

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 1 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.getastmahelp.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.

Essential Information from the 2007 NHLBI Guidelines for the Diagnosis and Treatment of Asthma Expert Panel 3 Report



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

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

1.866.EZLUNGS (1.866.395.8647)
www.getastmahelp.org

Children 0 to 4 Years

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment	Symptoms	≤2 days/wk	>2 days/wk not daily	Daily	Throughout day
	Nighttime Awakenings	0	1-2x /month	3-4x /month	>1x /wk
	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 requiring oral steroids	0-1/year	≥2 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 exacerbation. Frequency & severity may fluctuate over time for patient of any severity class.			
Recommended Step for Initiating Treatment		Step 1	Step 2	Step 3	
		Re-evaluate control in 2-6 weeks and adjust therapy accordingly.			

Children 5 to 11 Years

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment	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	Daily	Several times daily
	Interference with Normal Activity	None	Minor limitation	Some limitation	Extremely limited
	Lung Function	Normal FEV ₁ btwn exacerbations			
	FEV ₁ or Peak Flow	>80%	>80%	60-80%	<60%
	FEV ₁ /FVC	>85%	>80%	75-80%	<75%
Risk	Exacerbations requiring oral steroids	0-1 /year	≥2 /year		
		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			
Recommended Step for Initiating Treatment		Step 1	Step 2	Step 3	
		Re-evaluate control in 2-6 weeks and adjust therapy accordingly.			

Youths ≥ 12 Years and Adults

COMPONENTS OF SEVERITY		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment	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	Normal FEV ₁ btwn exacerbations			
	FEV ₁	>80%	>80%	60-80%	<60%
	FEV ₁ /FVC	Normal	Normal	Reduced 5%	Reduced >5%
Risk	Exacerbations requiring oral steroids	0-1 /year	≥2 /year		
		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			
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/wk but not >1 /day	>2 days/wk or many times on ≤2 days/wk	Throughout day
	Nighttime Awakenings	≤1x /month	>1x /month	>1x /wk
	SABA Use for Symptoms	≤2 days/wk	>2 days/wk	Several times /day
	Interference with Normal Activity	None	Some limitation	Extremely limited
Risk	Exacerbations requiring oral steroids	0-1x /year	2-3x /year	>3x /year
	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		<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 wks If no clear benefit in 4-6 wks, consider alternative diagnosis or adjust therapy. 	<ul style="list-style-type: none"> Consider oral steroids Step up 1-2 steps

COMPONENTS OF CONTROL		Classification of Asthma Control		
		Well Controlled	Not Well Controlled	Very Poorly Controlled
Impairment	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
	SABA Use for Symptoms	≤2 days/wk	>2 days/wk	Several times /day
	Interference with Normal Activity	None	Some Limitation	Extremely Limited
	FEV ₁ or Peak Flow	>80%	60-80%	<60%
	FEV ₁ /FVC	>80%	75-80%	<75%
Risk	Exacerbations requiring oral steroids	0-1x /year	≥2x /year	
	↓ Lung Growth	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		<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 wks Adjust therapy accordingly 	<ul style="list-style-type: none"> Consider oral steroids Step up 1-2 steps

COMPONENTS OF CONTROL		Classification of Asthma Control		
		Well Controlled	Not Well Controlled	Very Poorly Controlled
Impairment	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
	Interference with Normal Activity	None	Some limitation	Extremely limited
	FEV ₁ or Peak Flow	>80%	60-80%	<60%
	Validated Questionnaires			
	ATAQ	0	1-2	3-4
	ACQ	≤0.75	≥1.5	N/A
	ACT	≥20	16-19	≤15
Risk	Exacerbations requiring oral steroids	0-1 /year	≥2 /year	
	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		<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 wks. 	<ul style="list-style-type: none"> 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	Persistent Asthma: Daily Medication Consult with asthma specialist step 3 or higher. Consider consultation at step 2				Step 6 Preferred: High-Dose ICS + Oral Corticosteroid + LABA or Montelukast
	Step 2	Step 3	Step 4	Step 5	
Step 1	Preferred: Low-Dose ICS Alternative: LTRA Cromolyn	Preferred: Medium-Dose ICS	Preferred: Medium-Dose ICS + LABA or Montelukast	Preferred: High-Dose ICS + LABA or Montelukast	

Patient Education and Environmental Control at Each Step

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: Daily Medication Consult with asthma specialist step 4 or higher. Consider consultation at step 3.				Step 6 Preferred: High-Dose ICS + LABA + Oral Corticosteroid Alternative: High-Dose ICS + LTRA or Theophylline
	Step 2	Step 3	Step 4	Step 5	
Step 1	Preferred: Low-Dose ICS Alternative: Cromolyn, LTRA, Nedocromil, or Theophylline	Preferred: Low-Dose ICS + LTRA, LABA, or Theophylline OR Medium-Dose ICS	Preferred: Medium-Dose ICS + LABA Alternative: Medium-Dose ICS + LTRA or Theophylline	Preferred: High-Dose ICS + LABA Alternative: High-Dose ICS + LTRA or Theophylline	

Patient Education and Environmental Control at Each Step

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: Daily Medication Consult with asthma specialist step 4 or higher. Consider consultation at step 3.				Step 6 Preferred: High-Dose ICS + LABA + Oral Corticosteroid AND Consider Olamizumab for patients with allergies
	Step 2	Step 3	Step 4	Step 5	
Step 1	Preferred: Low-Dose ICS Alternative: Cromolyn, LTRA, Nedocromil, or Theophylline	Preferred: Low-Dose ICS + LABA OR Medium-Dose ICS + LTRA, Zileutin, or Theophylline	Preferred: Medium-Dose ICS + LABA Alternative: Medium-Dose ICS + LTRA, Zileutin, or Theophylline	Preferred: High-Dose ICS + LABA AND Consider Olamizumab for patients with allergies	

Patient Education and Environmental Control at Each Step