

Tools for  
Assessing Asthma  
Educational Materials





## INTRODUCTION

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The enclosed tools were developed by the Allies Against Asthma Latino Workgroup to assess asthma educational materials written in Spanish. All tools were based on established health education and asthma guidelines. (For complete references, please see page 26.) They have been adapted for general use and compiled in this document so that others may be able to use them.

These tools can be used to evaluate existing health educational materials or as a reference for developing new materials. Several of the tools may be applied to materials addressing other health topics and/or written in other languages. When using these tools, you should determine your own standards regarding what will be considered acceptable. The tools will allow you to judge various aspects of the materials against these standards and/or determine how materials compare to each other.

For additional information on the Allies Latino Workgroup, please go to [www.AsthmaResourceBank.net](http://www.AsthmaResourceBank.net).

## CONTENTS

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### **3 Basic Fact Sheet**

*Purpose: Document basic information about each item being reviewed*

### **Section One: Tools to Assess Format, Language, and Cultural Appropriateness**

*Purpose: Determine whether materials meet a set of minimum criteria*

#### **4 Format Screening Tool**

#### **5 Format Score Sheet**

#### **7 Spanish Language Score Sheet**

#### **8 Cultural Appropriateness Score Sheet**

### **Section Two: Tools to Assess Asthma-Specific Content**

*Purpose: Determine whether materials address key asthma topics*

#### **9 Key Asthma Topics: Brief List**

*This tool is most useful when applied to brief general educational materials such as brochures or fact sheets.*

#### **11 Key Asthma Topics: Comprehensive List**

*This tool is most useful when applied to lengthy general educational materials or to topic-specific materials.*

### **Section Three: Additional Information**

#### **26 History, Contact Information, and Acknowledgements**

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*Support for this project was provided by a grant from The Robert Wood Johnson Foundation in Princeton, New Jersey. Allies Against Asthma (AAA) is a project of The Robert Wood Johnson Foundation that provides support and funding for seven community-based coalitions to develop and sustain community-wide asthma control and prevention systems. Direction and Technical Assistance is provided by the National Program Office at the Center for Managing Chronic Disease, University of Michigan School of Public Health.*



# BASIC FACT SHEET

Title(s): \_\_\_\_\_

Produced/Developed by: \_\_\_\_\_

Date of Production: \_\_\_\_\_

Cost: \_\_\_\_\_

Reading Level: \_\_\_\_\_

<p><b>Format</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Fact Sheet</li> <li><input type="checkbox"/> Brochure (1 page, unbound)</li> <li><input type="checkbox"/> Booklet (more than one page)</li> <li><input type="checkbox"/> Other (specify)</li> </ul>	<p><b>Part of a larger set of materials?</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>	<p><b>Written in original language?</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Don't Know</li> </ul>
<p><b>Target Audience</b> Note any defining characteristics such as age, ethnicity, relation to person with asthma.</p>	<p><b>Educational Objective(s)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Improve knowledge</li> <li><input type="checkbox"/> Modify behavior</li> <li><input type="checkbox"/> Perform skill</li> <li><input type="checkbox"/> Reinforce knowledge/behavior</li> <li><input type="checkbox"/> Change attitude</li> <li><input type="checkbox"/> Improve compliance</li> <li><input type="checkbox"/> Other (specify)</li> </ul>	<p><b>Asthma Topic</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> General asthma information</li> <li><input type="checkbox"/> Asthma in kids (for adult use)</li> <li><input type="checkbox"/> Asthma in kids (for child use)</li> <li><input type="checkbox"/> Asthma triggers</li> <li><input type="checkbox"/> Peak flow meters</li> <li><input type="checkbox"/> Medications</li> <li><input type="checkbox"/> Medication delivery devices</li> <li><input type="checkbox"/> Other (specify)</li> </ul>

Comments: \_\_\_\_\_

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Reviewer(s): \_\_\_\_\_

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Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# FORMAT SCREENING TOOL

**FORMAT**

Check if Yes

1. Text is presented in short sentences/short paragraphs.	
2. Headers or topic captions are used to tell readers what is coming next.	
3. Text uses bullets, titles, underline, and/or bold to reinforce important points.	
4. Text is broken up with visuals to emphasize key points.	
5. Font is easy to read.	
6. Good use of white space.	
<b>Total</b>	
<b>Acceptable?</b>	



Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# FORMAT SCORE SHEET

*Score only applicable criteria.*

A. TEXT	SCORE 0=Poor, 1=Fair, 2=Good	POINTS POSSIBLE 2 or 0 (if not applicable)
A1. Educational objective is clearly stated in the beginning.		
A2. Vocabulary is familiar or explained for readers; lay language is used.		
A3. Summary is provided at the end to review major points.		
A4. Sentences and paragraphs are short.		
A5. Writing style is active voice.		
<b>Section Subtotal</b>		
B. LAYOUT		
B1. Layout and organization is logical, consistent, and easy to follow.		
B2. Lists are grouped or "chunked".		
B3. No more than 5 items are presented without a subheading.		
B4. Headers or topic captions are used to tell readers what is coming next.		
B5. Bullets, titles, underline, or bold are used to reinforce important points.		
B6. Text is broken up with visuals to emphasize key points.		
B7. Topics are kept together, not broken by page or column divide.		
<b>Section Subtotal</b>		
C. GRAPHICS		
C1. Cover graphics show purpose.		
C2. Graphics are appropriate to topic.		
C3. Graphics reinforce educational objective.		
C4. Graphics are simple, uncluttered.		
C5. Graphics highlight key messages.		
C6. Lists, tables, or other figures are explained.		
C7. Captions are provided.		
C8. Illustrations are on the same page as related text.		
<b>Section Subtotal</b>		

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Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# FORMAT SCORE SHEET continued

D. APPEARANCE	SCORE	POINTS POSSIBLE
	0=Poor, 1=Fair, 2=Good	2 or 0 (if not applicable)
D1. Appearance is attractive and appealing to audience.		
D2. Font size is at least 12 point.		
D3. NO ALL CAPS.		
D4. Font is easy to read.		
D5. Use of color supports the message.		
D6. Color is appropriate for intended group.		
D7. High contrast between type and paper, no ghosted images.		
D8. High print quality.		
D9. Good use of white space.		
<b>Section Subtotal</b>		
<b>Totals</b>		
<b>Percentage Score (Total Score/ Total Points Possible)</b>		<b>%</b>
<b>Acceptable?</b>		



Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# SPANISH LANGUAGE SCORE SHEET

*Score only applicable criteria.*

SPANISH LANGUAGE	SCORE	POINTS POSSIBLE
	0=Poor, 1=Fair, 2=Good	2 or 0 (if not applicable)
1. Correct use of gender and plural. <i>(adjectives, nouns, pronouns, verbs, adverbs, prepositions)</i>		
2. Correct use of Spanish-specific spelling and punctuation. <i>(accents, reverse interrogation and exclamation points, capitalization, division of words at the margin)</i>		
3. Correct use of syntax. <i>(order of words in sentence, complete sentences, verb tense)</i>		
4. Text reflects a balance between active and passive voice.		
5. Consistent use of the 2nd person throughout. <i>("usted" or "tu")</i>		
<b>Totals</b>		
<b>Percentage Score (Total Score/ Total Points Possible)</b>		%
<b>Acceptable?</b>		



Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# CULTURAL APPROPRIATENESS SCORE SHEET

*Score only applicable criteria.*

<b>CULTURAL APPROPRIATENESS</b>	SCORE 0=Poor, 1=Fair, 2=Good	POINTS POSSIBLE 2 or 0 (if not applicable)
1. Concepts are presented in an appropriate context.		
2. Images and examples present the culture in a positive way.		
4. Graphics and illustrations reflect the intended audience.		
5. Scenes/Presentation are culturally relevant.		
6. Information is culturally useful.		
<b>Totals</b>		
<b>Percentage Score (Total Score/ Total Points Possible)</b>		%
<b>Acceptable?</b>		





Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: BRIEF LIST\*

*This tool is most useful when applied to brief general educational materials such as brochures or fact sheets.*

*In the first column, check if item addresses each topic.*

*In the second column, check if information included is accurate.*

*Note: This tool is designed to assess asthma content only, not wording. Messages should be worded for cultural and linguistic appropriateness.*

A. ASTHMA DEFINITIONS	Topic is Addressed	Information is Accurate
A1. Asthma is a chronic inflammatory disorder of the airways in which three things happen:		
A1-a. The inner lining of the airways swells (becomes inflamed) and becomes irritated,		
A1-b. Mucus may be produced, which can plug the airways, and		
A1-c. The muscles around the airways tighten at times, making the opening in the airways smaller.		
A2. These three things obstruct your airways, making it harder to breathe. When you have asthma, the airways become obstructed.		
A3. Asthma cannot be cured but can be controlled.		
A4. Asthma control means being free of symptoms, maintaining normal activity levels, and maintaining (near) normal pulmonary function.		
A5. Asthma can be fatal.		
<b>Section Subtotal</b>		
B. SIGNS AND SYMPTOMS		
B1. Common signs and symptoms of asthma include coughing (day or night or with exercise), wheezing, trouble breathing/hard to breathe/shortness of breath, difficulty walking or talking due to shortness of breath, and tightness in the chest.		
B2. Development or worsening of asthma symptoms signal the onset of an asthma attack.		
B3. During an asthma attack you should follow the Asthma Action Plan given to you by your health care provider.		
B4. Your Asthma Action Plan should include:		
B4-a. When to take medication,		
B4-b. How to know whether the medication is working, and		
B4-c. What to do if the medication does not work.		
<b>Section Subtotal</b>		
C. TRIGGERS		
C1. Triggers are things that may worsen or cause asthma symptoms, episodes, or attacks in some people.		
C2. It is important to identify the irritants or allergens to which an individual with asthma is sensitive.		

