The Asthma Office Visit

- Assess "severity" and "control"
 - Reduce current impairment •
 - Reduce future risk
- Address inflammation vs. bronchoconstriction •
- Differentiate controller vs. rescue medication
- Prescribe an inhaled steroid (for at least 4-6 weeks) •
- Teach spacer device technique •
- Evaluate asthma triggers at home, schools, and work
- Write an Asthma Action Plan
 - Daily management and recognizing signs and symptoms of worsening
 - Step-up "Yellow Zone" plan for home management
- Set up follow up in 4-6 weeks: step-up/step-down and modify Asthma Action Plan
- Prescribe albuterol and spacer for school •
- Annual influenza vaccine, regardless of severity

When to Refer to an Asthma Specialist

- Patient has difficulty achieving or maintaining control •
- Patient has required more than 2 bursts of oral systemic • corticosteroids in I year
- Patient has had an exacerbation requiring hospitalization hospitalization is a risk factor for mortality
- Patient requires "Step 4" care or higher • (Step 3 for children 0-4 years)
- Immunotherapy or omalizumab are considered for patient's • care
- Additional testing is indicated (allergy skin testing, • bronchoscopy, workplace assessment, etc.)
- Signs and symptoms are atypical •
- Co-morbid conditions complicate asthma
- Patient requires additional education/guidance •

Terms to Know:

Impairment (present)

- Frequency and intensity of symptoms
- Functional limitations (quality of life)

Risk (future)

- Asthma exacerbations (utilization)
- Progressive loss of pulmonary function
- Risk of adverse reaction from medication

Resources available at

http://www.getasthmahelp.org/EPR3AsthmaGuidelines.asp

- . 6 Key Messages from Expert Panel Report-3
- Tri-fold Guide (8.5 x 11 and 11 x 17 versions)
- Classifying Severity, Control, and Stepwise Treatment Guidelines excerpted from Expert Panel Report-3
- · Asthma medication dose grids for long term control and quick relief medications. excerpted from Expert Panel Report-3
- · Validated instruments for assessment and monitoring asthma. excerpted from Expert Panel Report-3. (ATAQ and ACT)

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. www.nhlbi.nih.gov/guidelines/asthma



The Asthma Initiative of Michigan is a collaborative effort involving multiple partners from public and private sectors across the state and is committed to reducing the burden of asthma in Michigan.

Link to the <u>Complete</u> Expert Panel Report: www.nhlbi.nih.gov/guidelines/asthma

Essential Information from the

2007 NHLBI Guidelines for the Diagnosis and Treatment of Asthma **Expert Panel 3 Report**



For questions, state and local resources, or to request more information:

> 1.866.EZLUNGS (1.866.395.8647) www.getasthmahelp.org

Children 0 to 4 Years

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
		Internitient	Mild	Moderate	Severe
	Symptoms	≤2 days/wk	>2 days/wk not daily	Daily	Throughout day
Impairment	Nighttime Awakenings	0	1-2x /month	3-4x /month	>1x/wk
Impairment	SABA Use for Symptoms	≤2 days/wk	>2 days/wk not daily	Daily	Several times daily
	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited
Risk Exacerbations		0-1/year	≥2 in 6 months requiring oral steroids, OR ≥4 in 1 year lasting >1 day AND risk factors for persistent asthma		
	requiring oral steroids	Consider severity & interval since last exacerbation. Frequency & severity may fluctuate over time for patient of any severity class.			
Recommended Step for Initiating		Step 1	Step 2	Ste	ep 3
Treatment		Re-evaluate control in 2-6 weeks and adjust therapy accordingly.			

		Classification of Asthma Severity				
COMPONENTS OF SEVERITY		Intermittent	Persistent			
		Internitterit	Mild	Moderate	Severe	
	Symptoms	≤2 days/wk	>2 days/wk not daily	Daily	Throughout day	
	Nighttime Awakenings	≤2x / month	3-4x /month	>1x /wk not nightly	Often 7x /wk	
Impairment	SABA Use for Symptoms	≤2 days/wk	>2 days/wk not daily	Daily	Several times daily	
ппраппен	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited	
	Lung Function	Normal FEV ₁ btwn exacerbations				
	FEV ₁ or Peak Flow FEV ₁ /FVC	>80% >85%	>80% >80%	60-80% 75-80%	<60% <75%	
		0-1 /year		≥2 /year		
Risk	Exacerbations requiring oral steroids	Consider severity & interval since last exacerbation. Frequences fluctuate over time for patient of any severity class.		ncy & severity may		
		Relative annual risk of exacerbations maybe related to FEV1				
Recommended	d Step for	Step 1	Step 1 Step 2 Step 3			
Initiating Treat	ment	Re-evaluate control in 2-6 weeks and adjust therapy accordingly.				

