Components of Severity		Classification of Asthma Severity (Youths ≥12 years of age and adults)				
			Persistent			
			Mild	Moderate	Severe	
Impairment Normal FEV ₁ /FVC: 8-19 yr 85% 20 -39 yr 80% 40 -59 yr 75% 60 -80 yr 70%	Symptoms	≤2 days/week	>2 days/week but not daily	Daily	Throughout the day	
	Nighttime awakenings	≤2x/month	3-4x/month	>1x/week but not nightly	Often 7x/week	
	Short-acting beta ₂ -agonist use for symptom control (not prevention of EIB)	≤2 days/week	>2 days/week but not >1x/day	Daily	Several times per day	
	Interference with normal activity	None	Minor limitation	Some limitation	Extremely limited	
		 Normal FEV₁ between exacerbations 				
	Lung function	• FEV ₁ >80% predicted	 FEV₁≥80% predicted 	• FEV ₁ >60% but <80% predicted	 FEV₁ <60% predicted 	
		• FEV ₁ /FVC normal	• FEV ₁ /FVC normal	• FEV ₁ /FVC reduced 5%	• FEV ₁ /FVC reduced >5%	
Risk	Exacerbations requiring oral systemic corticosteroids	0–1/year (see note)	≥2/year (see note)		
		Consider severity and interval since last exacerbation. Frequency and severity may fluctuate over time for patients in any severity category.				
		Relative annual risk of exacerbations may be related to FEV ₁				

"FIGURE 4–6. Classifying Asthma Severity and Initiating Treatment in Youths ≥ 12 Years of Age and Adults." NHLBI Guidelines for the Diagnosis and Management of Asthma (EPR-3). National Heart, Lung and Blood Institute, July 2007.

http://www.nhlbi.nih.gov/guidelines/asthma/09_sec4_lt_12.pdf. p. 344

Components of Severity		Classification of Asthma Severity (Children 5–11 years of age)				
		Intermittent	Persistent			
		Intermittent	Mild	Moderate	Severe	
	Symptoms	≤2 days/week	>2 days/week but not daily	Daily	Throughout the day	
Impairment	Nighttime awakenings	≤2x/month	3-4x/month	>1x/week but not nightly	Often 7x/week	
	Short-acting beta ₂ -agonist use for symptom control (not prevention of EIB)	≤2 days/week	>2 days/week but not daily	Daily	Several times per day	
	Interference with normal activity	None	Minor limitation	Some limitation	Extremely limited	
		 Normal FEV₁ between exacerbations 				
	Lung function	 FEV₁ >80% predicted 	• FEV ₁ = >80% predicted	• FEV ₁ = 60–80% predicted	 FEV₁ <60% predicted 	
		• FEV ₁ /FVC >85%	• FEV ₁ /FVC >80%	• FEV ₁ /FVC = 75–80%	• FEV ₁ /FVC <75%	
Risk	Exacerbations requiring oral systemic corticosteroids	0–1/year (see note) ≥2 in 1 year (see note) →				
		Consider severity and interval since last exacerbation. Frequency and severity may fluctuate over time for patients in any severity category.				
		Relative annual risk of exacerbations may be related to FEV ₁				

"FIGURE 4 – 2b. Classifying Asthma Severity and Initiating Treatment in Children 5–11 Years of Age." NHLBI Guidelines for the Diagnosis and Management of Asthma (EPR-3). National Heart, Lung and Blood Institute, July 2007.

http://www.nhlbi.nih.gov/guidelines/asthma/08 sec4 It 0-11.pdf. p. 308

STEPWISE APPROACH FOR MANAGING ASTHMA IN YOUTHS ≥12 YEARS OF AGE AND ADULTS

Persistent Asthma: Daily Medication Intermittent Consult with asthma specialist if step 4 care or higher is required. **Asthma** Consider consultation at step 3. Step 6 Step up if Step 5 needed Preferred: (first, check Preferred: High-dose Step 4 ICS + LABA + oral adherence, High-dose corticosteroid environmental ICS + LABA Preferred: Step 3 control, and AND Medium-dose ICS Preferred: AND comorbid + LABA Step 2 Low-dose ICS + LABA Consider conditions) Consider Preferred: Omalizumab for Alternative: Omalizumab for OR patients who have Low-dose ICS patients who have Step 1 Medium-dose ICS Medium-dose ICS allergies Assess allergies Alternative: + either LTRA. Alternative: control Preferred: Theophylline, or Cromolyn, LTRA, Low-dose ICS + either LTRA, Theophylline, or Zileuton Nedocromil, or Zileuton SABA PRN Theophylline Step down if possible (and asthma is Each step: Patient education, environmental control, and management of comorbidities. well controlled at least Steps 2-4: Consider subcutaneous allergen immunotherapy for patients who have allergic asthma (see notes). 3 months) **Quick-Relief Medication for All Patients** SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms: up to 3 treatments at 20-minute intervals as needed. Short course of oral systemic corticosteroids may be needed. Use of SABA >2 days a week for symptom relief (not prevention of EIB) generally indicates inadequate control and the need to step up treatment.

