

Asthma Therapy: Quick Reference Guide

What is Asthma?²

Asthma is a chronic condition characterized by long-term airway inflammation and respiratory symptoms such as wheezing, shortness of breath, chest tightness, and cough. These symptoms and breathing limitations can vary in intensity

The Importance of Inhaler Use and Adherence^{1,2,4}

Asthma is a disease of increasing prevalence that affects about 25 million people in the US.

2018 Global Initiative for Asthma (GINA) guidelines recommend an inhaled corticosteroids, in addition to a short-acting beta agonist, and education about correct inhaler technique in order to properly manage asthma symptoms and improve quality of life.

Patients who are not using or not adherent with first-line therapy or who have uncontrolled asthma are at greater risk for asthma attacks, declining lung function, hospitalizations, and death.

Barriers to Inhaler Adherence^{2,3}

- Insurance and cost
- Poor health literacy
- Desire for immediate relief
- Fear of steroid side effects
- Limited patient education
- Little knowledge of inhaler types
- Poor inhaler technique

Non-Pharmacological Asthma Interventions²

- Trigger avoidance
- Regular exercise
- Breathing exercises
- Smoking Cessation

Asthma ²	COPD ^{1,2}
Symptoms vary in intensity and frequency over time	Symptoms progress over time
Dry cough	Wet, phlegmy cough
First Line: Inhaled Corticosteroids	First Line: Inhaled bronchodilators

Classifying Asthma^{2,3}

Presentation Over Past 2-4 weeks	Mild Intermittent	Mild Persistent	Moderate Persistent	Severe Persistent
Daytime Asthma Symptoms	≤ 2 days per month	≤ 2 days per week	3-6 times per week, but NOT daily	Daily
Nighttime Asthma Awakenings	None	1-4 per month (≤1 per week)	2-6 times per week	Daily
Exacerbations in the Past Year	None	≤ 1	> 1	> 1
FEV₁ or FEV₁/FVC	Normal	Normal	FEV ₁ 60-80% FEV ₁ /FVC <5-10% predicted	FEV ₁ <60% FEV ₁ /FVC <10% predicted
Preferred Initial Therapy	Step 1	Step 2	Step 3	Step 4/5

Initial therapy should be based on the most severe category the patient experienced.

Stepwise Asthma Treatment Approach^{2,3}

	Step 1	Step 2	Step 3	Step 4	Step 5*
Reliever Medication	SABA as needed**	SABA as needed**	SABA as needed**	SABA as needed**	SABA as needed**
Controller Medication	None	Low Dose ICS	Low Dose ICS/LABA	Medium dose ICS/LABA	High dose ICS/LABA
Illinois Medicaid Preferred Agent	ProAir Proventil	QVAR Flovent Asmanex PLUS ProAir Proventil	Dulera Symbicort Advair Diskus PLUS ProAir Proventil	Dulera Symbicort Advair Diskus PLUS ProAir Proventil	Dulera Symbicort Advair Diskus PLUS ProAir Proventil

SABA: Short-Acting Beta Agonist ICS: Inhaled Corticosteroid LABA: Long-Acting Beta Agonist

*Refer to specialist for add-on treatment

**Regularly assess overuse of SABA (>1 canister monthly)

Role of Montelukast, an LTRA, in Asthma Therapy⁵

Montelukast may be used in combination with or as an alternative to inhaled corticosteroids in patients who have a contraindication to inhaled corticosteroids. Montelukast is most effective in patients with concurrent allergic rhinitis. Unlike inhaled corticosteroids, montelukast has **not been shown** to significantly decrease frequency of hospitalizations, decrease courses of prednisone for exacerbations, or increase number of asthma symptom-free days.

Role of Theophylline, a Methylxanthine, in Asthma Therapy^{2,3}

Theophylline is a mild-moderate bronchodilator that may be used as alternative therapy for step 2 (mild persistent asthma) or as adjunctive therapy to an inhaled corticosteroid for children ≥ 5 years old. Theophylline is not recommended for routine use in patients with asthma due to inconvenience of monitoring serum levels, high number of side effects, and numerous drug interactions.

Assessment and Monitoring of Asthma Control²

Initial Visit	<ul style="list-style-type: none"> Assess Asthma Severity and Initiate Treatment Instruct on proper spacer use with inhalers with patient demonstration of technique www.aerochambervhc.com/instructions-for-use 	Establish Asthma Action Plan
Follow-Up Visits	<ul style="list-style-type: none"> Assess asthma control, adherence, and inhaler technique (with or without spacer device/ mask). Review Asthma Action Plan. Assess overuse of SABA (>1 canister/ month). Adjust PRN prescription refills as appropriate. <p>Determine therapy adjustments: step-up, step-down, or maintain treatment.</p> <p>Measure spirometry every 1-2 years or more often if asthma is uncontrolled.</p>	<p style="text-align: center;">Frequency of Patient Follow-up</p> <ul style="list-style-type: none"> Every 2-6 weeks while gaining control Every 1-6 months to monitor control Every 3 months if step-down or step-up therapy is anticipated. <p style="text-align: center;">The Asthma Action Plan should be updated at each clinic visit.</p>

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