

**Consortium on Children's Asthma Camps
Parent Education Curriculum
"Building Self-Management Skills in a Child with Asthma"**

Background

Founded in 1988, the Consortium on Children's Asthma Camps has taken an important role in coordinating the activities of asthma camps nationwide, promoting the quality of medical care and asthma education, and advancing the positive impact of the camps on the lives of children with asthma.

During the spring 2005, Genentech, Inc. and Novartis provided an unrestricted educational grant to the Consortium on Children's Asthma Camps to develop, pilot test, and evaluate a parent component for asthma camps.

This curriculum is based on the concerns, questions, and advice from parents of children who have attended asthma camps in the past, asthma experts, and life/family specialists collected through focus groups and key informant interviews.

Purpose

The purpose of this curriculum is to strengthen the capacity of parents and caregivers to assist children in managing their asthma after attending a summer asthma camp. Specifically, this curriculum outlines the 7 roles of a parent/caregiver of child with asthma. While there is a wealth of information a parent could learn about their child's asthma, it is important that the parent/caregiver understand their specific asthma management role and be able to carry out that role effectively and consistently.

This curriculum does not focus on the basics of asthma. Rather, this curriculum:

1. Highlights what asthma self-management skills children learn at asthma camp
2. Describes the 7 roles a parent/caregiver must fulfill to support their child's asthma self-management
3. Applies these 7 roles in the parent/caregiver's day-to-day routines
4. Builds problem-solving skills
5. Addresses the psychosocial issues of raising a child with asthma.

This curriculum is geared toward adult learners. Therefore, this curriculum applies concepts to the daily lives of parents/caregivers. To assist with learning retention, discussion questions and problem-solving opportunities are provided.

Curriculum Delivery

This curriculum can be delivered in 60 to 90 minutes, depending on the amount of participation and discussion among the parents/caregivers.

Audiovisual equipment needed:

1. An overhead projector and transparencies OR a laptop computer with an LCD projector
2. Flip chart with markers

Encourage discussion among participants by setting chairs in a large circle, instead of classroom style.

All materials and handouts are provided, including:

- Disk containing the PowerPoint slides and speaker notes
- Asthma trigger kit
- Straws (30 are included)
- Posters of normal airways and airways during an asthma episode
- Cross-section of a normal airway and airway during an asthma episode
- MDI placebo and spacer
- Diskus placebo
- Handouts
 - *Take the Asthma Control Test and Know Your Asthma Score*
 - *Preparing for an Asthma Doctor Visit/Questions to Ask Your Asthma Doctor*
 - *American Lung Association Asthma Action Plan*

Who should deliver this curriculum

This curriculum should be delivered by a peer educator who is knowledgeable in managing family chronic diseases, is a skilled group facilitator, is able to present at a low healthy literacy level, and is of the same race and/or culture as the majority of parents/caregivers attending the session. An asthma expert/medical professional should support the peer educator by providing an asthma-related question/answer opportunity at the end of the education session.

Helpful ideas when planning and delivering this curriculum

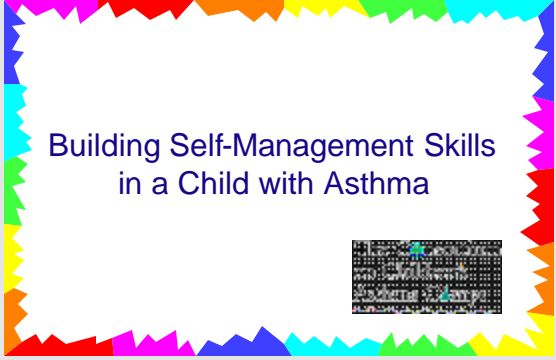
- Begin marketing this education session at least three weeks in advance.
- Hold parent/caregiver education sessions for specific age groups of children with asthma together (i.e. hold education session for the parents/caregivers of teens together and parents/caregivers of 8-11 year olds together). Parents will relate more with each other.
- Advertise and provide incentives for parents/caregivers to attend. Be sure there is one incentive for each family attending. Examples may include movie tickets for every family member, movie rental certificates, etc.
- Do not be discouraged in providing this curriculum to groups of 8-12 parent/caregivers. Small groups encourage discussion and problem solving among participants.
- If providing this curriculum to a large group of parents/caregivers, the posters, airway cross-section, and other "hands-on items" may not work. In these instances, the facilitator will need to rely upon the PowerPoint graphics.
- Parents may have a lot of questions specific to their child's asthma throughout this education session. Instead of taking questions randomly, consider jotting down on the flip chart the questions that could take the group on a tangent. By writing down the questions, the facilitator acknowledges

