

Early Childhood Education Linkage System/ Healthy
Child Care Pennsylvania
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January 2018

To: Pennsylvania Early Care and Education Staff

Re: Asthma Self-Learning Module for Early Care and Education Staff

Directions: Thank you for selecting this module to learn about asthma. Complete the following activities for this module:

1. Review the Self Assessment of the module before you begin. This is the information you will be asked to submit to earn credit for completing this module.
2. [Click here](#) to access the California Childcare Health Program Training Curricula page. Click on the link for the Asthma Information Packet for Early Care and Education Providers. On this page, you will find links to the asthma video, "**Asthma Care Training for Child Care Providers**" and the **Asthma Information Handbook**. Watch the 18 minute video and read the handbook. They are available in both English and Spanish.
3. Read and use the materials provided in this document packet.
4. Access and complete the Self-Assessment Questions on Survey Monkey by using this link: <https://www.surveymonkey.com/s/CQNL22T> OR fill out the Self-Assessment in this packet and return to ECELS using e-mail, fax, or mail.
5. Follow the instructions on the ECELS website self-learning module page in the box with the heading "Important Reminders" and then click in the green rectangle labeled "Click here to order SLM reviews" to pay the review fee.

ECELS staff members will review the work you send us and offer advice if you need help to complete the module successfully. If you have questions, please call or e-mail the ECELS office. Upon satisfactory completion of the module, ECELS will award (2) hours of professional development credit. You will then receive email confirmation with instructions on how to access your certificate from the PA Keys website. Processing takes approximately 3-6 weeks after submission of required documentation.

Sincerely,

Susan Aronson, MD, FAAP
ECELS Pediatric Advisor

Nancy Alleman, BSN, RN, CRNP, CSN
ECELS Lead T/TA Coordinator

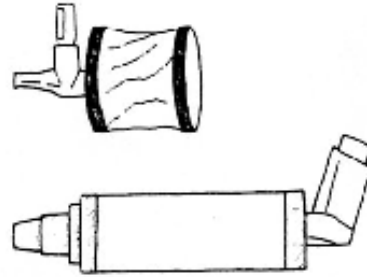
Training costs have been underwritten by the PA Department of Public Welfare, Office of Child Development and Early Learning.

ASTHMA EQUIPMENT



Metered Dose Inhaler

Delivers inhaled medication in a fine mist for immediate relief when asthma symptoms are present.



Inhaler with a Holding Chamber

An inhaler with a spacer or holding chamber to keep the inhaler the correct distance from the mouth. It also catches the mist and holds it so it can be breathed in slowly, enabling the maximum amount of medicine to reach the child's lungs. Used especially with young children.



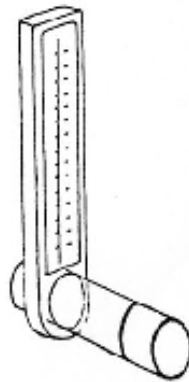
Nebulizer

A machine that delivers medication in a fine mist that is prescribed for some children with asthma. A treatment usually takes 5 to 15 minutes.



Peak Flow Meter

A device to monitor the status of children with asthma, perhaps to decide whether a child should participate in a certain activity.



Additional Information
Peak Flow Meter

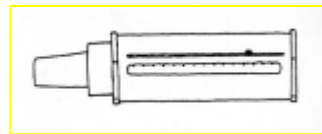
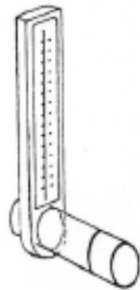
Introduction

A peak flow meter is a hand held instrument, which measures the speed of the air as it passes through the hollow center of the meter. The scale on the outside of the barrel is marked in liters per minute. This is an indication of how well the lungs and airways are doing. Correct use of this tool will help someone with asthma know when to take medicine. Many children can learn to use a peak flow meter at age 4 or older.

How to use a Peak Flow Meter

Follow these step-by-step directions:

1. Place one of the mouthpieces on the peak flow meter.
Pick the smaller mouthpiece for young children.
2. Make sure that the indicator arrow or slide bar is at the bottom of the scale.
3. Hold the peak flow meter so that nothing blocks the opening.
4. Inhale as deeply as possible and grasp the mouthpiece, making sure the lips form a tight seal.
5. Blow out as hard and fast as possible through the mouth (not the nose). It should be a short, harsh breath. This will cause the indicator to move up the scale. The final position of the indicator is the peak flow score.
6. Slide the indicator to the bottom of the scale (zero). Repeat steps 3-5 to repeat the test.
7. Take three readings and record the highest value obtained along with the date and time.



