 100/6 1 puff BD and 1 puff PRN via spacer

Moderate dose MART	
DPI	Fobumix Easyhaler 160/4.5 or Symbicort Turbohaler 200/6 or DuoResp Spiromax 160/4.5 or Fostair NEXThaler 100/6 (off-label) 2 doses BD and 1 dose PRN
MDI	Luforbec 100/6 or Proxor 100/6 2 puffs BD and 1 puff PRN via spacer (off-label)

If uncontrolled on moderate dose MART, check FeNO, if available, and blood eosinophils

If neither is raised consider a trial of Montelukast* 10mg ON or Spiriva 2.5mcg Respimat 2 doses OD for 8-12 weeks. (Spiriva more helpful if element of fixed airways obstruction / COPD.) After:

- If asthma controlled, continue treatment
- If improved but still inadequate, trial of adding the other medicine (LTRA or LAMA)
- If not improved, stop and start a trial of the alternative (LTRA or LAMA)

If result raised or trial failed

REFER TO SECONDARY CARE

HIGH dose ICS/LABA combination	
DPI	Fobumix Easyhaler 320 / 9 or Fostair NEXThaler 200/6 or DuoResp Spiromax 320/9 or Symbicort Turbohaler 400/12 2 doses BD + SABA PRN
MDI	Luforbec or Proxor 200/6 2 puffs BD via spacer + Salamol 100mcg 1-2 puffs PRN via spacer

Fostair / Luforbec / Proxor is licensed for a maximum 8 doses in 24 hours
 Fobumix / Symbicort / DuoResp > 8 doses /24hours is not normally needed; however up to 12 doses could be used for a limited period. **If patients use >8 doses daily, it is recommended that they seek medical advice. No more than 6 inhalations should be taken on any single occasion.**

[Choose inhaler](#) – support patient choice. Consider [inhaler device decision aid](#) and [sustainability](#).

*Montelukast: Risk of neuropsychiatric reactions.

Asthma Management – Inhaler Treatment – Traditional SABA regimen

For patients established on SABA containing regimens (diagnosed pre NICE/BTS/SIGN 2024 update), review routinely. **If uncontrolled, check adherence and inhaler technique, then consider switch to an equivalent SABA free regimen** (see also NICE comparison of [equivalent ICS doses](#)). For patients uncontrolled on other medication combinations see [PCRS guidance](#) for equivalent switch.

All patients with asthma should be treated with an ICS. Using Salbutamol monotherapy is now outdated and no longer acceptable	
Regular low dose ICS + SABA	
DPI 	Budesonide Easyhaler 100mcg or Budesonide Turbohaler 100mcg 2 doses BD Plus Salbutamol Easyhaler 100mcg 1-2 puffs PRN
MDI	Clenil modulite 100mcg 2 puffs BD via spacer Plus Salamol 100mcg 1-2 puffs PRN via spacer
If uncontrolled, consider switch to low dose MART	

Regular low dose ICS/LABA + SABA	
DPI 	Fobumix Easyhaler 160/4.5 or Fostair Nexthaler 100/6 or Symbicort Turbohaler 200/6 1 dose BD Plus Salbutamol Easyhaler 100mcg 1-2 puffs PRN
MDI	Luforbec 100/6 or Proxor 100/6 1 puff BD via spacer Plus Salamol 100mcg 1-2 puffs PRN via spacer
If uncontrolled, consider switch to low dose MART	

Regular medium dose ICS/LABA + SABA	
DPI 	Fobumix Easyhaler 160/4.5 or Fostair NEXThaler 100/6 or Symbicort Turbohaler 200/6 2 doses BD Plus Salbutamol Easyhaler 100mcg 1-2 puffs PRN
MDI	Luforbec 100/6 or Proxor 100/6 2 puffs BD via spacer Plus Salamol 100mcg 1-2 puffs PRN via spacer
If uncontrolled, consider switch to moderate dose MART	

Secondary Care led treatment	
HIGH dose ICS/LABA combination	
DPI 	Fobumix Easyhaler 320 / 9 or Fostair NEXThaler 200/6 or Symbicort Turbohaler 400/12 2 doses BD + SABA PRN
MDI	Luforbec 200/6 or Proxor 200/6 2 puffs BD via spacer + Salamol 100mcg 1-2 puffs PRN via spacer
If uncontrolled and not previously referred, refer to secondary care	

Uncontrolled asthma: Any exacerbation requiring oral corticosteroids or frequent regular symptoms (such as using reliever inhaler 3 or more days a week or night-time waking 1 or more times a week.)

