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 step-up 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

Children's Mercy Pediatric Care Network
www.cmpcn.org

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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

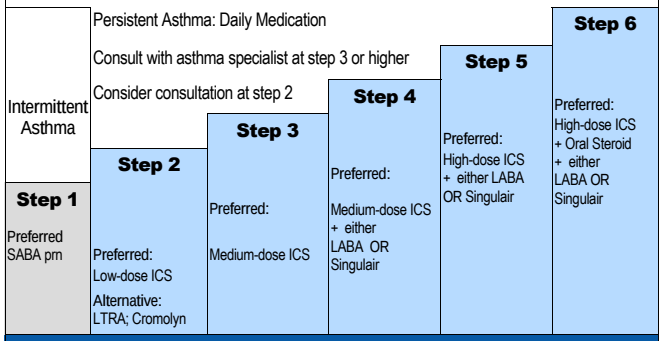
Children 0-4 Years Old

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment	Symptoms	≤2 days/wk	>2 days/wk but not daily	Daily	Throughout day
	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 Requiring Oral Steroids	0-1/year	> 2 episodes in 6 months requiring oral steroids, OR ≥4 in 1 year lasting >1 day AND risk factors for persistent asthma		
		Consider severity & interval since last episode. Frequency & severity may fluctuate over time for patient of any severity class.			
Recommended Step for Initiating Therapy		Step 1	Step 2	Step 3; consider oral steroid burst	
		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
	Treatment-Related Adverse Effects	The intensity of medication-related side effects does not correlate to 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 • Consider step down if well controlled ≥ 3 mo.	Step up 1 step • Re-evaluate in 2-6 weeks • Adjust therapy accordingly	Consider oral steroids Step up 1-2 steps

Stepwise Approach for Managing Asthma

Quick Relief Medication for All Patients: SABA prn 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.



Each Step: Patient Education and Environmental Control

Children 5-11 Years Old

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment Normal FEV1/FVC 8-19 yr 85%	Symptoms	≤2 days/week	>2 days/wk, not daily	Daily	Throughout day
	Nighttime Awakenings	≤2x /month	3-4x/month	>1x /week but not nightly	Often 7x/week
	SABA use for Symptoms	≤2 days/week	>2 days/wk, not daily	Daily	Several times daily
	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited
	Lung Function FEV1 or Peak Flow FEV1/FVC	Normal FEV1 between episodes >80% >85%	>80% >80%	60-80% 75-80%	<60% <75%
Risk	Episodes Requiring Oral Steroids	0-1/year	≥2 /year		
		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; consider oral steroid burst	
		Re-evaluate control in 2-6 weeks and adjust therapy accordingly			

COMPONENTS OF CONTROL		Classification of Asthma Control		
		Well Controlled	Not Well Controlled	Very Poorly Controlled
Impairment	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
	SABA use for Symptoms	≤2 days/week	>2 days/week	Several times/day
	Interference with Normal Activity	None	Some limitation	Extremely limited
	FEV1 or Peak Flow FEV1/FVC	>80% >80%	60-80% 75-80%	<60% <75%
Risk	Episodes Requiring Oral Steroids	0-1x /year	≥2 /year	
	Progressive Loss of Lung Function	Evaluation requires long-term follow-up care		
	Treatment-Related Adverse Effects	Intensity of medication-related side effects does not correlate to specific levels of control but should be considered in the overall assessment of risk		
Recommended Action For Treatment		• Maintain current step • Regular follow-up every1-6 months • Consider step down if well controlled ≥ 3 mo.	Step up 1 step • Re-evaluate in 2-6 weeks • Adjust therapy accordingly	Consider oral steroids Step up 1-2 steps

Stepwise Approach for Managing Asthma

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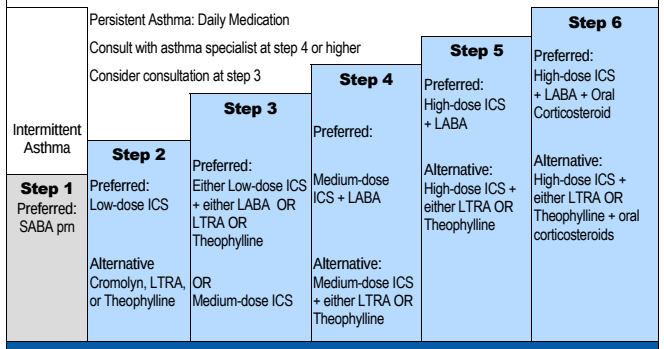

Each Step: Patient Education and Environmental Control

Children ≥12 Years and Adults

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment Normal FEV1/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 day
	Nighttime Awakenings	≤2x /month	3-4x/month	>1x /week, not nightly	Often 7x/week
	SABA use for Symptoms	≤2 days/week	>2 days/wk (not daily and not >1/day)	Daily	Several times daily
	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited
	Lung Function FEV1 FEV1/FVC	Normal FEV1 between episodes >80% Normal	>80% Normal	60-80% Reduced 5%	<60% Reduced 5%
Risk	Episodes Requiring Oral Steroids	0-1/year	≥2 /year		
		Consider severity and interval since episode. Frequency & severity may fluctuate over time for patients in any severity class.			
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.			

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

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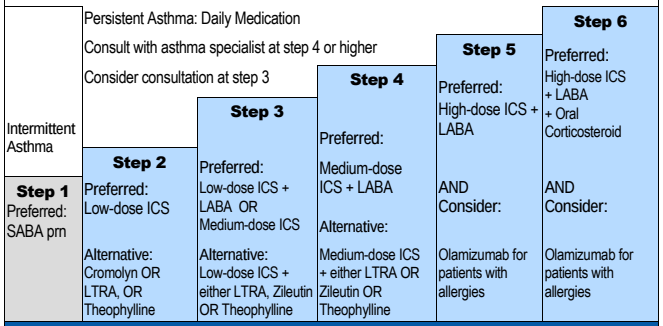

Each Step: Patient Education and Environmental Control