the value of the parent/caregiver's question, but allows the facilitator to come back and answer the question later when it will not disrupt the flow of the planned session. Another way of handling these questions would be to state at the beginning that there will be an opportunity to ask questions about their child's asthma care to an asthma specialist at the end of the education session. It may be advantageous to have an asthma specialist available during the question and answer period.

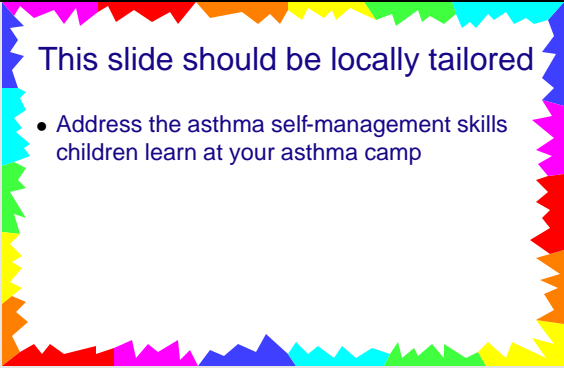
- Tailor this curriculum for local use. There are several places in this curriculum where it is appropriate to tailor the curriculum to local information. These places are highlighted in blue.

Step-by-step Curriculum Guide

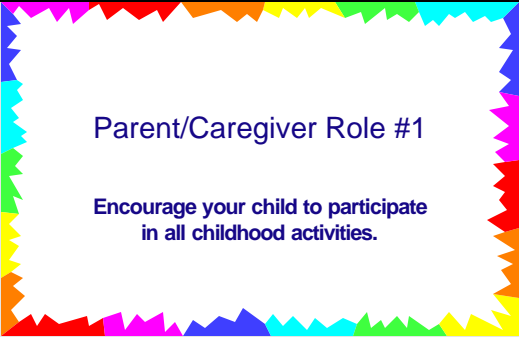
***Please note that comments/instructions to the facilitator are in italics.*

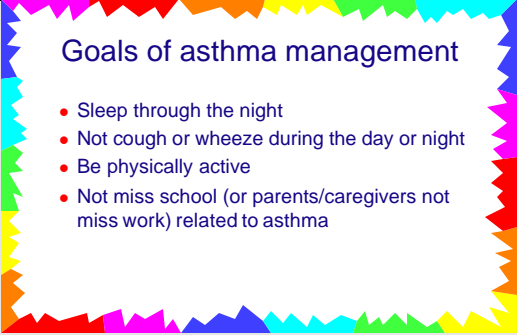

Welcome, introduction, and meeting the needs of your audience	
Slide	 <p>Include your asthma camp and other sponsoring organization's names and logos.</p>
Materials or handouts	<p>Name tags, if desired. Flip chart and markers <i>"Take the Asthma Control Test and Know Your Asthma Score" handout</i></p>
Talking points	<p><i>As parents/caregivers begin to arrive, introduce yourself and welcome them to the education session. Provide each family with one copy of the "Take the Asthma Control Test and Know Your Asthma Score." Explain that this test is to help the family begin thinking about their child's asthma and how well their child's asthma is controlled.</i></p> <p><i>Introduce yourself and explain your organization and the purpose of this program. Be sure to give credit to any sponsoring or participating organizations. If you are not a health care provider, make sure the participants understand this and that the information you are providing is not a substitute for what their doctor tells them.</i></p> <p><i>Explain that the purpose of this education session is to help parents/caregivers support and reinforce the asthma self-management skills their child has learned at asthma camp AND to help the family establish daily routines for their child's asthma.</i></p> <p><i>Ask each parent/caregiver about their primary concern regarding their child's asthma. Write these responses down on the flip chart. These responses will</i></p>

assist you in tailoring the messages and amount of information throughout the session. Let the parents/caregivers know that you and the asthma specialist will ensure their concerns and questions are answered.


