

Management of Asthma in Youth 12 Years and Older and Adults

Key Components		Recommendation and Level of Evidence			
First, assess severity to decide initial therapy		Classification of Asthma Severity			
		Intermittent	Persistent (Mild)	Persistent (Moderate)	Persistent (Severe)
Components of Severity	Impairment	≤ 2 days/week	> 2 days/week, not daily	Daily	Throughout day
	Symptoms	≤ 2x/month	3-4x/month	> 1x/week, not nightly	Often, 7x/week
	Nighttime awakenings	≤ 2 days/week	> 2 days/week, not daily and not > 1/day	Daily	Several times daily
	Short-acting beta ₂ -agonist use for symptoms	None	Minor limitation	Some limitation	Extremely limited
	Interference with normal activity	Normal FEV ₁ between exacerbations	> 80%	60%-80% Reduced 5%	< 60% Reduced > 5%
Lung function: FEV ₁ , FEV ₁ /FVC	FEV ₁	> 80%	> 80%	60%-80% Reduced 5%	< 60% Reduced > 5%
	FEV ₁ /FVC	Normal	Normal	60%-80% Reduced 5%	< 60% Reduced > 5%
Risk	Exacerbations requiring oral steroids	0-1/year	≥ 2/year		
		<ul style="list-style-type: none"> Consider severity & interval since last exacerbation. Frequency & severity may fluctuate over time for patient of any severity class. Relative annual risk of exacerbations may be related to FEV₁. 			
Recommended step for initiating treatment		Step 1	Step 2	Step 3	Step 4 or 5
Re-evaluate control in 2-6 weeks and adjust therapy accordingly.					

On follow-up, assess control and step therapy up or down		Classification of Asthma Control		
Components of Control		Well-Controlled	Not Well-Controlled	Very Poorly Controlled
Impairment	Symptoms	≤ 2 days/week	> 2 days/week	Throughout day
	Nighttime awakenings	≤ 2x/month	1 - 3x/week	≥ 4x/week
	Short-acting beta ₂ -agonist use for symptoms	≤ 2 days/week	> 2 days/week	Several times/day
	Interference with normal activity	None	Some limitation	Extremely limited
	FEV ₁ or Peak Flow	> 80%	60%-80%	< 60%
Risk	Exacerbations requiring oral steroids	0-1x/year	≥ 2x/year	
	Treatment-related adverse effects	Intensity of medication-related side effects does not correlate to specific levels of control, but should be considered in overall assessment of risk.		
Recommended action for treatment		<ul style="list-style-type: none"> Maintain current step Regular follow-up every 1-6 months Consider step down if well-controlled ≥ 3 months 	<ul style="list-style-type: none"> Step up 1 step Re-evaluate in 2-6 weeks 	<ul style="list-style-type: none"> Consider oral steroids Step up 1-2 steps Re-evaluate in 2 weeks

Step approach for asthma management (Use lowest treatment level required to maintain control.)

- Quick relief medication for all patients: Inhaled short-acting beta₂-agonist (SABA) as needed for symptoms [A]. Intensity of treatment depends on severity of symptoms; up to 3 treatments at 20-minute intervals as needed. Short course of systemic oral corticosteroids may be needed. Use of SABA > 2 days a week for symptom control (not prevention of exercise-induced bronchospasm) indicates inadequate control and the need to step up treatment.
- Patient education and environmental control at each step
- Persistent asthma: Daily long-term control therapy [A]; consult with asthma specialist if step 4 or higher [D], or progressive decreased lung function. Consider consultation at step 3 [D].

Intermittent Step 1	Mild Persistent Step 2	Moderate Persistent Step 3	Severe Persistent Step 4	Severe Persistent Step 5	Severe Persistent Step 6
Preferred Short-acting beta ₂ -agonist as required	Preferred Low-dose inhaled corticosteroid [A] Alternative Cromolyn Or Leukotriene receptor antagonist; or Nedocromil; or Theophylline [B]	Preferred Low-dose inhaled corticosteroid + long-acting beta ₂ -agonist [A] or medium-dose inhaled corticosteroid [A] Alternative Low-dose inhaled corticosteroid + either a leukotriene receptor antagonist [A], theophylline [B], or zileutin [D]	Preferred Medium-dose inhaled corticosteroid + long-acting beta ₂ -agonist [B] Alternative Medium-dose inhaled corticosteroid + either a leukotriene receptor antagonist, theophylline [B] or zileutin [D]	Preferred High-dose inhaled corticosteroid + long-acting beta ₂ -agonist [B] and consider omalizumab for patients who have IgE-mediated allergies [B]	Preferred High-dose inhaled corticosteroid + long-acting beta ₂ -agonist + oral corticosteroid [D] and consider omalizumab for patients who have IgE-mediated allergies [B]