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\* References: NHLBI/NAEPP Guidelines (1997, 1999); Chicago Asthma Consortium Patient Education Materials Tool; Berland G et al, JAMA (2001)285: 2612-2621. For additional information go to [www.AsthmaResourceBank.net](http://www.AsthmaResourceBank.net)



## KEY ASTHMA TOPICS: BRIEF LIST *continued*

<i>Triggers continued</i>	Topic is Addressed	Information is Accurate
C3. In almost all cases, asthma can be controlled by following a proper medical treatment plan and avoiding triggers to which an individual with asthma is sensitive.		
C4. Common asthma triggers include: tobacco and other smoke, viral infections (colds & flu), exercise, emotions, changes in weather, air pollution, and allergies to animals (pets, rodents), mold, dust mites, or cockroaches.		
<b>Section Subtotal</b>		
<b>D. MEDICATIONS</b>		
D1. Quick relief (rescue) medication (e.g., Albuterol) is used to treat acute symptoms (coughing, wheezing, difficulty breathing, chest tightness) and to prevent exercise-induced bronchospasm.		
D2. Long-term control medications (controllers) (e.g., inhaled corticosteroids, long acting beta-agonists, leukotriene modifiers) are used daily for long periods of time to control inflammation and to prevent exacerbations.		
D3. All asthma medicines are safe when taken in the usually prescribed doses. Inhaled steroids, taken in the usually prescribed doses, do not affect children's growth.		
D4. Using a spacer device/holding chamber will improve delivery of inhaled medications to the lungs when using a metered dose inhaler.		
<b>Section Subtotal</b>		
<b>E. CHILD &amp; FAMILY ROLES</b>		
E1. Take your child to his/her regularly scheduled doctor appointments even when he/she is feeling well.		
E2. At each doctor visit, even if you are not asked:		
E2-a. Tell your doctor how frequently you/your child are having symptoms.		
E2-b. Describe how medications are being used.		
E2-c. Ask questions until you understand everything.		
E2-d. Discuss any of your fears or concerns.		
E3. It is important to take medications and avoid triggers as directed.		
E4. Ask your doctor for and follow a written Asthma Action Plan, a plan for patient self-management.		
<b>Totals</b>		
<b>Acceptable?</b>		



Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST\*

This tool is most useful when applied to lengthy general educational materials or to topic-specific materials for which only one category might be relevant.

In the first column, check if item addresses each topic.

In the second column, check if information included is accurate.

Notes: **The most important topics are in bold text.**

This tool is designed to assess asthma content only, not wording. Messages should be worded for cultural and linguistic appropriateness.

Adapt as necessary to suit your needs.

Each section begins on a new page. Sections included are:

I. Definition of Asthma

II. Recognition of and Response to Asthma

III. Expectations for Asthma

IV. Triggers

V. Medications and Delivery Devices

VI. Peak Flow Monitoring

VII. Partnership with Family and Health Care

VIII. Asthma and Children in School, Day Care, and After-School Programs

I. DEFINITION OF ASTHMA	Topic is Addressed	Information is Accurate
<b>A. What happens in your lungs with asthma?</b>		
1. Asthma is a chronic inflammatory disorder of the airways in which the <b>lining of the airways swells (becomes inflamed).</b>		
2. Inflammation in asthma contributes to airway hyper-responsiveness in which <b>muscles around the airways tighten, making the opening in the airways smaller.</b>		
3. Inflammation in asthma contributes to <b>production of mucus</b> which can plug the airways.		
<b>4. Airways become obstructed.</b>		
5. Airway inflammation causes recurrent episodes of asthma symptoms.		
<b>B. What are other important facts about asthma?</b>		
1. The cause is not known.		
2. Speculated to be a combination of genetic (hereditary) and environmental factors (exposures).		
<b>3. Asthma cannot be cured but can be controlled.</b>		
<b>4. Asthma control means being free of symptoms, maintaining normal activity levels, and maintaining (near) normal pulmonary function.</b>		
<b>5. Asthma can be fatal.</b>		
<b>6. Asthma symptoms may be due to exposure to triggers or may occur due to unknown causes.</b>		
<b>C. Asthma Severity</b>		
1. Asthma severity is defined as either <i>intermittent</i> or <i>persistent</i> based on symptoms when the child is not using appropriate controller medicine:		
1a. Children with <i>intermittent asthma</i> have day symptoms twice a week or less and/or night symptoms twice a month or less		
1b. Children with <i>persistent asthma</i> have day symptoms and/or need to use a rescue medication more than twice a week or wake up with symptoms during the night more than twice a month.		