Refer to formulary for other established inhaler choices which have been available.
Once daily inhalers, eg. Relvar Ellipta + SABA prn can help adherence in some patients.

Asthma Management – Inhaler treatment

Inhaler choice: prescribe by brand

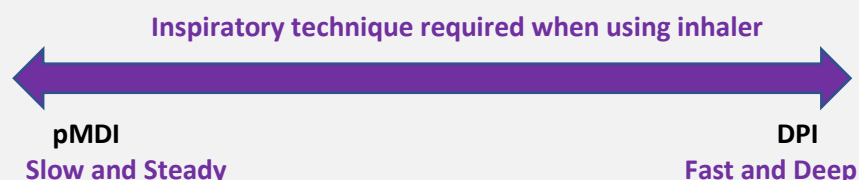
To help choose the right inhaler for the patient:

- Use BLMK [inhaler device decision aid](#)
- InCheck® or placebo devices can help inform choice
- Consider environmental considerations – most people can use more sustainable DPIs with training.

Use [Rightbreathe](#) and [Asthma and Lung UK](#) resources to support inhaler and spacer choice, technique and care.

Changing inhaler devices: only change after discussion and agreement.

Offer face to face contact for support with new inhalers.



Sustainability THINK GREEN

The NHS has set the target of reaching net zero by 2040 for the greenhouse gas emissions which it can control. Inhalers account for approximately 13% of the carbon footprint related to delivery of care. To reduce the carbon footprint of inhaler prescribing:

- Optimise asthma care following national guidance.
- Offer dry powder inhalers (DPI) or soft mist inhalers as first choice where clinically appropriate. Use supportive tools where appropriate. [BLMK Greener inhalers – Medicines optimisation tool](#).
- Check and optimise inhaler technique.
- Encourage people to return inhalers to their pharmacy for environmentally friendly disposal.

Advise people not to reduce their inhaler usage due to any environmental concerns. Address any such concerns if present.

Prescribing Tips

- Review patients regularly, frequency depending on control (but at least annually).
- High doses of ICS may cause long term harm. If the asthma is well controlled and stable, then consider reducing the dose. In all patients aim for the lowest effective ICS (+/- LABA) dose.
- When using ICS, consider total daily steroid load (including intranasal and oral). Issue an emergency steroid card to patients as per [guidance](#).
- A spacer device should be used when issuing an MDI inhaler. Aerochamber Plus Flow-Vu Antistatic is the preferred spacer choice in BLMK. Other choices are available – refer to online formulary.



See [link](#) for instructions on use and cleaning instructions. The device will make a whistle sound if the inhalation is too fast (if there is a good seal)

- Check inhaler technique and adherence at each appointment, and / or before any change in treatment. Consider referring patients to the community pharmacist for a New Medicines Service review.
- Use templates / [asthma management page](#) to discuss other aspects, particularly smoking, vaccination, the management of co-morbidities and supporting self-management.

Inhaler Choice Formulary Guide

This is not an exhaustive list. Please refer to the online local formulary.

	Flexible regimen		Traditional	
Dry powder inhaler 	Fobumix Easyhaler 160/4.5		As left plus: Budesonide Easyhaler 100	
	Symbicort Turbohaler 200/6		Budesonide Turbohaler 100	
	Fostair NEXThaler 100/6		Easyhaler Salbutamol 100	
	DuoResp Spiromax 160/4.5			
Aerosol If DPI not Suitable 	Luforbec 100/6 MDI		As left plus: Clenil 100	
	Proxor 100/6 MDI		Salamol 100 MDI	

ICS dosages for people aged ≥ 12 years

([Full link to NICE guidance for inhaled corticosteroid doses for adults](#))

	Low dose	Moderate dose	High dose
Beclometasone dipropionate			
Standard particle pMDI & DPI eg. Glenil	200-500 micrograms per day in 2 divided doses	600-800 micrograms per day in 2 divided doses	1000-2000 micrograms per day in 2 divided doses
Extra-fine particle pMDI / DPI eg. Fostair, Luforbec, Proxor	100-200 micrograms per day in 2 divided doses	300-400 micrograms per day in 2 divided doses	500-800 micrograms per day in 2 divided doses
Budesonide			
DPI eg. Pulmicort, Budesonide Easyhaler, Fobumix, Symbicort	200-400 micrograms per day in 2 divided doses	600-800 micrograms per day in 2 divided doses	1000-1600 micrograms per day in 2 divided doses
Fluticasone propionate			
pMDI & DPI (excluding Sefflair Spiromax) eg. Seretide, Sereflo, Sirdupla	100-250 micrograms per day in 2 divided doses	300-500 micrograms per day in 2 divided doses	600-1000 micrograms per day in 2 divided doses
Fluticasone furoate			
DPI , eg. Relvar	Not available	100 micrograms per day as a single dose	200 micrograms per day as a single dose

Template for asthma review

A GP practice asthma review should be offered at least once a year (QOF), after dose changes and within 48 hours of a hospital attendance or admission.