Which inhaler do you use?

Metered Dose Inhaler

1. Stand up straight.
2. Shake your inhaler.
3. Breathe out all the way.
4. Put your inhaler through your teeth, with your tongue underneath.
5. Close your mouth around the inhaler.
6. Begin to breathe in slowly and deeply and press down on the inhaler at the same time.
7. Hold your breath 10 seconds.



Metered Dose Inhaler with Spacer

1. Stand up straight.
2. Shake your inhaler.
3. Put the inhaler mouthpiece into the end of the spacer.
4. Breathe out all the way.
5. Put the spacer mouthpiece through your teeth, with your tongue underneath.
6. Close your mouth.
7. Begin to breathe in slowly and deeply and press down on the inhaler at the same time.
8. Hold your breath 10 seconds.



Metered Dose Inhaler with Spacer and Mask

1. Shake the inhaler.
2. Put the inhaler mouthpiece into the end of the spacer.
3. Place the mask firmly over the child's nose and mouth. Make sure there is an airtight seal between the mask and the child's face.
4. Press down on the inhaler once.
5. Encourage the child to take at least 6 normal breaths.
6. Don't lift the mask off the child's face until they breathe in the medicine.
7. Remove the mask.
8. Wait at least one minute before a second puff, if needed.



Pulmicort™ Turbuhaler

1. Stand up straight.
2. Hold the inhaler with the mouthpiece end up and the brown dial down. Never hold the inhaler with the mouthpiece down or the medicine may fall out.
3. Remove the cover.
4. Twist the brown dial to the right as far as it will go, then back to the left until it clicks.
5. Breathe out all the way.
6. Turn the mouthpiece towards you. Put your mouth all the way around the mouthpiece.
7. Inhale quickly and deeply through the inhaler.
8. Hold your breath for 10 seconds.
9. Replace the cover on the inhaler.



Advair™ and Serevent™ Diskus

1. Stand up straight
2. Hold the inhaler label flat between the fingers and thumb of one hand. Never hold the inhaler with the mouthpiece down or the medicine may fall out.
3. With your other hand, slide open the inhaler using the notch on the side, so that the mouthpiece appears. Make sure the mouthpiece is facing towards you. Notice the small lever on the side.
4. Push the lever away from you until it clicks.
5. Breathe out all the way.
6. Put your mouth all the way around the mouthpiece.
7. Inhale quickly and deeply through the inhaler.
8. Hold your breath for 10 seconds.
9. Close the inhaler by sliding the cover over the mouthpiece.



DO:

- Keep track of how many puffs you have used. It is hard to tell when an inhaler is empty unless you count how many puffs you have used. The Diskus and Turbuhaler count the puffs for you in a small window on the inhaler.

DO NOT:

- Let your inhaler get wet. If it ever gets wet get a new one.
- Breathe out into the inhaler. Breathe in through your nose.
- Hold the inhaler with the mouthpiece down.

Additional Information

Medication Administration in School or Early Learning Programs
Nebulizer treatments or inhaled medications

Parent or Guardian Permission

The parent/guardian of _____ ask that school/child care staff give the
(Child's name)
following medication _____ at _____
(Name of medicine and dosage) (Time)
to my child, according to the Health Care Provider's signed instructions on the lower part of this form.

- ◆ The Program agrees to administer medication prescribed by a licensed health care provider.
- ◆ It is the parent's responsibility to furnish the medication and equipment and to keep daily emergency contact information up to date.

By signing this document, I give permission for my child's health care provider/clinic to share necessary information regarding the care of my child's health condition with Program staff.

Parent/Legal Guardian's Name Parent/Legal Guardian Signature Date

Home Phone Work Phone

Health Care Provider Authorization

Child's Name _____ Birthdate: _____

Name of inhaled medication: _____

Dosage: _____

To be given in school/child care at the following time(s): _____

Note to health care provider: Specific time and/or interval must be indicated on this form in order for non-medical persons in school/child care to administer medication

Start Date: _____ End Date: _____

Usual (baseline) respiratory rate for this child: _____

Comments: _____

Seek Emergency Medical Care if the child has any of the following:

- ◆ Respiratory rate greater than _____
- ◆ Coughs constantly
- ◆ Hard time breathing with:
 - ✓ Chest and neck pulled in with each breath
 - ✓ Struggling or gasping for breath
- ◆ Trouble walking or talking
- ◆ Lips or fingernails are grey or blue
- ◆ Other _____

Signature of Health Care Provider with Prescriptive Authority Phone

Adapted from Healthy Child Care Colorado.

