The Asthma Office Visit

- Classify "asthma severity" with new patients; evaluate "asthma control" at follow-up visits
- Reduce current impairment and future risk
- Address inflammation vs. bronchoconstriction
- Differentiate controller vs. rescue medication
- Prescribe inhaled steroid for persistent asthma (for at least 4-6 weeks)
- Teach/review inhaler and spacer technique
- Evaluate trigger control and co-morbid conditions
- · Write an Asthma Action Plan
 - Daily medication plan
 - Early warning signs/seasonal allergies and stepup medication plan
 - Symptoms of worsening asthma and step-up medication plan
 - One dose of oral steroid for RED ZONE
- Teach self-management skills for asthma control
- Set follow-up in 1-6 months to evaluate asthma control and need to adjust Written Asthma Action Plan
- Prescribe albuterol and spacer/nebulizer for school
- Provide annual Written Action Plan for school
- Give annual influenza vaccine for ALL asthma patients

When to Refer to an Asthma Specialist

- Difficulty achieving/maintaining asthma control
- Patient required ≥ 2 bursts of oral steroids in one year
- Patient had episode requiring hospitalization
- Patient requires "Step 4" care or higher (Step 3 for children 0-4 years)
- Considering immunotherapy or omalizumab therapy
- Additional testing indicated (allergy skin testing; rhinoscopy; additional PFTs; bronchoprovacation; etc.)
- Atypical signs and symptoms
- Co-morbid conditions that complicate asthma: sinusitis; nasal polyps; severe rhinitis; VCD; GERD
- Patient requires additional education/guidance

Terms to Know

Impairment—considers the last 2-4 weeks:

- Evaluate the frequency and intensity of symptoms the patient has experienced
- Evaluate functional limitations (quality of life) patient has experienced

Risk—considers the likelihood of:

- Asthma episodes based on FEV1 or personal best peak flow
- · Progressive loss of pulmonary function
- · Possible medication side effects

The two domains, Impairment and Risk, may not correlate with each other, and they may respond differentially to treatment.

Reference

National Heart, Lung, and Blood Institute, Guidelines for the Diagnosis and Management of Asthma Expert Panel Report 3

National Institutes of Health Publication Number 08-4051, August 2007

Download Full Report www.nhlbi.nih.gov/guidelines/asthma/index.htm

Special thanks to Asthma Initiative of Michigan (AIM) for sharing their information. Visit their website: www.getasthmahelp.org





Asthma Guidelines

adapted from

Expert Panel Report 3
Guidelines for the
Diagnosis and
Management of Asthma

Children 0 - 4 Years Old

Children 5 - 11 Years Old

Youths ≥ 12 Years Old and Adults

Children 0-4 Years Old						
COMPONENTS OF		Classification of Asthma Severity				
00		Intermittent	Persistent			
SEV	SEVERITY		Mild	Moderate	Severe	
	Symptoms	<2 days/wk	>2 days/wk but not daily	Daily	Throughout day	
Impairment	Nighttime Awakenings	None	1-2x/month	3-4x/month	>1x/week	
	SABA use for Symptoms	≤2 days/wk	>2 days/wk but not daily	Daily	Several times daily	
	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited	
Risk	Episodes Risk Requiring			ear lasting >1 da	uiring oral steroids, ay AND risk factors	
	Oral Steroids		erity & interval since last episode. Frequency & severity over time for patient of any severity class.			
Recomme	nded Step for	Step 1	Step 2	Step 3; consid	er oral steroid burst	
Initiating Therapy		Re-evaluate control in 2-6 weeks and adjust therapy accordingly				

COMPONENTS OF CONTOL		Classification of Asthma Control				
		Well Controlled	Not Well Controlled	Very Poorly Controlled		
Impairment	Symptoms	<2 days/week but not >1/day	>2 days/wk or many times on < 2 days/wk	Throughout day		
	Nighttime Awakenings	≤1x/month	>1x /month	>1x/week		
	SABA use for Symptoms	<2 days/wk	>2 days/wk	Several times/day		
	Interference with Normal Activity	None	Some limitation	Extremely limited		
Risk	Episodes Requiring Oral Steroids	0-1x /year 2-3x/year		>3x/year		
KISK	Treatment- Related Adverse Effects	The intensity of medication-related side effects does not correlate is specific levels of control, but should be considered in the overall assessment of risk				
Recommended Action for Treatment		Maintain current step. Regular follow-up every 1-6 months	Step up 1 step Consider oral steroi Step up 1-2 steps Re-evaluate in 2-6 weeks			
		 Consider step down if well controlled <u>></u> 3 mo. 	A 11			

