

# Humber and North Yorkshire 2024 Asthma Guidelines

The enclosed asthma guidelines are intended for use by clinicians working in Humber and North Yorkshire. These guidelines have been developed to inform treatment decisions for:

- People with suspected asthma that are awaiting objective diagnostic testing
- People with newly diagnosed asthma
- People with uncontrolled asthma considered by their clinician to require a change in treatment
- People considered by their clinician to require a change in asthma treatment for another reason through shared decision making

These guidelines **are not** intended to and **should not** be used to support or justify a switch in asthma therapy that is not clinically indicated. All change in treatment should be made through shared decision making between a patient and their clinician.



**Humber and North Yorkshire**  
Health and Care Partnership



The green leaf symbol identifies the lower carbon footprint regimen and devices.

Inhaler choice should be based on an individual patient's needs, choice and ability to use the device.

Controlled asthma has a significantly lower environmental impact than uncontrolled asthma.

## Guideline Key

- AIR: anti inflammatory reliever
- ICS: inhaled corticosteroid
- LABA: long-acting beta agonist
- LAMA: long-acting muscarinic antagonist
- LTRA: leukotriene receptor antagonist
- MART: maintenance and reliever therapy
- SABA: short-acting beta-agonist

## Step-up and step-down treatment to achieve control with the lowest possible maintenance treatment

Before adjusting asthma medications, consider and address the reasons for uncontrolled asthma. These may include:

- Alternative diagnoses or comorbidities.
- Poor adherence to treatment.
- Suboptimal inhaler technique.
- Smoking or exposure to e-cigarettes (active or passive).
- Psychosocial factors.
- Seasonal influences.
- Environmental triggers such as air pollution (indoor and outdoor).

Arrange diagnostic testing in accordance with Guidelines.

### Trial of Treatment

**Paediatric low dose ICS + SABA reliever as needed** for relief of symptoms  
Review response to treatment at 8 weeks  
**If good response and/or asthma diagnosis confirmed Continue**

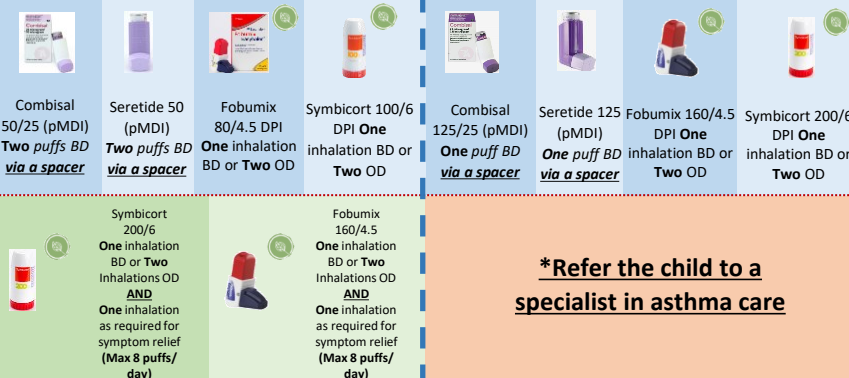
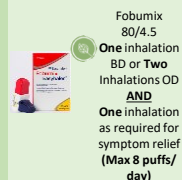
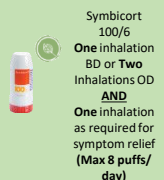


### Licensed treatment options (traditional track)

- 6months - 5years  
**Montelukast 4mg OD at night**
- 6 - 11years  
**Montelukast 5mg OD at night**

**Discuss Potential side effects prior to prescribing**

**Consider MART**  
Assess ability of child and carers to manage MART regimen & DPI



Consider increasing to Paediatric moderate-dose ICS/LABA + SABA  
(Continue LTRA if effective)

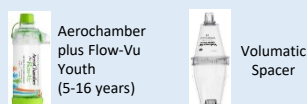
**\*Refer the child to a specialist in asthma care**

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- If asthma is not controlled on paediatric moderate-dose MART or Paediatric moderate dose ICS/LABA maintenance treatment
- 2 or more courses of oral steroids in the previous 12 months
- 2 or more attendances to ED in the previous 12 months
- Following inpatient/acute admission to hospital
- Diagnostic uncertainty
- Referral to TERTIARY Care if patient has required PICU admission for asthma.