NEBULIZER OR INHALER TREATMENT LOG

Child's Name _____

Classroom _____

Medication and Dosage: _____ Time(s) to be given _____

Special Instructions: _____

Nebulizer and inhaler treatments should not be given more often than every 4-6 hours unless the child's health care provider asks you to give more frequent treatment in a specific situation. Be sure to follow the instructions provided by the health care provider.

Date	Time of Last Treatment	Time of Treatment	Breath Rate/Minute before tx.	Breath Rate/Minute after tx.	Observations (Cough, skin, color, secretions, any discomfort, activity level, etc)	Staff Initials

Comments:

Staff Signature	Staff Initials	Staff Signature	Staff Initials

Adapted from Healthy Child Care Colorado.

Asthma Action Plan for a Young Child

Child's Name _____	Date _____	of _____	Birth _____
_____ Address _____		Home Phone (____) _____	
City _____	State _____	Zip _____	code _____
_____ Diagnosis _____		Other Medical Conditions _____	

<input type="checkbox"/> Food allergy – Specify _____			
<input type="checkbox"/> Other allergies- Specify _____			

Emergency Information

Parent Contact _____ Preferred Phone # _____ Other Phone # _____

Address _____ City _____ State _____ Zip _____

Physician Name _____ Phone _____

Address _____ City _____ State _____ Zip _____

Emergency Contact Name _____ Phone _____

Environmental Information

Pets in your home? No Yes Specify _____

Smokers in family? No Yes Number _____

Mother No Yes Father No Yes Other No Yes Specify _____

Persons other than parents who care for your child _____ Do they smoke? No Yes

Exposure to smokers worsens asthma for children. Contact your doctor for tips to quit or use the Center for Disease Control website, www.cdc.gov/tobacco/campaign/tips/quit-smoking/ or 1-800-QUIT-NOW.

Asthma Triggers

Cold/Virus Dust Mold Pollen/grass Pets Exercise Weather Other _____

Medication(s) Given at Home:

Quick Relief Medication to be given in child care if symptoms listed below occur:

If a child is breathing HEAVY AND FAST and CAN NOT TALK WELL or LIPS OR FINGERNAILS are BLUE OR GRAY-CALL 911 AND PARENTS IMMEDIATELY.

Symptoms:

New wheezing is heard (a noise heard when breathing out)
 New frequent cough with or without activity
 Chest retraction (sucking in at the base of the neck, between or below the ribs)

Shortness of breath or rapid breathing
 Complaint of chest tightness
 Additional warning signs:

- Remove the child from any asthma triggers.
- Give medication listed below.

Medications

Inhaler with a spacer and mask (preferred for young children) or mouthpiece: Ask the health care provider about use of a spacer and inhaler in child care for easier and more effective delivery of inhaled asthma medication.

Albuterol Metered Dose Inhaler (Pro-air, Proventil or Ventolin):
 2 puffs (wait one minute between puffs), may repeat once in 4 hours.

Xopenex HFA Inhaler:
 2 puffs (wait one minute between puffs), may repeat once in 4 hours.
 Other: _____

Nebulizer:

Albuterol _____ 1.25mg _____ 2.5mg:
 1 unit nebulized, may repeat once in 4 hours

Xopenex (Levalbuterol)
 _____ 0.31 mg _____ 0.63mg _____ 1.25 mg:
 1 unit nebulized, may repeat once in 4 hours
 Other: _____

- Call the parents to let them know you have given the medication.
- Call the parents or emergency contact for immediate pick-up if the child does not improve within 20 minutes.
- **CALL 911** if symptoms worsen and parents or emergency contact cannot be reached.
- If quick-relief medication is used more than two days in one week, the parent should talk with the child's health care provider about the need for additional medication.
- Early education staff have received in-person instruction for correct use of specific equipment needed: Inhaler with spacer and mask or nebulizer. Yes _____ No _____

I give permission to _____ (name of health care provider/practice) to share information about how to care for my child's asthma with _____ (name of child care provider).
 I have read and understand this asthma action plan.