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\* References: NHLBI/NAEPP Guidelines (1997, 1999); Chicago Asthma Consortium Patient Education Materials Tool; Berland G et al, JAMA (2001)285: 2612-2621. For additional information go to [www.AsthmaResourceBank.net](http://www.AsthmaResourceBank.net)



Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Asthma Severity continued</i>	Topic is Addressed	Information is Accurate
<b>2. Symptoms may change over time.</b>		
<b>3. Children with intermittent symptoms may have severe exacerbations or flare-ups.</b>		
4. Children with persistent asthma may have mild, moderate, or severe symptoms/severity:		
4a. Children with mild persistent asthma have day symptoms more than twice a week but less than once a day and/or night symptoms more than twice a month.		
4b. Children with moderate persistent asthma have daily symptoms and/or night symptoms more than one night per week.		
<b>SECTION SUBTOTAL</b>		





Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

II. RECOGNITION OF AND RESPONSE TO ASTHMA	Topic is Addressed	Information is Accurate
<b>A. Common signs and symptoms of asthma</b>		
1. <b>Coughing</b> (day or night or with exercise)		
2. <b>Wheezing</b>		
3. <b>Trouble breathing/Hard to breathe/Shortness of breath</b>		
4. Trouble sleeping/Nocturnal awakening		
5. <b>Exercise intolerance</b>		
6. <b>Tightness in chest</b>		
7. An asthma attack is persistence of the above symptoms.		
<b>B. Recognition of an asthma attack</b>		
1. <b>Extreme and persistent difficulty breathing</b>		
2. <b>Shortness of breath at rest</b>		
3. <b>Severe and persistent chest tightness</b>		
4. <b>Uncontrolled/persistent cough</b>		
5. Extreme tiredness		
6. Missing these signs of an asthma attack can lead to death.		
<b>C. Response to an asthma attack</b>		
1. <b>Administer rescue/quick relief medication immediately.</b>		
2. <b>Follow instructions given to you by your health care provider (e.g., Asthma Action Plan).</b>		
3. Your Asthma Action Plan should include:		
3a. When to take medication,		
3b. How to know whether the medication is working, and		
3c. What to do if the medication does not work:		
3c-i. When/if to call your physician		
3c-ii. When to go to the nearest emergency department or call 911		

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Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Recognition of and Response to Asthma continued</i>	Topic is Addressed	Information is Accurate
<b>D. Recognition of life-threatening symptoms</b>		
<b>1. The following are signs of life-threatening asthma symptoms:</b>		
<b>1a. Lips and/or fingernails turn blue,</b>		
<b>1b. Trouble walking or talking due to shortness of breath, and/or</b>		
<b>1c. Unresponsiveness.</b>		
<b>2. Untreated, life-threatening symptoms are likely to lead to death</b>		
<b>E. Response to life-threatening symptoms</b>		
<b>1. What to do in a life-threatening emergency:</b>		
<b>1a. Administer rescue/quick relief medication immediately.</b>		
<b>1b. Call 911 or go immediately to the nearest Emergency Department .</b>		
<b>SECTION SUBTOTAL</b>		



Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

III. EXPECTATIONS FOR ASTHMA	Topic is Addressed	Information is Accurate
<b>A. Definition of asthma control</b>		
1. In the majority of cases, asthma can be controlled when following a proper medication regimen and/or avoiding triggers to which a child with asthma is sensitive.		
<b>B. Control of asthma symptoms</b>		
1. When following a proper medication regimen and/or avoiding triggers to which a child with asthma is sensitive, a child should experience:		
1a. Minimal use of inhaled short-acting beta-agonists (< 1 use/day, < 1 canister/month),		
1b. No (or minimal) coughing, difficulty breathing, wheezing or chest-tightness during the day or waking up at night because of asthma symptoms, and		
1c. No acute episodes of asthma that require unscheduled physician visits, emergency room visits or hospitalizations.		
<b>C. Activity limitations</b>		
1. When following a proper medication regimen and/or avoiding triggers to which a child with asthma is sensitive, a child should be able to fully participate in physical activities:		
1a. No limitations on activities including play, sports, exercise, or other school and daycare activities		
1b. No or minimal absences due to asthma from school, activities, or work for the child and parent or caregiver		
<b>SECTION SUBTOTAL</b>		



# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

IV. TRIGGERS	Topic is Addressed	Information is Accurate
<b>A. Definition and Identification of Triggers</b>		
1. Triggers are things that may worsen or cause asthma symptoms, episodes, or attacks in some people.		
2. It is important to identify the irritants or allergens to which an individual with asthma is sensitive.		
<b>B. Common Triggers</b>		
1. Tobacco and other smoke		
2. Viral infections (colds and flu)		
3. Exercise		
4. Allergies to:		
4a. Animal dander (pets)		
<b>4b. Mold</b>		
<b>4c. Dust mites</b>		
<b>4d. Pollen</b>		
<b>4e. Cockroaches</b>		
<b>4f. Certain foods</b>		
5. Changes in weather		
6. Cold air		
7. Emotions		
8. Strong odors/Irritants (perfumes, cleaning agents, etc.)		
9. Air Pollution		
10. Untreated aggravating conditions (e.g., sinusitis, allergies, and reflux/GERD)		
<b>C. Strategies to control/reduce key environmental triggers</b>		
1. Families should be educated about effective exposure reduction strategies for key environmental triggers to which their child is sensitive, including:		
<b>1a. Tobacco or other smoke:</b>		
<b>1a-i. Permit no smoking around the child or in the child's home.</b>		
1a-ii. Help parents and caregivers stop smoking.		
1a-iii. Eliminate use of wood stoves and fireplaces.		

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Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Triggers continued</i>	Topic is Addressed	Information is Accurate
<b>1b. Dust mites:</b>		
<b>1b-i. Encase the child's mattress and box springs in an allergen-impermeable cover.</b> <small>NOTE: Although studies have not demonstrated the effectiveness of using mattress covers by themselves, they have been shown to be effective in combination with other interventions.</small>		
<b>1b-ii. Cover the pillow in an allergen-impermeable case.</b>		
1b-iii. Wash bedding weekly in hot water.		
<b>1c. Cockroaches:</b>		
<b>1c-i. Do not leave food or garbage exposed.</b>		
<b>1c-ii. Reduce indoor humidity to &lt; 50%.</b>		
<b>1c-iii. Fix leaky faucets and pipes.</b>		
<b>1c-iv. Take measures to eradicate (poison, baits, powders, gels, traps or paste).</b>		
<b>1d. Cat dander:</b>		
<b>1d-i. Remove the cat from the home.</b>		
1d-ii. If removal is not possible, keep the cat out of the child's bedroom and keep the bedroom door closed.		
1d-iii. Keep the cat off upholstered furniture and carpets.		
<b>SECTION SUBTOTAL</b>		



# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

V. MEDICATIONS AND DELIVERY DEVICES	Topic is Addressed	Information is Accurate
<b>A. What are rescue (quick relief) medications?</b>		
1. Rescue (quick relief) medications are used to treat acute symptoms (coughing, wheezing, difficulty breathing, chest tightness) and to prevent exercise-induced bronchospasm.		
2. Rescue medications include:		
2a. Short-acting inhaled or oral bronchodilators or beta-agonists that open the airways (breathing passages) (Albuterol, Proventil, Ventolin®)		
2b. Short term (3-7 day therapy) oral corticosteroids that are effective to treat exacerbations (Prednisone®, Prelone®)		
2c. Anticholinergics that have a possible additive benefit to inhaled beta-agonists for severe exacerbations (Atrovent®, Ipratropium Bromide)		
<b>B. What are long-term control medications (controllers)?</b>		
1. Long-term control medications (controllers) are used daily and chronically (for long periods of time) to maintain control of persistent asthma and to prevent exacerbations.		
2. Long-term control medications include:		
2a. Inhaled corticosteroids, the most potent anti-inflammatory medications that reduce inflammation in the airways. Inhaled corticosteroids include:		
2a-i. AeroBid®, Flunisolide		
2a-ii. Beclovent®, Vanceril®, Beclomethasone		
2a-iii. Pulmicort®, Budesonide		
2a-iv. Flovent®, Fluticasone		
2a-v. Azmacort®, Triamcinolone		
2b. Inhaled cromolyn (Intal®, Tilade®, Nedocromil), an alternative anti-inflammatory agent for younger children		
2c. Long-acting beta-agonists, which relax bronchial smooth muscle and are used as add-on therapy to inhaled corticosteroids for long-term control (Serevent®, Salmeterol, Floradil®, Formeterol)		
2d. Combination medications (Advair®, a Fluticasone and Salmeterol combination)		