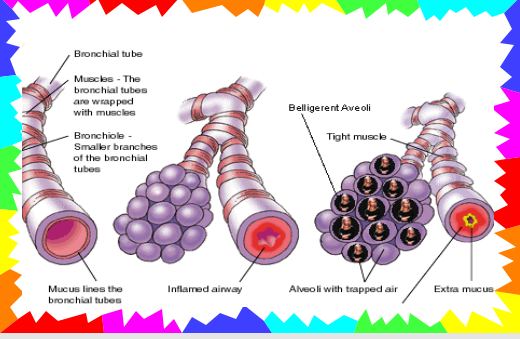
The asthma self-management skills your child learns at asthma camp.	
Slide	 <p>This slide should be locally tailored</p> <ul style="list-style-type: none"> • Address the asthma self-management skills children learn at your asthma camp <p>Learning objectives from your local asthma camp. This slide should be tailored to reflect the self-management skills taught at your asthma camp.</p>
Teaching objective	To ensure parents understand the asthma self-management skills their child learned at asthma camp.
Materials or handouts	
Talking points	<p>The following are common concerns that parents have about their child attending asthma camp. You may choose to address them at this time.</p> <ul style="list-style-type: none"> • Is my child safe at camp? Do you conduct background checks? • What are the qualifications of the medical staff? • How can my child be around molds, pollens, and without air conditioning? This is different than what has been preached by our doctor.

The remainder of this education session will focus on your role as a parent/caregiver in managing your child's asthma.

Parent/caregiver role #1: Encourage your child to participate in all childhood activities.	
Slide	 <p>Parent/Caregiver Role #1</p> <p>Encourage your child to participate in all childhood activities.</p>

Slide	 <p>Goals of asthma management</p> <ul style="list-style-type: none"> • Sleep through the night • Not cough or wheeze during the day or night • Be physically active • Not miss school (or parents/caregivers not miss work) related to asthma
Slide	 <p>Praise Can Work Wonders In A Child's Life.</p> <p>With enough praise and encouragement, the sky's the limit.</p>
Teaching objectives	<ol style="list-style-type: none"> 1. To recognize that praise and encouragement builds self-sufficiency and self-management. 2. To know that a child with asthma can participate fully in all activities. 3. To understand that a child with asthma may need pre-treatment with their reliever medication. 4. To understand that exercise is good, even if their child has exercise induced asthma.
Materials or handouts	NA
Talking points	<p>Ask parents/caregivers:</p> <ul style="list-style-type: none"> • Does your child always feel sick? • Does your child have many missed days from school? • Do you miss days from work related to your child's asthma? <p>By discussing these questions, parents/caregivers come to understand that their child is not always ill. When they are feeling well, the child participates in everyday "childhood" activities.</p> <p>The goal of asthma management is for a child to:</p> <ul style="list-style-type: none"> • Sleep through the night • Not cough or wheeze during the day or night • Participate in recess • Participate in athletic/exercise activities such as soccer games, swimming, and hiking • Not miss school (or parents/caregivers not miss work) related to asthma <p>To help a child participate fully, parents/caregivers may need to take the child's allergies/triggers into consideration and pre-treat with reliever medication (such as albuterol) 10 to 15 minutes prior to the activity.</p>

	<p>Parents/caregivers need to empower their child with asthma so they do not see themselves as weak or feeble. In addition, children with asthma have more needs. This becomes tiring for parents and parent/caregivers need a break. But the public perception is that asthma is “no big deal.” Through praise and encouragement, children with asthma can become self-sufficient.</p>
Tips to apply this to day-to-day life	<p>To help your child participate fully, you may need to take into consideration their allergies/triggers and pre-treat with their reliever medication (such as albuterol) 10 to 15 minutes prior to the activity or exposure to the allergen/trigger. An example would be taking 2 puffs of their albuterol inhaler 15 minutes prior to going sledding outside.</p>