<i>Aim of the review</i>	Improve quality of life. Achieve control, meaning no daytime symptoms or limitation of activity. No disturbed sleep. Minimal side effects from medication.
	Assess control and severity
<i>Control Test</i>	Assess asthma control e.g., Asthma Control Test , RCP 3 questions.
<i>Inhaler ratio</i>	Review how many inhalers have been ordered and how many used. Use of more than 3 SABA (or 3 additional PRN ICS/LABA for those on AIR / MART) in 12 months – suggests poor control.
<i>PEFR</i>	Consider only if eg. it is part of the PAAP. Record weight (and height as appropriate) to support calculating the peak flow rate.
<i>FeNO</i>	Consider for monitoring: at annual review and before and after changing therapy.
<i>Exacerbations</i>	Check the number of exacerbations in the last 12 months and since last review. Identify and refer those at high risk into specialist care .
	Review
<i>Diagnosis</i>	Ensure the evidence for asthma or suspected asthma diagnosis is recorded. If any uncertainty revisit objective tests as appropriate.
<i>Understanding</i>	Check person's understanding of what asthma is and how it is treated.
<i>Inhaler technique</i>	Suboptimal technique is linked to poorer asthma outcomes. Check inhaler and spacer technique at every review and reinforce correct technique. Offer inhaler specific training videos . If a spacer is being used re-enforce the benefits for drug delivery, importance of technique, spacer care and when to replace.
<i>Adherence</i>	Review medication, as stated above for inhaler ratio.
<i>Smoking status</i>	Document and offer smoking cessation if required. Contact details: Bedfordshire and Milton Keynes: Professionals - Choose You Luton: Total Wellbeing Luton
<i>Triggers</i>	Identify triggers and consider ways to mitigate exposure. eg. pets, occupation, beta-blockers, NSAIDs. If asthma is worse at work refer to specialist care for suspected occupational asthma.
<i>Co-morbidities</i>	Identify and manage co-morbidities . Including optimise hay fever management, exploring psychological wellbeing and offer support.
<i>Medication</i>	If asthma is poorly controlled despite good adherence and technique, consider a step up in management. Refer to specialist care if poor control despite moderate-dose therapies or ≥ 2 exacerbations requiring oral corticosteroids in the last 12 months. If stable for ≥ 3 months and low risk of exacerbations consider a step down in management. Offer a lower carbon footprint inhaler where appropriate. Check and address any SABA or PRN ICS/LABA overreliance.
<i>Vaccination</i>	Re-enforce need for annual flu vaccination. Check need for any other vaccination, eg. COVID-19, pneumococcal.
	Collaborate
<i>PAAP</i>	Co-create a personalised asthma action plan with the person with asthma to support self-management and update this annually. Templates (multiple languages) from Asthma & Lung UK asthma action plan / AIR / MART asthma action plan (also on Arden's template.) Review action plan and check understanding on how to manage an exacerbation and when to seek advice