Stepwise Approach for Managing Asthma

Quick Relief Medication for All Patients: SABA pm for symptoms. Treatment intensity depends on symptom severity. May take up to 3 treatments at 20 minute intervals as needed. Short course of oral steroids may be needed. Use of SABA >2 days a week for symptom control (not to prevent EIB) indicates inadequate control and need to step up treatment.

indicates ina	dequate control an	ia neea to step up	treatment.		
	Persistent Asthma		Step 6		
	Consult with asth	ma specialist at ste	p 3 or higher	Step 5	
Intermittent	Consider consulta	ation at step 2	Step 4		Preferred:
Asthma		Step 3		Preferred:	High-dose ICS + Oral Steroid
	Step 2		Preferred:	High-dose ICS + either LABA	+ either LABA OR
Step 1		Preferred:	Medium-dose ICS	OR Singulair	Singulair
Preferred SABA pm	Preferred: Low-dose ICS Alternative: LTRA; Cromolyn	Medium-dose ICS	+ either LABA OR Singulair		
Each Step: Patient Education and Environmental Control					

Children 5-11 Years Old						
COMPO	COMPONENTS OF		Classification of Asthma Severity			
			Persistent			
3E	VERITY	Intermittent	Mild	Moderate	Severe	
	Symptoms	<pre><2 days/week</pre>	>2 days/wk, not daily	Daily	Throughout day	
Impairment	Nighttime Awakenings	<2x /month	3-4x/month	>1x /week but not nightly	Often 7x/week	
Normal FEV ₁ /FVC	SABA use for Symptoms	<2 days/week	>2 days/wk, not daily	Daily	Several times daily	
8-19 yr 85%	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited	
	Lung Function FEV ₁ or Peak Flow	Normal FEV ₁ between episodes >80%	>80%	60-80%	<60%	
	FEV ₁ /FVC	>85%	>80%	75-80%	<75%	
	Episodes	0-1/year		<u>></u> 2 /year		
Risk Requiring Oral Steroids		Consider severity & interval since last episode. Frequency & severity may fluctuate over time for patient of any severity class.				
Recommended Step for Initiating Treatment		Step 1	Step 2	Step 3-4; conside	er oral steroid burst	
		Re-evaluate control in 2-6 weeks and adjust therapy accordingly				

COMPONENTS OF		Classification of Asthma Control			
001	CONTROL	Well Controlled	Not Well Controlled	Very Poorly Controlled	
	Symptoms	<2 days/week but not more than once on each day	>2 days/wk or many times on ≤2 days/week	Throughout day	
	Nighttime Awakenings	<1x/month	≥2x /month	≥2x /week	
Impairment	SABA 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 FEV ₁ /FVC	>80% >80%	60-80% 75-80%	<60% <75%	
	Episodes Requiring Oral Steroids	0-1x /year <u>></u> 2 /year			
Risk	Progressive Loss of Lung Function	Evaluation requires long-term follow-up care			
	Treatment-Related Adverse Effects	Intensity of medication-related side effects does not to specific levels of control but should be considered overall assessment of risk			
Rec	commended Action	Maintain current step Regular follow-up	Step up 1 step	Consider oral steroids Step up 1-2 steps	
	For Treatment	 every1-6 months Consider step down if well controlled \(\geq 2 \) mo. 	Re-evaluate in 2-6 weeks Adjust therapy accordingly		

Stepwise Approach for Managing Asthma

Quick Relief Medication for All Patients: SABA pm for symptoms. Treatment intensity depends on symptom severity.

May take up to 3 treatments at 20 minute intervals as needed. Short course of oral steroids may be needed. Use of SABA
>2 days a week for symptom control (not to prevent EIB) indicates inadequate control and need to step up treatment.