Children 5 to 11 Years

	Classification of Asthma Severity				
F SEVERITY	Interneittent	Persistent			
		Mild	Moderate	Severe	
Symptoms	≤2 days/wk	>2 days/wk not daily	Daily	Throughout day	
Nighttime Awakenings	≤2x / month	3-4x /month	>1x /wk not nightly	Often, 7x /wk	
SABA Use for Symptoms	≤2 days/wk	>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 FEV ₁	Normal FEV ₁ btwn exacerbations >80%	>80%	60-80%	<60%	
FEV ₁ /FVC	Normal	Normal	Reduced 5%	Reduced >5%	
	0-1 /year		≥2 /year		
Exacerbations requiring oral steroids	Consider severity & interval since last exacerbation. Frequency & severity may fluctuate over time for patient of any severity class. Relative annual risk of exacerbations maybe related to FEV ₁				
tep for	Step 1	Step 2	Step 3	Step 4 or 5	
nt	Re-evaluate control in 2-6 weeks and adjust therapy accordingly.				
	Symptoms Nighttime Awakenings SABA Use for Symptoms Interference with Normal Activity Lung Function FEV1 FEV1/FVC Exacerbations requiring oral steroids tep for	Symptoms ≤2 days/wk Nighttime ≤2x / month Awakenings ≤2x / month SABA Use ≤2 days/wk for Symptoms ≤2 days/wk Interference with None Normal Activity Nomal FEV₁ btwn Lung Function Normal FEV₁ btwn FEV₁ >80% FEV₁/FVC Normal Consider severity & in fluctuate over time for requiring oral steroids Relative ar tep for Step 1	F SEVERITY Intermittent Mild Symptoms <2 days/wk >2 days/wk Nighttime <2 days/wk not daily Awakenings <2x / month 3-4x /month SABA Use <2 days/wk >2 days/wk for Symptoms <2 days/wk not daily and not SABA Use <2 days/wk not daily and not for Symptoms <2 days/wk not daily and not Normal Activity None Minor Interference with None Minor Normal Activity Normal FEV1 btwn Exacerbations >80% >80% FEV1 >80% >80% FEV1/FVC Normal Normal 0-1 /year Consider severity & interval since last exact fluctuate over time for patient of any severit Relative annual risk of exacerbations requiring oral steroids Step 1 Step 2	F SEVERITY Intermittent Persistent Mild Moderate Symptoms $\leq 2 days/wk$ $>2 days/wk$ Daily Nighttime $\leq 2 days/wk$ $>2 days/wk$ Daily Awakenings $\leq 2x / month$ $3 - 4x / month$ $>1x / wk$ SABA Use $\leq 2 days/wk$ $3 - 4x / month$ Daily SABA Use $\leq 2 days/wk$ not daily and not Daily for Symptoms $\leq 2 days/wk$ not daily and not Daily Interference with None Minor Some Normal Activity Normal FEV ₁ btwn exacerbations Some FEV ₁ >80% >80% 60-80% FEV ₁ /FVC Normal Normal Reduced 5% 0-1 /year $\geq 2 /year$ Consider severity & interval since last exacerbation. Frequent fuctuate over time for patient of any severity class. Relative annual risk of exacerbations maybe related tep for	

1/FVC: 9 yr 85%	for
9 yr 80%	Inte
9 yr 75%	Nor
0	Lur

COMPONENTS	C

		Classification of Asthma Control			
COMPONENT	IS OF CONTROL	Well Controlled	Not Well Controlled	Very Poorly Controlled	
	Symptoms	≤2 days/wk	>2 days/wk	Throughout day	
	Nighttime Awakenings	≤2x /month	1-3x /wk	≥4x /week	
	SABA Use for Symptoms	≤2 days/wk	>2 days/wk	Several times daily	
Impairment	Interference with Normal Activity	None	Some limitation	Extremely limited	
impairment	FEV ₁ 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	
	Exacerbations requiring oral steroids	0-1 /year	≥2 /year		
Risk	Progressive ↓ 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 every 1-6 months. Consider step down if well controlled ≥3 months. 	Step up 1 step. Re-evaluate in 2-6 wks.	 Consider oral steroids Step up 1-2 steps Re-evaluate in 2 wks. 	

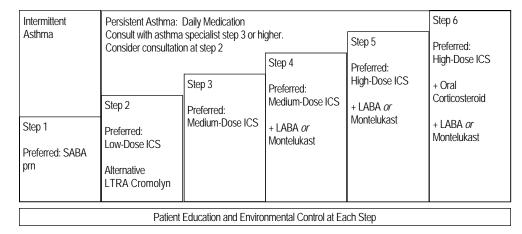
Stepwise Approach for Managing Asthma Quick Relief Medication for All Patients: SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms: up to 3 treatments at 20 minute intervals as needed. Short course of systemic oral corticosteroids may be needed. Use of SABA >2 days a week for symptom control (not prevention of EIB) indicates inadequate control and the need to step up treatment.