Parent/caregiver role #2: Monitor your child's asthma signs and symptoms.	
Slide	
	
Teaching objective	To recognize signs and symptoms of an asthma episode
Materials or handouts	<ol style="list-style-type: none"> 1. One straw for each participant 2. Posters of normal airways and airways during an asthma episode 3. Cross-section of airway (normal and during an asthma episode)
Talking points	<p>Instructions for straw activity: Ask the participants to:</p> <ul style="list-style-type: none"> • Breathe through a straw. • After several breaths, pinch of the straw closed halfway. <p>Ask the participants what they notice:</p> <ul style="list-style-type: none"> • When they blew through the straw? • After they pinched the straw? <p>Encourage the participants to share how they felt when they were blowing the air</p>

through the straw (responses may include anxiousness, out of breath, nervousness, etc.). Share how:

- The airway becomes narrowed during an asthma episode and the amount of air going in and out of the airway decreases
- It becomes difficult to breathe normally
- A person with asthma begins to feel very tired because it becomes harder to breathe.

Ask participants:

- How does your child look when he/she is having trouble breathing?
- What do you hear when your child is having difficulty breathing?
- Does your child stop whatever he/she is doing when he/she is having difficulty breathing?
- What signs does your child show after coughing a lot at night?

Share that:

- Asthma affects each child differently.
- Asthma symptoms do not always occur together.
- Oxygen deprivation can cause hyperactivity in young children.

Four signs of asthma are:

- Dry, hacking cough
- Wheezing (a whistling sound coming from the chest)
- Chest tightness
- Shortness of breath, or wheezing with exercise or exposure to triggers

Other signs of asthma may include:

- Frequent coughing or bronchitis with colds or respiratory infections
- Waking at night with a cough or shortness of breath.

When a person has asthma, the airways become very sensitive to irritants and other small particles. Normal airways filter out these irritants, but in children with asthma, the airways become sensitive and swollen, making it difficult for air to pass in and out of the lungs.

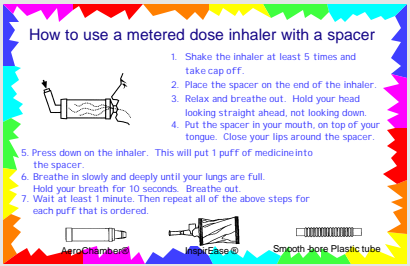
When a person with asthma breathes in irritants, they can also have uncontrolled spasms in the lung, called bronchospasm. Bronchospasm occurs when the muscles around the airways become tightened, making the tunnel in the airways even smaller.

During an asthma episode, the lungs also make more mucus. Mucus is thick and sticky making it even harder for the air to get through. (*Refer to slide.*)

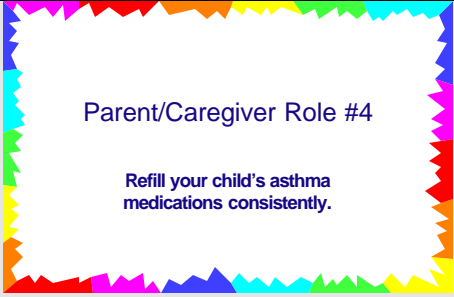
Based on the "Take the Asthma Control Test and Know Your Asthma Score" test completed when parents/caregivers arrived, ask parents/caregivers to share if their child's asthma is poorly controlled. What factors/symptoms helped parents/caregivers recognize their child's asthma is not well controlled? What signs and symptoms does their child have during an asthma episode? Discuss ways to recognize the signs and symptoms earlier.

	<p>Many children use their asthma as a tool or excuse to get special treatment. "If I don't take my meds, I get a special trip to the nurse's office, I get to stay home, I can skip my history test." In addition, it may be difficult to tell how mild your child's signs and symptoms are. To prevent this manipulation, follow the asthma action plan. Use peak flow meter reading instead of relying only on the child's comments and complaints. If the symptoms are real, medicate according to their asthma action plan.</p>
<p>Tips to apply this to day-to-day life</p>	<p>Discussion questions:</p> <ul style="list-style-type: none"> • In what ways has your child used their asthma as an excuse/tool for special treatment? • How did you respond? • How can you respond differently in the future? <p>Problem-solving example: It is a Friday morning and your child has a history test at school. He/she complains at breakfast about his/her chest feeling tight and it is difficult for them to breath. How can you respond assertively and safely?</p>