Management of acute asthma in adults in general practice^{6,7}

Assess and record	Moderate acute	Severe acute	Life-threatening
Speak in sentences	Yes	No	No
SpO₂	≥92%	≥92%	<92%
PEFR (best or predicted)	50-75%	33-55%	<33%
HR (bpm)	<110	≥110	• Silent chest, cyanosis or poor respiratory effort. • Arrhythmia or hypotension • Exhaustion, altered consciousness
RR / min	<25	≥25	
Where to manage	Manage at home or in primary care. Admit to hospital if life-threatening features, previous near fatal asthma, getting worse. Lower threshold if afternoon or evening attack, recent nocturnal symptoms or hospital admission, previous severe attacks, patient unable to assess own condition, concern re: social circumstances.	Arrange admission if no response to initial treatment. Stay with person until ambulance arrives.	Arrange immediate admission. Stay with person until ambulance arrives
Treatment			
β ₂ bronchodilator: SABA pathway	*Give Salbutamol 100mcg by pMDI and large volume spacer: one puff at a time, inhaled separately using tidal breathing, one puff every 60 seconds, up to 10 puffs. If no improvement via nebuliser: Salbutamol 5mg ideally oxygen driven.	Give nebulised Salbutamol 5mg preferably via oxygen-driven nebuliser. If symptoms do not respond give Ipratropium 0.5mg Via spacer* if nebuliser not available.	Give nebulised Salbutamol 5mg and nebulised Ipratropium 0.5mg preferably via oxygen-driven nebuliser. Via spacer* if nebuliser not available.
β ₂ bronchodilator: SABA free pathway ⁸	One puff of ICS / formoterol inhaler (e.g. Symbicort) every minute, up to 6 puffs. If no relief dial 999. Repeat step.		
Prednisolone	40-50mg daily for 5-7 days.	40-50mg or IV hydrocortisone 100mg	40-50mg or IV hydrocortisone 100mg immediately
Oxygen <i>If available</i>	To maintain SpO ₂ 94-98%	To maintain SpO ₂ 94-98%	To maintain SpO ₂ 94-98%

Many asthma deaths are preventable. Treatment delays can be fatal. People with life-threatening acute asthma may not be distressed. Include management of exacerbations and when to seek advice in all action plans. [What to do in an asthma attack – resource for people with asthma](#)

Arrange follow up within 48 hours in general practice or with community asthma team for anyone who has been seen in the emergency setting for an acute asthma exacerbation. Review should include:

- Check asthma is responding to treatment.
- Continue prednisolone 5-7 days.
- Explore avoidable triggers
- Ensure correct treatment is prescribed – including ICS, and check adherence and correct technique
- Update PAAP

When to refer

When to refer for respiratory specialist opinion⁹

Refer if any of:

- Any features suggestive of poor control and high risk of adverse outcomes:
 - Life threatening asthma exacerbation
 - Needing 2 or more ED visits for asthma in past year or 1 hospital admission
 - Frequent exacerbations (requiring 2 or more oral corticosteroid courses per year despite optimal inhaled therapy).
 - Patients requiring high dose ICS for control or remaining uncontrolled despite high dose ICS
- Diagnostic uncertainty based on clinical judgment + / - primary care investigations
- Unexpected / inconsistent clinical findings (e.g. stridor, monophonic wheeze, clubbing, cyanosis).
- Suspected occupational asthma
- Prominent systemic features (myalgia, fever, weight loss)
- Concerns about adherence with treatment despite education
- Difficult asthma (e.g. suspected inducible laryngeal obstruction, refractory reflux, etc)
- For CYP: complex psychosocial / safeguarding issues.

Uncontrolled / severe asthma AAC consensus pathway

Produced by the AHSNs in 2022, this pathway provides a summary of actions to support those with severe / uncontrolled asthma across the entire patient journey. It includes a blueprint of actions for primary care and recommends a maximum time of 6 months for medicines optimisation before onward referral. It is intended to lead to real improved outcomes for those with severe asthma.

[Consensus pathway for managing uncontrolled asthma in adults - Health Innovation Oxford & Thames Valley](#)

Resources

Resources for people with asthma and carers

Asthma and Lung UK

- [Asthma education](#)
- [Inhaler choices](#) (4 simple inhaler changes) – in multiple languages.
- [How to use your inhalers \(videos\)](#)
- [Peak flow diary](#)
- [Groups and support](#)
- [Asthma attack recovery plan](#)

[Rightbreathe](#) – how to look after inhalers and spacers, including videos

Resources for Adolescents

- [Moving on Asthma](#)

Beat Asthma

- [Asthma education](#)
- [Resources for adolescents](#)

Resources for healthcare professionals

Education

- Asthma and Lung UK – [health professionals information](#)
- [e-Learning for healthcare: the asthma programme](#). A range of free e-learning modules on different aspects of asthma care
- NHSE / elfh - [FeNO in Asthma - elearning for healthcare](#)

Environmental

- [BLMK Greener inhalers – medicines optimisation tool for adults](#)
- [Greener Practice Asthma care](#) – clinician led network. Asthma toolkit

Miscellaneous information

Some pMDIs contain very small amounts of ethanol. The content released per puff is less than the ethanol content in a ripe banana. Some people may feel that an inhaler containing ethanol is unsuitable for ethical, cultural, or religious reasons. Healthcare professions should be sensitive to people's personal beliefs and an alternative be offered where appropriate and available.

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