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# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Medications and Delivery Devices continued</i>	Topic is Addressed	Information is Accurate
2e. Leukotriene modifiers (Singulair®, Montelukast, Accolate®, Zafirlukast), a new class of drug that can be useful in the following ways:		
2e-i. For mild persistent asthma		
2e-ii. As an add-on to inhaled steroids for moderate or severe persistent asthma		
2e-iii. To prevent exercise symptoms in children over age 6		
2f. Sustained release theophylline (Slo-bid ®, Theophylline), which can be used as add-on therapy to anti-inflammatory medications for long-term control of symptoms, especially nighttime symptoms		
2g. Daily oral corticosteroids can also be used for long-term use to treat children with severe persistent asthma but are associated with systemic effects.		
<b>C. What are the side effects of asthma medications?</b>		
<b>1. If on proper medication and taking it properly, most children should experience few or no side effects.</b>		
2. Asthma medicines, including inhaled corticosteroids, are quite safe and highly effective if taken in the recommended doses.		
3. Talk with your doctor if you have any questions or concerns about side effects from medications.		
4. <i>Inhaled</i> steroids, taken in the usually prescribed doses, do not affect children's growth. <b>Uncontrolled asthma can retard a child's growth.</b>		
<b>5. Oral steroids, on the other hand, can have significant side effects if used over the long term.</b>		
<b>6. Some people report side effects of beta agonists, inhaled bronchodilators, and theophylline including nervousness, tremors and learning difficulties, although these have not been fully demonstrated in most studies.</b>		
<b>7. The safety and efficacy of leukotriene modifiers in children under 6 years of age has not been demonstrated.</b>		
<b>D. What are asthma delivery devices and why use them?</b>		
<b>1. A metered-dose inhaler (MDI) delivers medicine into the airways where it is needed.</b>		
<b>2. A spacer device/holding chamber will improve delivery of inhaled medications to the lungs.</b>		
2a. They are required for young children.		
2b. They are strongly recommended for older children and adolescents.		
<b>3. Use of spacer devices can minimize side effects.</b>		
<b>4. A face mask may be required for younger children who cannot use a spacer with their MDI.</b>		
<b>5. Nebulizer therapy is useful when individuals cannot handle an MDI or spacer device.</b>		

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Item Number \_\_\_\_\_

Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Medications and Delivery Devices continued</i>	Topic is Addressed	Information is Accurate
<b>6. Nebulizer therapy should be used for:</b>		
<b>6a. Treatment of severe exacerbations, and/or</b>		
<b>6b. Administering high doses of beta agonist for children age 2 or less.</b>		
<b>E. What is the correct way to use a metered-dose inhaler (MDI)?</b>		
<b>1. Poor technique results in less medication getting to the airways.</b>		
2. Different MDIs may require different inhalation techniques.		
3. Generally accepted steps for using MDI:		
3a. Stand or sit up straight.		
3b. Shake your MDI to mix medicine.		
3c. Hold the MDI 2-3 finger-widths from your wide-open mouth.		
3d. Press the MDI at the same time you begin to slowly inhale.		
3e. Once your lungs are fully inflated, hold your breath for a count of 10 or longer.		
3f. Slowly exhale through your mouth.		
3g. Repeat for each puff recommended.		
3h. Rinse mouth.		
<b>F. What is the correct way to use a spacer and/or face mask?</b>		
<b>1. Correct use of a spacer and/or face mask will improve delivery of inhaled medications to the lungs.</b>		
<b>2. Use a spacer and/or face mask as instructed by your health care provider.</b>		
3. Generally accepted steps for using a spacer:		
3a. Stand or sit up very straight.		
3b. Shake the inhaler vigorously for two seconds (10 shakes).		
3c. Hold the spacer close to your mouth and breathe out naturally.		
3d. Without breathing in, place the spacer mouthpiece in your mouth and seal your lips around it.		
3e. Puff the medication into the spacer chamber one time.		
3f. Breathe in slowly through your mouth from the chamber until your lungs are fully inflated.		