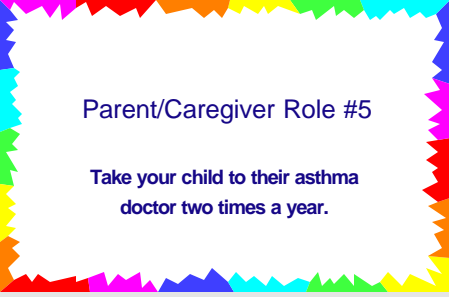
<p>Parent/caregiver role #3: Monitor how and when your child takes their medications.</p>	
<p>Slide</p>	<div data-bbox="695 835 1105 1098" style="border: 2px dashed black; padding: 10px; margin-bottom: 20px;"> <p style="text-align: center;">Parent/Caregiver Role #3</p> <p style="text-align: center;">Monitor how and when your child takes their medications.</p> </div> <div data-bbox="695 1167 1105 1430" style="border: 2px dashed black; padding: 10px; margin-bottom: 20px;"> <p style="text-align: center;">Controller Medications</p> <ul style="list-style-type: none"> • Do not stop an asthma episode • Reduce inflammation (swelling) in the lungs • Key to managing asthma • Are not addictive • Should be taken every day, even when your child is feeling well • Think of them as vitamins protecting your child from serious illness </div> <div data-bbox="695 1472 1105 1734" style="border: 2px dashed black; padding: 10px;"> <p style="text-align: center;">Quick-relief medications</p> <ul style="list-style-type: none"> • Also called reliever or rescue medications • Work in 5 to 10 minutes • The child breathes the medicine into the lungs using an inhaler (with spacer) or nebulizer. </div>

	
Teaching objective	<ul style="list-style-type: none"> • To understand the difference between controller and reliever medications. • To ensure parents/caregivers know how to correctly use a MDI with spacer. • To provide application tips to monitor medication usage and build children's ability to take their own medication consistently.
Materials or handouts	MDI and various spacers
Talking points	<p><u>Controller medications</u> are taken every day, whether or not the child has asthma symptoms.</p> <ul style="list-style-type: none"> • Controller medications <u>do not</u> stop an asthma episode. They reduce inflammation and help prevent future symptoms/episodes if your child is exposed to a trigger. • They are the key to managing and controlling asthma. • They should be taken every day, even when your child is feeling well. • They act over a long period of time, sometimes taking a week or month to have an effect. • The most common controller medications are inhaled steroids. The steroids in controller medications are not the same used by body builders and do not have an effect on muscles. • Controller meds are not addictive, even though your child takes them every day. Think of controller medications like vitamins protecting your child from serious illness. • Name brand examples of controller medications include: Advair, Aerobid, Axmacort, Flovent, Intal, Pulmocort, QVAR, and Xolair. <p><u>Quick-relief medications</u> (reliever or rescue medications) work fast. The child breathes the medicine into the lungs using an inhaler (with spacer) or nebulizer. Most inhaled reliever medications produce an effect within 5 to 10 minutes. Names of quick-relief medications include: albuterol, Maxair, Proventil, and Ventolin.</p> <p>Spacers connect to the inhaler so that your child breathes from the tube, not directly from the inhaler. The spacer lets your child breathe in the medicine more slowly; so more medicine ends up in your child's lungs.</p> <p>Ask several parents/caregivers to demonstrate how to use an MDI with spacer. <i>(See slide for steps of MDI and spacer use.) (Facilitator: make corrections to parent/caregiver technique and provide praise when appropriate.)</i></p>
Tips to apply this to day-to-day life	<ul style="list-style-type: none"> • For the controller medications that have a "counter" built in (such as Advair and Singular) and are taken twice a day, a helpful tip for monitoring usage is to remember "even number in the morning, odd number at night."