Intermittent Asthma	P C C
	S
Step 1	P L
Preferred: SABA prn	A C N T

COMPONENTS OF CONTROL		Classification of Asthma Control			
		Well Controlled	Not Well Controlled	Very Poorly Controlled	
	Symptoms	≤2 days/wk but not >1 /day	>2 days/wk or many times on ≤2 days/wk	Throughout day	
Impairmant	Nighttime Awakenings	≤1x /month	>1x /month	>1x/wk	
Impairment	SABA Use for Symptoms	≤2 days/wk	>2 days/wk	Several times /day	
	Interference with Normal Activity	None	Some limitation	Extremely limited	
	Exacerbations requiring oral steroids	0-1x /year	2-3x /year	>3x /year	
Risk	Treatment-related adverse effects	Intensity of medication-related side effects does not correlate to speci- levels of control, but should be considered in the overall assessment or risk.			
Recommended Action For Treatment		 Maintain current step. Regular follow-up every 1-6 months. 	Step up 1 step.	Consider oral steroidsStep up 1-2 steps	
		• Consider step down if well controlled ≥3 months.	 Re-evaluate in 2-6 wks If no clear benefit in 4-6 diagnosis or adjust there 	wks, consider alternative apy.	

		Classification of Asthma Control			
COMPONENTS OF CONTROL		Well Controlled	Not Well Controlled	Very Poorly Controlled	
	Symptoms	≤2 days/wk but not >1 /day	>2 days/wk or many times on ≤2 days/wk	Throughout day	
	Nighttime Awakenings	≤1x /month	≥2x /month	≥2x /week	
Impairment	SABA Use for Symptoms	≤2 days/wk	>2 days/wk	Several times /day	
mpairment	Interference with Normal Activity	None	Some Limitation	Extremely Limited	
	FEV1 or Peak Flow FEV1/FVC	>80% >80%	60-80% 75-80%	<60% <75%	
	Exacerbations requiring oral steroids	0-1x /year ≥2x /year			
Risk	↓ Lung Growth	Evaluation requires long-term follow-up care.			
NSK .	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 every 1-6 months. Consider step down if well controlled ≥3 months. 	Step up 1 step. Re-evaluate in 2-6 wks Adjust therapy accordin		

Stepwise Approach for Managing Asthma 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 systemic oral corticosteroids may be needed. Use of SABA >2 days a week for symptom control (not prevention of EIB) indicates inadequate control and the need to step up treatment.



Stepwise Approach for Managing Asthma 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 systemic oral corticosteroids may be needed. Use of SABA >2 days a week for symptom control (not prevention of EIB) indicates inadequate control and the need to step up treatment.

Intermittent Asthma	Persistent Asthma: Consult with asthma	abor		Step 6			
ASUIIIIa	Consider consultation			Step 5	Preferred:		
			Step 4	Preferred: High-	High-Dose ICS +LABA		
		Step 3	Preferred:	Dose ICS + LABA	+Oral		
	Step 2	Preferred:	Medium-Dose ICS + LABA		Corticosteriod		
Step 1	Preferred: Low-Dose ICS	Low-Dose ICS + LTRA, LABA, <i>or</i> Theophylline	+ LTRA, LABA, or	Alternative:	Alternative: High-Dose ICS + LTRA <i>or</i>	Alternative: High-Dose ICS	
Preferred: SABA	Alternative:	OR	Medium-Dose ICS	Theophylline	+LTRA <i>or</i> Theophylline		
pm	Cromolyn, LTRA, Nedocromil, <i>or</i> Theophylline	Medium-Dose ICS	+ LTRA <i>or</i> Theophylline		+Oral Corticosteriod		
Patient Education and Environmental Control at Each Step							

Youths \geq 12 Years and Adults

ersistent Asthma: I	Step 6						
onsult with asthma consider consultatio	specialist step 4 or hig n at step 3.	Step 5	Preferred:				
Stop 4			Preferred: High-	High-Dose ICS +LABA			
	Step 3	Preferred: Medium-Dose ICS	Dose ICS + LABA	+Oral			
tep 2 referred: ow-Dose ICS	Preferred: Low-Dose ICS + LABA OR	+ LABA Alternative:	AND	Corticosteriod AND			
Iternative: romolyn,LTRA, edocromil, <i>or</i> heophylline	Medium-Dose ICS Alternative Low-Dose ICS + LTRA, Zileutin, <i>or</i> Theophylline	Medium-Dose ICS + LTRA, Zileutin, <i>or</i> Theophylline	Consider Olamizumab for patients with allergies	Consider Olamizumab for patients with allergies			

Patient Education and Environmental Control at Each Step