Parent's signature _____ Date _____

Physician signature _____ Date _____

Child care provider signature _____ Date _____

This is one of many options for an Asthma Action Plan for health care providers to share information with child care providers. This plan is meant for children who need medication intermittently in child care. Another Asthma Action Plan is from the National Heart, Lung and Blood Institute and available at www.nhlbi.nih.gov

Taking Care of Children with Asthma in Early Learning Programs Self-Learning Module Self-Assessment

Name (Please print.) _____	Facility Name _____
Phone number _____	Director's Name _____

Answer the questions. Choose the best answer for each question.

1. ____ What part of the breathing system is most involved during an episode of asthma?
 - a. the windpipe.
 - b. the diaphragm.
 - c. the small and large tubes that connect the windpipe to the lung tissue.
 - d. the voice box (the larynx).

2. ____ Which one of the following happens during an episode of asthma?
 - a. the lower airways tighten, swell and get plugged by mucous.
 - b. the diaphragm spasms with breathing.
 - c. the upper airways become inflamed and blocked.
 - d. the tonsils and adenoids become inflamed and swollen.

3. ____ Which of the following is not a symptom of asthma?
 - a. wheezing
 - b. chest retractions
 - c. sneezing
 - d. coughing

4. ____ If you have a child who is wheezing and working to breathe, the first thing the child needs to do is to
 - a. rest until the symptoms pass.
 - b. take the rescue medication recommended for the child.
 - c. get the child's parent to come right away.
 - d. call for emergency medical help (911).

5. ____ Which one of the following statements is correct about "asthma triggers" in children?
 - a. A common cold can **not** trigger an asthma episode.
 - b. Triggers vary for each child but most children have only one trigger..
 - c. Children with asthma should have furry pets.
 - d. Exercise is an asthma trigger for some children; however exercise should **not** be avoided.

6. ____ Immediate relief of asthma symptoms is best accomplished by which one of the following treatments?
 - a. sprinkled medicine in applesauce
 - b. liquid medicine
 - c. capsules or pills
 - d. inhaled medicine

7. ____ Inhalers give better results when:
 - a. the inhaler is used with a spacing device.
 - b. the inhaler is kept in the mouth for at least 20 seconds.
 - c. the child inhales before pressing the top of the medication canister.
 - d. the child puts her head down to inhale.

Name _____

8. _____ The correct procedure to use a nebulizer is to:
- connect the tubing, mouthpiece or mask and medicine chamber to the machine.
 - check to see if mist is coming out before giving the mouthpiece or mask to the child.
 - have the adult remain with the child during the entire treatment.
 - all of the above
9. _____ A peak flow meter is used to:
- control the flow of inhaled medicine during treatment.
 - measure whether the child has trouble breathing right now.
 - control the flow of oxygen from an oxygen mask.
 - all of the above
10. _____ Which of the following is *not* an essential part of the asthma care plan?
- instructions about use of a peak flow meter.
 - information about a child's asthma triggers.
 - information about what to do if an episode of asthma occurs.
 - information about whether the child's parents have asthma.
11. _____ Long-term control (preventive) medicines should:
- be used only when the child is wheezing at the time you give the medicine.
 - be taken every day, even if the child has no symptoms, to reduce or prevent swelling of the airways.
 - be stopped when the child feels better after an asthma episode.
 - make a child feel better 10 minutes after taking the medicine.

12. & 13. Case Study and Care Plan Questions-The Care Plan which follows is to be used for this case study.

Please read the case study and Johnny Wheezer's Asthma Action Plan (following pages); answer questions 12 and 13. Johnny Wheezer is 5 years old. He attends child care 5 days a week. He has asthma. He has an asthma care plan on file at the child care facility from his health care provider. Today he is not feeling well. He has a slight cough, stuffy nose, and says, "My chest feels tight." His behavior is unusual, too. Normally he has lots of energy. In fact, he never sits down. However, today he is very quiet. Johnny acts this way when he is having an asthma episode.

Today Johnny's peak flow meter reading is 110, which is in the yellow zone. Johnny's personal best peak flow is usually 200.

12. _____ What is the first thing to do for Johnny Wheezer?
- Have Johnny watch a movie.
 - Call 911.
 - Give albuterol, 2 puffs via his inhaler and notify his parents.
 - Give Johnny a drink of water.
13. _____ Twenty minutes after Johnny takes albuterol with his inhaler and spacer, he seems to be working hard to breathe and is unable to talk well; what should you do for Johnny?
- Have Johnny lie down and rest.
 - Get emergency medical help (Call 911) and notify parents.
 - Give another 2 puffs of albuterol.
 - Give Johnny some fresh air.