	<ul style="list-style-type: none"> • Place the controller medication with the child's toothbrush or nightstand (some place where they will see it every morning and night). Connect the taking of their controller medication with an already existing habit, such as brushing their teeth. • Provide a reward system to your child for consistently taking their medication to help build his/her skills and be more self-sufficient. It also takes some of the burden off of you, the parent/caregiver. Reward examples include: <ul style="list-style-type: none"> • If your teen is begging for \$30 for a new pair of tennis shoes, challenge him/her to take his/her medication every morning and night – in front of you – for one month without you reminding them. At the end of the month, if he/she has met the challenge, provide them with the \$30. You might have given the \$30 for the shoes anyway, but through this incentive, your child is learning a routine that makes him/her more self-sufficient. • Tell your child, if he/she takes his/her controller medications 6 out of 7 days, he/she can choose the family movie. <p>Ask the parents/caregivers to brainstorm other ways reward their children for remembering and consistently taking their controller medications.</p>
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Parent/caregiver role #4: Refill your child's asthma medications consistently.	
Slide	
Teaching objective	To understand that ordering and refilling prescriptions is the responsibility of the parent/caregiver.
Materials or handouts	<ul style="list-style-type: none"> • Canister of albuterol or other reliever medication • Piece of masking tape
Talking points	<p>Children/teens under 18 may not be able to pick-up prescriptions at the pharmacy and may not be able to pay the pharmacy co-pay. The refilling of monthly asthma medications is the responsibility of the parent/caregiver.</p> <p>Ask parents/caregivers to share how they remember when to refill their child's controller medications. How do parents/caregivers fit this additional errand into their already busy lives?</p>
Tips to apply this to day-to-day life	<ul style="list-style-type: none"> • To help you remember to refill your child's controller medications on a monthly basis, use a special date (such as your child's date of birth, or day your rent/mortgage is due) as a reminder. • Ask your child's asthma doctor for a prescription for an extra month's supply

	<p>(controller, reliever, and spacer). Keep this supply on hand so you do not run out. Be sure to use prior to the expiration date.</p> <ul style="list-style-type: none"> • If you are too busy or do not have transportation, select a pharmacy that will deliver the prescription to your home or have someone else pick it up for you. If your residence is not consistent, is there another friend/family residence where it can be delivered? • The medicine in a canister of albuterol may be gone even if you hear something when you shake the canister (propellant). To track dosages remaining in the canister; place a piece of masking tape on the canister. Each time your child uses the inhaler, write a hatch mark on the tape. • Another way to monitor albuterol usage is to estimate the number of times per week that your child/teen uses the inhaler and multiply by 52 weeks per year. Remember, if your child/teen is using the reliever inhaler more than two times per week or two canisters per year, he/she needs to be seen by an asthma doctor for a change in controller medications. • The Partnership for Prescription Assistance offers a single point of access to more than 275 public and private patient assistance programs, including more than 150 programs offered by pharmaceutical companies. To find out if you qualify for one or more programs, patients and caregivers can visit a user-friendly website (www.pparx.org) or call toll-free 1-888-477-2669 to speak with a trained specialist who can provide application assistance in English, Spanish, and 150 other languages. • Please share additional local resources for providing free or reduced asthma medication/supplies.
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Parent/caregiver role #5: Take your child to their asthma doctor two times a year.	
Slide	 <p>Parent/Caregiver Role #5</p> <p>Take your child to their asthma doctor two times a year.</p>
Teaching objective	<ul style="list-style-type: none"> • To reinforce the importance of seeing the child's asthma doctor twice a year, even if the child is feeling well. • To remind parents/caregivers that they know their child's symptoms better than anyone else. • To encourage parents/caregivers to have questions ready for their asthma doctor visit. • To remind parents/caregivers to get their child a flu shot every fall. • To provide resources/options available in rural areas. • To provide local options for children who do not have health insurance.