### Spacers



### SABA Relievers



**Short-acting beta agonist (SABA) relievers are recommended in this age group, but should not be prescribed without concomitant inhaled corticosteroid in the management of chronic asthma**

SABA-only treatment is associated with risk of asthma attacks and asthma deaths.  
SABA over-use in asthma ( $\geq 3$  canisters per year) is associated with increased risk of asthma attacks and asthma deaths.  
Unless using MART, asthma patients should be prescribed inhaled corticosteroids alongside a SABA- reliever.

**Before adjusting asthma medications, consider and address the reasons for uncontrolled asthma.**

These may include:

- Alternative diagnoses or comorbidities.
- Poor adherence to treatment.
- Suboptimal inhaler technique.
- Smoking or exposure to e-cigarettes (active or passive).
- Psychosocial factors.
- Seasonal influences.
- Environmental triggers such as air pollution (indoor and outdoor), occupational exposures.

## Suspected Asthma

Arrange diagnostic testing in accordance with Guidelines.

**As-needed ICS/Formoterol**  
for relief of symptoms  
(review after diagnostic testing)

**Licensed & recommended treatment options**

- **Age 12-17 years**

Only certain ICS-formoterol inhalers are licensed for use as 'as-needed' AIR, without additional maintenance doses. Use of other off-label ICS-formoterol inhalers (see MART sections) can be considered when licensed options are unsuitable.

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- **Age ≥ 18 years**

## Confirmed Asthma in People Aged ≥ 12 Years Old

**Step-up and step-down treatment to achieve control with the lowest possible maintenance treatment**

Start here if:

- Newly diagnosed asthma with symptoms less than daily and no night-time symptoms. **OR**
- Asthma and prescribed SABA-reliever only

**As-needed Anti-inflammatory Reliever**

**As-needed ICS/Formoterol**  
for relief of symptoms

Start here if:

- Newly diagnosed asthma with daily symptoms, regular night-time symptoms or exacerbations **OR**
- Asthma uncontrolled on low-dose ICS containing regimens.

**Low dose Maintenance and Reliever Therapy (MART)**

**Regular ICS/Formoterol**  
and as required for relief of symptoms.

Start here if:

- Asthma uncontrolled on moderate-dose ICS containing regimens.

**Moderate dose Maintenance and Reliever Therapy (MART)**

**Regular ICS/Formoterol**  
and as required for relief of symptoms

Start here if:

- Asthma uncontrolled on high-dose ICS containing regimens

**Refer for specialist care**  
(see page 3)

If blood eos  $\geq 0.3 \times 10^9/L$   
**or**  
FeNO  $\geq 50ppb$  (adults)  
**or**  $\geq 35ppb$  (aged 12-17)

**If still uncontrolled on moderate dose MART measure Blood Eosinophils and FeNO**

If **neither** are elevated  
(Refer 12-17 year olds for specialist care)

**Add LTRA AND / OR LAMA**

If remains uncontrolled after 8-12 week trial

**Refer for specialist care**  
(see page 3)

### Anti-inflammatory reliever (AIR) - based asthma treatment

As-needed AIR (without maintenance doses) or MART should be used for all asthma patients aged 12 years and older that are: i) newly diagnosed or ii) have known asthma and are uncontrolled on existing asthma treatment.

### Short-acting beta agonists (SABA) are not recommended for the management of chronic asthma

SABA-only treatment is associated with risk of asthma attacks and asthma deaths. SABA over-use in asthma ( $\geq 3$  canisters per year) is associated with increased risk of asthma attacks and asthma deaths. Asthma patients should be prescribed an anti-inflammatory reliever (as above) instead of a SABA-reliever.

# Suspected Severe Asthma (Aged $\geq 12$ years)

Severe asthma effects around 10% of all asthma patients and refers to people that either: i) require high-dose inhaled corticosteroids to achieve control, or ii) remain uncontrolled despite treatment with high-dose inhaled corticosteroids. Difficult asthma is different to severe asthma and refers to people with asthma who's symptoms are uncontrolled due to factors other than asthma (e.g. poor adherence with treatment, breathing pattern disorder, reflux disease, inducible laryngeal obstruction, obesity, and/or breathing pattern disorder). People with both difficult and severe asthma should be referred for specialist care.