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Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Medications and Delivery Devices continued</i>	Topic is Addressed	Information is Accurate
3g. Remove the spacer from your mouth and close your lips.		
3h. Hold your breath as long as possible (at least 10 seconds), then breathe out slowly.		
3i. Repeat above for each puff recommended.		
3j. Rinse mouth.		
4. Generally accepted steps for using a face mask:		
4a. Stand or sit up very straight.		
4b. Shake the inhaler vigorously for two seconds (10 shakes).		
4c. Insert inhaler into the opening in the back of the spacer.		
4d. Place mask around the child's face, making sure that both the mouth and nose are covered.		
4e. Press the inhaler once.		
4f. Maintain a good seal for 5-6 breaths after depressing inhaler.		
4g. Remove the spacer with mask.		
4h. Wait 60 seconds before repeating as prescribed.		
4i. Rinse mouth after use.		
<b>G. Alternative therapies</b>		
1. Alternative therapies for asthma (e.g., herbal remedies and chiropractic manipulation) have not been shown to be effective. Discuss with your physician.		
<b>SECTION SUBTOTAL</b>		





# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

VI. PEAK FLOW MONITORING	Topic is Addressed	Information is Accurate
<b>A. Definition and purpose of peak flow monitoring</b>		
1. <b>A peak flow meter is a portable device that measures how well you can move air out of your lungs.</b>		
2. <b>During an asthma episode, peak flow monitoring (PFM) may guide decisions about medications and when to seek care.</b>		
3. Short-term PFM may help you see changes in the severity of your asthma and can help assess the effectiveness of your medications.		
4. <b>Long-term PFM can make you aware of early changes to enable you to take action to prevent attacks.</b>		
5. PFM should be considered for patients with moderate or severe persistent asthma.		
6. Since PFM is effort dependent, it should be used along with assessment of signs and symptoms.		
<b>B. Generally accepted steps for using a peak flow meter</b>		
1. Slide pointer to the bottom of the numbered scale.		
2. Stand straight and tilt chin up.		
3. Keep fingers off the pointer and away from air exit hole(s).		
4. <b>Take a deep breath with mouth open, filling lungs completely.</b>		
5. <b>Close your lips around the mouthpiece.</b>		
6. <b>Blow out as hard and as fast as you can in a single blow.</b>		
7. The number next to the pointer is your peak expiratory flow (PEF).		
8. Repeat the steps three times.		
9. Record the highest of the three readings.		
<b>C. Purpose of personal best</b>		
1. <b>Identifying your personal best peak flow will help you know what to do when your peak flow numbers change.</b>		
2. Define individual personal best when asthma is under control:		
2a. Always use the same peak flow meter.		
2b. <b>Record PEF 2 times/day for 2 to 3 weeks.</b>		
2c. <b>Your personal best peak flow number is the highest repeating peak flow number you get over the monitoring period.</b>		

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Acceptable? \_\_\_\_\_

# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

<i>Peak Flow Monitoring continued</i>	Topic is Addressed	Information is Accurate
<b>D. Definition of peak flow zones</b>		
<b>1. Using a peak flow zone system may help with changes in therapy.</b>		
<b>2. Green zone: Asthma is under control:</b>		
2a. Current PEF is 80% to 100% of your personal best PEF.		
2b. You have no asthma symptoms.		
2c. Take asthma medications as usual following directions on your care plan.		
<b>3. Yellow Zone: Caution:</b>		
3a. Current PEF is 50% - 80% of your personal best PEF.		
3b. Some asthma symptoms are present.		
3c. Increase asthma medications following directions on your care plan.		
3d. Use rescue/relief medication(s).		
3e. Increase preventive/controller medications if directed on your care plan.		
3f. Two peak flow scores in the yellow zone within 48 hours means a change in your treatment plan is needed. Call your doctor for advice.		
<b>4. Red Zone: Medical alert:</b>		
4a. Current PEF is less than 50% of your best PEF.		
4b. Follow your plan for severe attacks.		
4c. Call your doctor or go to the emergency room.		
<b>SECTION SUBTOTAL</b>		



# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

VII. PARTNERSHIP WITH FAMILY AND HEALTH CARE	Topic is Addressed	Information is Accurate
<b>A. Physician (health care provider) responsibilities</b>		
<b>1. Partnerships of patients, family members and other caregivers, and health care providers are essential to control the patient's asthma.</b>		
<b>2. Physicians have the responsibility to promote open communication and ensure that patients and their families:</b>		
<b>2a. Receive basic educational messages and verbal or written asthma management plans.</b>		
2b. Have a basic and accurate foundation of knowledge about asthma.		
<b>2c. Understand the treatment approach.</b>		
2d. Have the self-management skills necessary to monitor the disease objectively and take medication effectively.		
<b>B. Definition and purpose of written Asthma Action (Treatment) Plans</b>		
<b>1. A written Asthma Action Plan is:</b>		
<b>1a. A plan for patient self-management that provides instruction on how to respond to symptoms.</b>		
1b. Recommended as part of an educational effort for patient self-management.		
1c. Especially useful for patients with moderate or severe persistent asthma or with a history of severe asthma attacks.		
<b>C. Patient/family responsibilities</b>		
<b>1. It is important to take medications and avoid triggers as directed.</b>		
<b>2. Take your child to his/her regularly scheduled doctor appointments even when he/she is feeling well.</b>		
3. Be open with your health care providers and tell them things even if they seem embarrassing or unimportant.		
<b>4. At each doctor visit, even if you are not asked:</b>		
<b>4a. Tell your doctor how frequently you/your child are having symptoms.</b>		
<b>4b. Describe how medications are being used.</b>		
<b>4c. Ask questions until you understand everything.</b>		
<b>4d. Discuss any of your fears or concerns.</b>		
5. Ask your provider for written guidelines on how to use your medications.		
6. See your health care provider if your child is not feeling well or you have questions.		
<b>SECTION SUBTOTAL</b>		





Item Number \_\_\_\_\_

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# KEY ASTHMA TOPICS: COMPREHENSIVE LIST

## continued

VIII. ASTHMA AND CHILDREN IN SCHOOL, DAY CARE, AND AFTER-SCHOOL PROGRAMS	Topic is Addressed	Information is Accurate
<b>A. What parents/children with asthma should expect from schools</b>		
1. Children should have prompt, reliable access to recommended medications before exercise and for emergencies.		
<b>2. Schools should be prepared to address a child's asthma, including:</b>		
<b>2a. Institution of an asthma management plan for children with asthma including an Asthma Action Plan for handling exacerbations</b>		
2b. Identification of those factors that make the student's asthma worse so the school may help the student avoid exposure		
3. Schools should educate personnel and students regarding a possible relationship between asthma and exercise, smoke, external pollution, pets, and other triggers.		
<b>B. Parent/Family responsibilities</b>		
1. Be familiar with the child's triggers and work with schools to remove exposure.		
<b>2. Ask your doctor for written instructions (an Asthma Action Plan) for your child's medication at home and at school. Provide and discuss the plan with individuals who work with children and/or are responsible for administering medication including the school nurse, teachers, coaches, and/or administrators.</b>		
<b>SECTION SUBTOTAL</b>		



## ADDITIONAL INFORMATION

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### HISTORY

In 2001, representatives from the AAA coalitions formed a “Latino Workgroup” to address the specific needs of their Spanish-speaking communities. The Latino Workgroup initiated a process to gather and review educational materials available in Spanish in order to assess the quality and relevance of materials for their programs. The tools presented here have been adapted for general use from the original tools developed for and used throughout the Latino Workgroup review process.

Additional information on the Latino Workgroup is available at: [www.AsthmaResourceBank.net](http://www.AsthmaResourceBank.net).

### DEVELOPMENT NOTES

The Basic Fact Sheet, Format Screening Tool, Format Score Sheet, and Cultural Appropriateness Score Sheet were based on generally accepted standards for health education materials. The Spanish Language Score Sheet was based on generally accepted standards for low-literacy Spanish health education materials. These tools were developed in collaboration with a bilingual native Spanish-speaking health educator who specializes in developing linguistically and culturally appropriate health education materials.

The checklists of Key Asthma Topics were based on the following:

- National Heart Lung and Blood Institute Guidelines
  - *NHLBI/NAEPP, Guidelines for the Diagnosis and Treatment of Asthma, 1997*
  - *NHLBI/NAEPP, Pediatric Asthma: Guidelines for Managing Asthma in Children, 1999*
- Existing instruments developed by the Chicago Asthma Consortium
  - *Chicago Asthma Consortium Patient Education Materials Tool*
- Existing instruments developed by RAND
  - *Berland G, Elliot M, Morales L, Algazy J, Kravitz R, Broder M, Kanouse D, Munoz J, Puyol JA, Lara M, Maltkins K, Yang H, McGlynn E. Health Information on the Internet: Accessibility, quality, readability in English and Spanish. JAMA (2001), 285: 2612-2621.*

The checklists were reviewed by all members of the Latino Workgroup as well as several national asthma experts (physicians and health educators). Short and long versions of the checklists were developed for widespread dissemination.

### CONTACT INFORMATION

We hope these tools are useful to you. We would love to receive feedback about how you use the tools and/or how they could be improved. For more information, or to share your experience, please see our website: [www.AsthmaResourceBank.net](http://www.AsthmaResourceBank.net) or contact [asthma@umich.edu](mailto:asthma@umich.edu).

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