Materials or handouts	<ul style="list-style-type: none"> • Flip chart and markers • <i>Preparing for an Asthma Doctor Visit</i> and <i>Questions to Ask Your Asthma Doctor</i> handout
Talking points	<p>Seeing your child's asthma doctor two times per year is important. During these visits, the doctor will ensure your child is taking the correct type and dose of medication to control his/her asthma and answer any questions you might have.</p> <p>It is important that you have a partnership with your child's asthma doctor. If you feel that your doctor is not listening to your concerns, is not answering your questions in a way that is understandable to you, or is not providing the type of care that will manage your child's asthma, you may want to consider a second opinion or seeking care from asthma specialist.</p> <p>Ask participants:</p> <ul style="list-style-type: none"> • What are some things that you do to prepare for your child's asthma doctor visit? (Write these down on a flip chart.) • What are some of the questions you would ask the doctor about your child's asthma? (Write these down on a flip chart.) <p><i>Pass out the Preparing for an "Asthma Doctor Visit and Questions to Ask Your Asthma Doctor" handout. Review the things a family can do to get ready for an asthma doctor visit and the questions to ask their child's asthma doctor.</i></p>
Tips to apply this to day-to-day life	<ul style="list-style-type: none"> • Suggest that parents/caregivers take the <i>Questions to Ask Your Asthma Doctor</i> handout with them to their child's asthma doctor visit as a reminder. • Suggest that parents/caregivers take the <i>"Take the Asthma Control Test and Know Your Asthma Score"</i> test to their asthma doctor visit. • To ensure the information and directions provided by the doctor are clear, encourage parents/caregivers to repeat back to the doctor what they have heard and write it down on their child's asthma action plan. • If you are on a publicly assisted health insurance plan, you may not have a co-pay for your child's well-asthma visits. • Each fall, your child with asthma should get a flu shot. • Add local and rural resources here. Examples for you to consider include: neighborhood clinic, federally qualified sliding scale clinic, free clinics, and public health departments.

Parent/caregiver role #6: Communicate with your child's school and childcare about their asthma.	
Slide	

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	<div data-bbox="760 422 1094 877" data-label="Image"> </div>
<p>Teaching objective</p>	<p>To emphasize the importance of sharing with your child's school nurse or childcare provider:</p> <ul style="list-style-type: none"> • A copy of the child's asthma action plan when they get it and each time changes are made • Any new asthma medications with instructions on administration <p>To inform parents about local school self-carry inhaler laws.</p>
<p>Materials or handouts</p>	<p>American Lung Association asthma action plan</p>
<p>Talking points</p>	<ul style="list-style-type: none"> • Ask participants if they are familiar with an asthma action plan and if their child/teen with asthma has an asthma action plan. If participants are not familiar with an asthma action plan, briefly explain the purpose of an asthma action plan. Clarify with parents to follow their child's action plan if signs and symptoms arise to know when to call their physician, when to go to the emergency department, and when to call 911. Distribute the American Lung Association asthma action plan as an example to parents who are not familiar with one. • Share your child's asthma action plan with your child's pediatrician/family practice physician (if different than your child's asthma doctor). • An asthma action plan is not just "one more required school form." It is the plan that schools and childcare providers will follow if your child experiences asthma symptoms. • Any time new asthma medications are prescribed or dosages are changed, a new asthma action plan should be written and provided to your child's school health office and childcare provider.

	<ul style="list-style-type: none"> The type and name of an asthma action plan may vary from region to region. If your region uses different wording or also uses an individualized medical plan or emergency action plan, please tailor the curriculum here to your local needs.
Tips to apply this to day-to-day life	Have your child/teen's asthma action plan, an inhaler/spacer, and other appropriate medications prepared in advance and send to the school health office prior to the start of every school year.

Parent/caregiver role #7: Identify and remove/modify triggers from your child's environment.

Slide	
Teaching objective	<ul style="list-style-type: none"> To understand how to identify a child/teen's asthma triggers. To recognize what asthma triggers are. To understand when to see an allergist. To realize that environmental tobacco smoke is one of the most common and strongest triggers for children with asthma. To understand the physiological (IgE) response to environmental triggers (allergens). To provide simple, low-cost environmental modifications that parents can do themselves to remove triggers from their child/teen's environment.
Materials or handouts	<ul style="list-style-type: none"> Trigger kit
Talking points	<p>Asthma usually lasts throughout one's life. Knowing your child's asthma triggers and avoiding/removing them can help to manage asthma symptoms and prevent asthma episodes.</p> <p><i>Use the Trigger Kit and slide to highlight and discuss environmental triggers.</i></p> <p>Ask participants:</p> <ul style="list-style-type: none"> What types of triggers does your child with asthma have? How did you identify your child's triggers? What can your family do to eliminate or reduce the allergen to your family's pet(s)? <i>(The facilitator should emphasize that the preferred option is to remove the pet from the home. If that is not acceptable to the</i>

family, there alternatives include keeping the pet out of the child's bedroom, keeping the pet off of upholstered furniture, vacuuming/dusting/ sweeping frequently, etc.)