## Who to refer for specialist review with suspected severe asthma

Asthma patients taking fixed, high-dose ICS-LABA combination inhalers +/- additional controllers **and** requiring 2 or more OCS courses within the past year

Asthma patients taking moderate-dose MART **and** evidence of T2 inflammation (blood eos  $0.3 \times 10^9/L$  or FeNO  $\geq 50$ ppb in adults or  $\geq 35$ ppb for those aged 12-17 years) **and** requiring 2 or more OCS courses within the past year

Asthma patients taking moderate-dose MART without evidence of T2 inflammation + LTRA + LAMA **and** requiring 2 or more OCS courses within the past year

## When to refer with suspected severe asthma

People with suspected severe asthma should be referred for specialist assessment without delay. However, many patients with suspected severe asthma can be controlled with good quality standard asthma care. Therefore, the following should be considered prior to referral:

- Asthma diagnosis should be reviewed & confirmed.
- Assess and optimise adherence with regular preventer/controller medication.
- Inhaler technique should be assessed and taught.
- Triggers should be identified and, where possible, exposure removed.
- Co-morbidities/difficult asthma features should be identified and treatment optimised.

## What information to include in the referral for suspected severe asthma

Summary of current symptoms and concerns.

Details of past medical history to include co-morbidities, difficult asthma features and their treatment.

Current asthma treatments including dose and evidence of adherence.

Past asthma treatments and reason that they were discontinued (e.g. lack of effectiveness, adverse effects etc.)

Number of exacerbations in the past year (number of acute OCS courses).

Objective tests supporting asthma diagnosis (past and/or present).

T2 biomarkers: highest blood eosinophils within the past year and FeNO.

History of atopy, including results of allergy testing (e.g. IgE, Specific IgE (RAST), skin prick testing).

## What to do while your patient is awaiting specialist review

Consider seeking specialist advice through:

- Advice and Guidance (include the same information as per referral)
- Community MDT discussion (where available).

Consider the below options depending on existing treatment

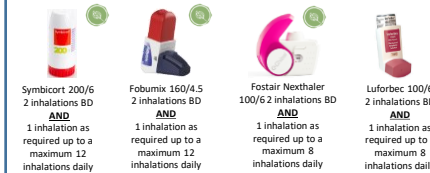
### Moderate Dose MART

Regular ICS/Formoterol and as required for relief of symptoms

### Fixed, high-dose ICS-LABA + SABA reliever

Adults Only

### Moderate Dose MART



### Plus trial LAMA



### High-dose ICS/LABA/LAMA Closed Triple (Adults Only)



**Reliever**  
SABA as required for relief of symptoms

If requiring frequent reliever doses, exceeding maximum daily dose.

Trial additional controller therapies (if not already trialed)

**LTRA AND/OR Methylxanthines\* AND/OR Macrolides\***

(\*only after specialist advice - adults only)

## Biologics in Severe Asthma

Biologics are advanced treatments that target specific inflammatory pathways in severe asthma. Biologics can prove transformational for appropriately selected severe asthma patients both in terms of preventing exacerbations, improving quality of life and reducing steroid burden. Early, appropriate referral of severe asthma patients for specialist assessment is important to ensure that the right patients can access these life changing medicines without unnecessary delay.

## ICS/Formoterol is the preferred reliever in asthma

ICS/Formoterol is the preferred reliever in asthma. ICS/formoterol is effective as required to relieve symptoms without regular preventer therapy in mild asthma (anti-inflammatory reliever therapy: AIR) or alongside regular maintenance doses of the same inhaler (maintenance and reliever therapy: MART) in moderate to severe asthma.