	Persistent Asthma: Daily Medication				
	Consult with asthr	na specialist at step 4	or higher	Step 5	Preferred:
	Consider consultation at step 3		Step 4	Preferred:	High-dose ICS
Intermittent		Step 3	Preferred:	High-dose ICS + LABA	+ LABA + Oral Corticosteroid
Step 1 Preferred: SABA pm	Step 2 Preferred: Low-dose ICS	Preferred: Either Low-dose ICS + either LABA OR LTRA OR Theophylline	Medium-dose ICS + LABA	Alternative: High-dose ICS + either LTRA OR Theophylline	Alternative: High-dose ICS + either LTRA OR Theophylline + oral corticosteroids
	Alternative Cromolyn, LTRA, or Theophylline	OR Medium-dose ICS	Alternative: Medium-dose ICS + either LTRA OR Theophylline		
Ea	ch Step: Pa	atient Educat	tion and En	/ironmental	Control

Children ≥12 Years and Adults					
COMPONENTS OF		Classification of Asthma Severity			
		Intermittent	Persistent		
3EI	/ERITY	mermittent	Mild	Moderate	Severe
	Symptoms	<2 days/week	>2 days/week but not daily	Daily	Throughout day
Impairment	Nighttime Awakenings	<2x /month	3-4x/month	>1x /week, not nightly	Often 7x/week
FEV ₁ /FVC	SABA use for Symptoms	<2 days/week	>2 days/wk (not daily and not >1/day)	Daily	Several times daily
8-19 yr 85% 20-39 yr 80% 40-59 yr 75%	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited
60-80 yr 70%	Lung Function	Normal FEV ₁ between episodes			
	FEV ₁ FEV ₁ /FVC	>80% Normal	>80% Normal	60-80% Reduced 5%	<60% Reduced 5%
	Episodes	0-1/year	<u>></u> 2 /year		
Risk	Requiring Oral Steroids	Consider severity and interval since episode. Frequency & severity may fluctuate over time for patients in any severity class.			
	ded Step for	Step 1	Step 2	Step 3	Step 4 or 5
Initiating Treatment		Re-evaluate control in 2-6 weeks and adjust therapy accordingly.			

The oralizate contact in 2 of freehe and adjust alongly accordingly.							
COMPONENTS OF CONTROL		Classification of Asthma Control					
		Well Controlled	Not Well Controlled	Very Poorly Controlled			
	Symptoms	≤2 days/week	>2 days/week	Throughout day			
	Nighttime Awakenings	≤2x/month	1-3x /week	≥4x/week			
	SABA use for Symptoms	≤2 days/wk	>2 days/wk	Several times/day			
	Interference with Normal Activity	None	Some limitation	Extremely limited			
mpairment	FEV₁ or Peak Flow	>80%	60-80%	<60%			
	Validated Questionnaires ATAQ ACQ ACT	0 ≤0.75 ≥20	1-2 <u>></u> 1.5 16-19	3-4 N/A ≤15			
	Episodes Requiring Oral Steroids	0-1x /year	<u>></u> 2 /year				
Risk	Progressive Loss of Lung Function	Evaluation requires long-term follow-up care					
	Treatment-Related Adverse Effects	Intensity of medication-related side effects does not co to specific levels of control, but should be considered in overall assessment of risk					
Recommended Action For Treatment		Maintain current step. Regular follow-up every1-6 months	Step up 1 step	Consider oral steroids Step up 1-2 steps			
		Consider step down if well controlled <u>></u> 3 mo.	Re-evaluate in 2-6 weeks Adjust therapy accordingly				
Stepwise Approach for Managing Asthma							

Stepwise Approach for Managing Asthma

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	Step 6						
	Consult with asthma specialist at step 4 or higher Step 5						
	Consider consultation at step 3		Step 4	Preferred:	High-dose ICS + LABA		
Intermittent		Step 3	Preferred:	High-dose ICS + LABA	+ Oral Corticosteroid		
Step 1 Preferred: SABA pm	Step 2 Preferred: Low-dose ICS		Medium-dose ICS + LABA Alternative:	AND Consider:	AND Consider:		
	Alternative: Cromolyn OR LTRA, OR Theophylline	Alternative: Low-dose ICS + either LTRA, Zileutin OR Theophylline	Medium-dose ICS + either LTRA OR Zileutin OR Theophylline	Olamizumab for patients with allergies	Olamizumab for patients with allergies		
	Each Step: Patient Education and Environmental Control						