- How can you ensure your child is not exposed to environmental tobacco smoke (i.e. second hand smoke)? *(Remind participants that simply smoking outside will not solve the problem. Also, children with asthma should not ride in cars that allow smoking – even if the windows are opened.)*

To help you identify your child's triggers, look for patterns. When symptoms occur, reflect on the past 8-10 hours. Jot down where your child was, what your child did, things your child ate, things your child came in contact with, the time of year (season). After several times, patterns should emerge.

The IgE and Allergic Response:

- In some children, allergic triggers can bring on asthma symptoms. This occurs when the allergens are breathed into the nose, throat, and lungs and attach to the lining of the nose, throat, or lungs. These triggers are seen by the body's immune system as foreign invaders and the body begins to fight them off. During this response, the body's immune system produces IgE antibodies – a protein involved in the allergic response.
- IgE antibodies, specific to the trigger, are produced within a few weeks after exposure and are released into the bloodstream.
- Then, when your child is exposed to that trigger again, these IgE antibodies link with the other immune systems cells in your child's body. This causes a release of chemicals causing inflammation (swelling) in the body. The signs and symptoms of asthma begin.

Tell the doctor if you have observed triggers for your child's asthma. The doctor may recommend going to an allergist for allergy testing to identify sensitivity to specific triggers. If these tests show that your child has allergies, the doctor may recommend allergy shots or medications that act early in the allergic response (effect the IgE response). Allergy shots, immunotherapy, and desensitization are all terms for shots (injection treatments) that reduce sensitivity to triggers. A small amount of trigger given in gradually increasing doses until the child can better tolerate exposure to that trigger. There are also new medications available to manage your child's asthma that act early in the allergic response (effect the IgE response).

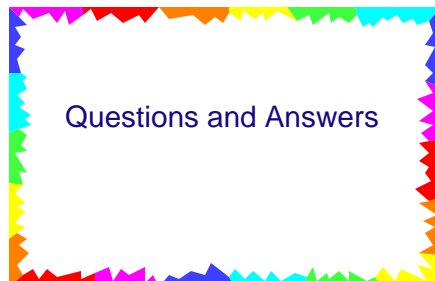
The doctor may also recommend that you remove/modify the triggers in your child's environment. Some simple, low-cost steps that you can take now include:

- Ensure tobacco, pipe, or cigar smoking is not allowed around your child, including in your house or a car.
- Enclose your child's mattress and pillows in allergen covers (this protects your child from any dust mite droppings/remains and molds in the mattress and pillow).
- Wash your child's bedding, including bedspread/comforter weekly in hot

	<p>water (over 130 degrees).</p> <ul style="list-style-type: none"> • Do not have your child/teen sleep on carpeted floors. • Do not have your child/teen sleep on upholstered sofas/furniture. • Remove the stuffed animals from your child's environment or wash them in hot water weekly. • Keep windows closed during allergy/pollen seasons. • Use a dehumidifier to keep the moisture level in your home low. • Vacuum weekly with a HEPA (High Efficiency Particulate Air) filter vacuum.
Tips to apply this to day-to-day life	<ul style="list-style-type: none"> • If your child's asthma is triggered by pet dander, finding a new home for your pet is the best option. If this is not possible, keep the pet out of your child's bedroom. Vacuum, clean, and dust the areas of your home that your child with asthma and the pet share frequently. • Tobacco smoke is one of the most common triggers for children with asthma. Simply smoking outdoors is not sufficient. Remember that the smoke gets into the smoker's clothes and is carried back indoors.

Additional resources	
Slide	
Teaching objective	To provide parents/caregivers with additional local resources to assist them in managing their child's asthma.
Materials or handouts	
Talking points	<p>Tailor the following resources and contact information locally:</p> <ul style="list-style-type: none"> • American Lung Association HelpLine 1-800-548-8252 • Your local Lung Association • Local/state asthma coalitions • American Lung Association Health House www.healthhouse.org • American Lung Association website www.lungusa.org

At the end of the planned education session, ask the asthma specialist to come forward and assist you. Refer to the flip chart regarding parents/caregivers' primary concerns. Use these primary concerns as a starting point to answer additional questions the parents/caregivers may have.



When all questions are addressed, distribute the incentives that you might have and thank participants for coming to the education session.

Thank parents/caregivers for attending the asthma education session!