14. Now that you have completed the Asthma Self-Learning Module, what does your child care program plan to do to improve your care of asthmatic children?

Asthma Action Plan for a Young Child

Child's Name	<u>Johnny Wheezer</u>	Date of Birth	<u>4-19-2013</u>
Address	<u>123 Circle Drive</u>	Home Phone (<u>215</u>)	<u>533-2345</u>
City	<u>Uptown</u>	State	<u>PA</u> Zip code <u>19111</u>
Diagnosis	<u>asthma</u>	Other Medical Conditions	<u>none</u>
<input type="checkbox"/>	Food allergy – Specify _____		
<input type="checkbox"/>	Other allergies-Specify _____		

Emergency Information

Parent Contact Mary Wheezer Preferred Phone # (215) 533-2345 Other Phone # (215) 555-1212
 Address (above) City _____ State _____ Zip _____

Physician Name Dr. Kidz Phone _____
 Address 456 Medical Drive City Uptown State PA Zip 19111

Emergency Contact Name Mrs. Sarah Dolly (neighbor) Phone (215) 567-8910

Environmental Information

Pets in your home? No Yes Specify _____

Smokers in family? No Yes Number _____

Mother No Yes Father No Yes Other No Yes Specify _____

Persons other than parents who care for your child Susan Cobb Do they smoke? No Yes

Exposure to smokers worsens asthma for children. Contact your doctor for tips to quit or use the Center for Disease Control website, www.cdc.gov/tobacco/campaign/tips/quit-smoking/ or 1-800-QUIT-NOW.

Asthma Triggers

Cold/Virus Dust Mold Pollen/grass Pets Exercise Weather Other feather pillows

Medication(s) Given at Home:

None

Quick Relief Medication to be given in child care if symptoms listed below occur:

If a child is breathing HEAVY AND FAST and CAN NOT TALK WELL or LIPS OR FINGERNAILS are BLUE OR GRAY-CALL 911 AND PARENTS IMMEDIATELY.

Symptoms:

New wheezing is heard (a noise heard when breathing out)
 New frequent cough with or without activity
 Chest retraction (sucking in at the base of the neck, between or below the ribs)

Shortness of breath or rapid breathing
 Complaint of chest tightness
 Additional warning signs:
cough with behavior change, audible

- Remove the child from any asthma triggers.
- Give medication listed below.

Medications

Inhaler with a spacer and mask (preferred for young children) or mouthpiece: Ask the health care provider about use of a spacer and inhaler in child care for easier and more effective delivery of inhaled asthma medication.

Albuterol Metered Dose Inhaler (Pro-air, Proventil or Ventolin):
 2 puffs (wait one minute between puffs), may repeat once in 4 hours.

Xopenex HFA Inhaler:
 2 puffs (wait one minute between puffs), may repeat once in 4 hours.

Other: _____

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Albuterol _____ 1.25mg _____ 2.5mg:
 1 unit nebulized, may repeat once in 4 hours

Xopenex (Levalbuterol)
 _____ 0.31 mg _____ 0.63mg _____ 1.25 mg:
 1 unit nebulized, may repeat once in 4 hours

Other: _____

- Call the parents to let them know you have given the medication.
- Call the parents or emergency contact for immediate pick-up if the child does not improve within 20 minutes.
- **CALL 911** if symptoms worsen and parents or emergency contact cannot be reached.
- If quick-relief medication is used more than two days in one week, the parent should talk with the child's health care provider about the need for additional medication.
- Early education staff have received in-person instruction for correct use of specific equipment needed: Inhaler with spacer and mask or nebulizer. Yes X No _____

I give permission to Dr. Kidz (name of health care provider/practice) to share information about how to care for my child's asthma with Playtime Early Learning Center (name of child care provider). I have read and understand this asthma action plan.

Parent's signature Mary Wheezer Date 2-15-2017

Physician signature Dr. Jon Kidz Date 2-15-2017

Child care provider signature Susan Cobb Date 2-16-2017

This is one of many options for an Asthma Action Plan for health care providers to share information with child care providers. This plan is meant for children who need medication intermittently in child care. Another Asthma Action Plan is from the National Heart, Lung and Blood Institute and available at www.nhlbi.nih.gov