"FIGURE 4 – 5. Stepwise Approach for Managing Asthma in Youths ≥ 12 Years of Age and Adults." *NHLBI Guidelines for the Diagnosis and Management of Asthma (EPR-3)*. National Heart, Lung and Blood Institute, July 2007. http://www.nhlbi.nih.gov/guidelines/asthma/09 sec4 lt 12.pdf. p. 343

STEPWISE APPROACH FOR MANAGING ASTHMA IN CHILDREN 5-11 YEARS OF AGE **Persistent Asthma: Daily Medication** Intermittent Consult with asthma specialist if step 4 care or higher is required. **Asthma** Consider consultation at step 3. Step up if Step 6 needed Step 5 Preferred: (first, check Preferred: Step 4 adherence. **High-dose ICS** High-dose ICS + inhaler Preferred: + LABA + oral Step 3 LABA systemic technique, Medium-dose Alternative: corticosteroid Preferred: environmental Step 2 ICS + LABA control, and High-dose ICS + EITHER: Alternative: Preferred: Alternative: either LTRA or comorbid Low-dose ICS + High-dose ICS + Theophylline conditions) Low-dose ICS either LABA, Medium-dose either LTRA or Step 1 LTRA, or ICS + either Theophylline + Alternative: Assess Theophylline LTRA or Preferred: oral systemic control Cromolyn, LTRA. Theophylline OR corticosteroid SABA PRN Nedocromil, or Medium-dose Theophylline Step down if ICS possible (and asthma is Each step: Patient education, environmental control, and management of comorbidities. well controlled at least Steps 2-4: Consider subcutaneous allergen immunotherapy for patients who have allergic asthma (see notes). 3 months) Quick-Relief Medication for All Patients SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms: up to 3 treatments at 20-minute intervals as needed. Short course of oral systemic corticosteroids may be needed. Caution: Increasing use of SABA or use >2 days a week for symptom relief (not prevention of EIB) generally indicates inadequate control and the need to step up treatment.

"FIGURE 4 – 1b. Stepwise Approach for Managing Asthma in Children 5-11 Years of Age." *NHLBI Guidelines for the Diagnosis and Management of Asthma (EPR-3)*. National Heart, Lung and Blood Institute, July 2007. http://www.nhlbi.nih.gov/guidelines/asthma/08 sec4 lt 0-11.pdf. p. 306

ASSESSING ASTHMA CONTROL IN YOUTHS ≥12 YEARS OF AGE AND ADULTS

Components of Control		Classification of Asthma Control (Youths ≥12 years of age and adults)				
		Well-Controlled	Not Well-Controlled	Very Poorly Controlled		
Impairment	Symptoms	≤2 days/week	>2 days/week	Throughout the day		
	Nighttime awakening	≤2x/month	1-3x/week	≥4x/week		
	Interference with normal activity	None	Some limitation	Extremely limited		
	Short-acting beta ₂ -agonist use for symptom control (not prevention of EIB)	≤2 days/week	>2 days/week	Several times per day		
	FEV_1 or peak flow	>80% predicted/ personal best	60–80% predicted/ personal best	<60% predicted/ personal best		
	Validated Questionnaires					
	ATAQ ACQ ACT	0 ≤0.75* ≥20	1–2 ≥1.5 16–19	3–4 N/A ≤15		
Risk	Evacorbations	0–1/year	≥2/year (see note)		
	Exacerbations	Consider severity and interval since last exacerbation				
	Progressive loss of lung function	Evaluation requires long-term followup care				
	Treatment-related adverse effects	Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.				

"FIGURE 4 – 7. Assessing Asthma Control and Adjusting Therapy in Youths ≥12 Years of Age and Adults." *NHLBI Guidelines for the Diagnosis and Management of Asthma (EPR-3)*. National Heart, Lung and Blood Institute, July 2007. http://www.nhlbi.nih.gov/guidelines/asthma/09 sec4 It 12.pdf. p. 345

ASSESSING ASTHMA CONTROL IN CHILDREN 5-11 YEARS OF AGE

Components of Control		Classification of Asthma Control (Children 5-11 years of age)				
		Well Controlled	Not Well Controlled	Very Poorly Controlled		
	Symptoms	≤2 days/week but not more than once on each day	>2 days/week or multiple times on ≤2 days/week	Throughout the day		
Impairment	Nighttime awakenings	≤1x/month	≥2x/month	≥2x/week		
	Interference with normal activity	None	Some limitation	Extremely limited		
	Short-acting beta ₂ -agonist use for symptom control (not prevention of EIB)	≤2 days/week	>2 days/week	Several times per day		
	Lung function					
	 FEV₁ or peak flow 	>80% predicted/ personal best	60-80% predicted/ personal best	<60% predicted/ personal best		
	 FEV₁/FVC 	>80%	75-80%	<75%		
Risk	Exacerbations requiring	0–1/year	≥2/year (see note)			
	oral systemic corticosteroids	Consider severity and interval since last exacerbation				
	Reduction in lung growth	Evaluation requires long-term followup.				
	Treatment-related adverse effects	Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.				

"FIGURE 4 – 3b. Assessing Asthma Control and Adjusting Therapy in Children 5-11 Years of Age." *NHLBI Guidelines for the Diagnosis and Management of Asthma (EPR-3)*. National Heart, Lung and Blood Institute, July 2007. http://www.nhlbi.nih.gov/guidelines/asthma/08 sec4 lt 0-11.pdf. p. 310