### ICS/Formoterol Reliever

- Formoterol is a fast- and long-acting bronchodilator, providing rapid relief of bronchoconstriction
- Using ICS/formoterol as a reliever ensures that symptomatic asthma patients receive an inhaled corticosteroid, even when adherence to preventer therapies is sub-optimal.
- AIR is as effective at preventing asthma attacks as taking regular ICS with SABA reliever in mild asthma and is safer than using SABA alone
- Do not routinely co-prescribe a SABA alongside an AIR/MART regimen. SABA co-prescription has potential to lead to confusion and continued SABA over-use.
- Provide a dedicated Asthma Action Plan when prescribing AIR and MART

### Instructions during an asthma attack:

In an asthma emergency I should:

- Sit up, stay calm and loosen tight clothing
- Take 1\* puff of my AIR/MART inhaler
- If needed, take 1\* additional puff of my AIR/MART inhaler every 1 to 3 minutes (up to a maximum of 6\* puffs)
- If I don't feel better, or feel worse at any point, call 999 for an ambulance.
- If the ambulance has not arrived after 10 minutes and my symptoms are not improving, I should repeat step 3.
- If am still still not improving, I should contact 999 again immediately.

\*If using Symbicort pMDI 100/3, 2 puffs equate to 1 puff of the Turbohaler. Therefore use 2 puffs as needed, up to a maximum of 12 puffs.

## Principles of Good Asthma Care

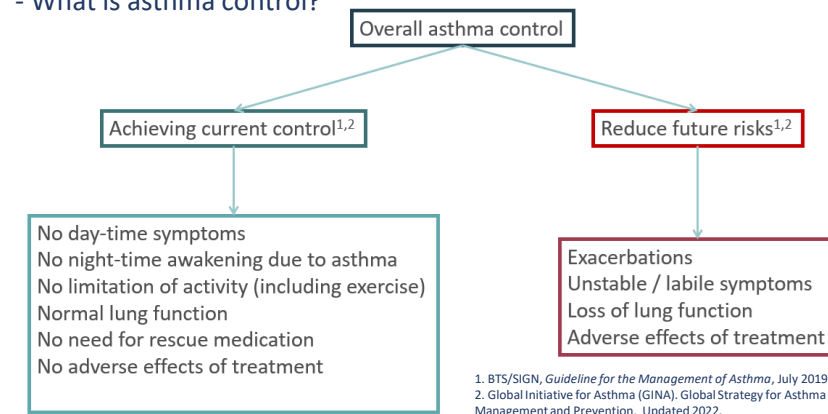
Check that all principles are being followed when considering stepping up asthma treatment

- Inhaler technique should be taught and reviewed during every asthma consultation. Inhaler technique videos are available at: [How to use your inhaler | Asthma UK](#)
- Adherence with preventer therapy is often low and should be assessed and addressed during every asthma consultation.
- If prescribing a pMDI inhaler, an appropriate spacer should be prescribed and instructions about its use and maintenance provided.
- All patients should be given a personalised asthma action plan which should be updated following any treatment change.
- Patients using MART should not be co-prescribed a SABA inhaler (see above).
- Appropriate life-style and self-management advice should be discussed during each asthma consultation (e.g. trigger avoidance smoking cessation, physical activity, weight management etc.)
- Persistent use of ICS/formoterol for relief of symptoms 7 or more times a week should prompt review and step up of maintenance treatment considered.
- Asthma diagnosis should be reconsidered and features of difficult asthma considered whenever step-up of treatment is considered.

HNY Asthma Guidelines FINAL Approved by HNY APC 04.06.25

The aim of asthma management is to achieve asthma control.

- What is asthma control?



Excessive reliever use† indicates the need for asthma review. Always provide a personalised asthma action plan with guidance to patients about when to seek review by an asthma clinician.

### Who/when to refer for a specialist opinion (aged ≥ 12 years)

- Diagnostic uncertainty based on clinical judgement +/- primary care investigations
- Unexpected / inconsistent clinical findings (e.g. stridor, monophonic wheeze, clubbing, cyanosis).
- Suspected occupational asthma
- Prominent systemic features (myalgia, fever, weight loss)
- Patients uncontrolled on moderate dose MART plus LTRA/LAMA when T2 biomarkers low.
- Patients uncontrolled on moderate dose MART with elevated T2 biomarkers (see 12+ guideline for age specific range).
- Frequent exacerbations (requiring 2 or more oral corticosteroid courses per year despite optimal inhaled therapy).
- Difficult asthma (e.g. suspected inducible laryngeal obstruction, refractory reflux etc.)

For advice about when to refer children aged 5-11 years, see specific guideline (page 2)

### Where can I find more asthma resources?

Implementation Resources



A+L UK



SENTINEL Plus Quality Improvement Framework



Greener Practice Toolkit

