Asthma: Reduce the Wheeze Please

Pennsylvania Chapter, American Academy Of Pediatrics – Early Childhood Education Linkage System (ECELS) – Healthy Child Care PA
1:00 TO 2:30 PM
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Susan S. Aronson, MD, FAAP
ECELS Founder & Pediatric Advisor
Moderator
Libby Ungvary, MEd
ECELS Director

Zalika Shani, MPH, MCHS
Manager, Crozer-Keystone Kids Asthma Management Program

Presenters

Poll: What is your role?
Select all that apply:
- Director/Teacher/Caregiver
- State agency, PA or Regional Key Staff
- Health Professional, Child Care Health Consultant
- Child Care Health Advocate
- Other

Download PPT & Resource Handout

http://www.ecels-healthychildcarepa.org
Professional Development > Webinars > Asthma

ECELS
Early Childhood Education Linkage System
Healthy Child Care Pennsylvania

Objectives
Participants will be able to:
- Describe the body changes and triggers that cause asthma
- Identify the symptoms of asthma
- Explain the rationale, content and process for correct use of an Special Needs Care Plan, including an Asthma Action Plan
- List one or more online and community resources to use for asthma education

Topics
- Body Changes & Symptoms
- Triggers and Prevention
- Medicines & Devices
- Asthma Action Plan and Collaboration for Implementation
- Resources
What is Asthma?

Asthma is a recurrent long term condition in which air passages to the lungs become inflamed, swollen and narrowed.


Body Changes & Symptoms in an Asthma Episode

Airways include pipes in the chest that carry oxygen-rich air from to the lungs and carbon dioxide out of the lungs.
- Linings of chest airways chest swell & become inflamed
- Mucus clogs chest airways
- Muscles tighten around chest airways
This narrows chest airways. Breathing is difficult and stressful, like breathing through a straw stuffed with cotton

From CDC Asthma Basics For Schools

Recognize Symptoms & Manage Early

- Shortness of breath, faster breathing, feeling chest tightness
- Wheezing
- Sucking in of the base of the neck, between or below the ribs (retractions)
- Coughing, daytime, night or with exercise
- Waking at night with breathing symptoms

Related Terms

Bronchiolitis – small irritated air tubes
Reactive Airway Disease - sensitive air tubes
Wheezeing – sound when air tubes don’t allow easy air flow
Bronchitis – large irritated air tubes, usually from infection

Poll: About how many children have asthma in programs where you work?

- none
- 1-5
- 6-10
- More than 10
- Don’t Know

Asthma Triggers
(different ones for each person)

- Infections in the upper airways, such as colds, influenza
- Changes in weather and temperature
- Exercise
- Physically expressing strong feelings (crying, laughing hard, yelling)

Extreme Weather and Air Pollution

- Check air quality index for unhealthy air quality (www.enviroflash.info)
- Cover the child’s mouth and nose with a scarf to reduce irritation of airways by cold dry air
- Don’t let cars idle near building

Exercise

- Exercise in general is good for all children
- Short bursts of exercise followed by short periods of rest best for children who have breathing problems after exercise

Exercise

- Exercise can cause rapid breathing that dries and triggers constriction of breathing tubes in some children; may make asthma symptoms worse, but does not cause asthma
- Children may need to sit out if recovering from an asthma episode or respiratory illness
- As directed by an child’s care and Asthma Action Plans administer a appropriate medication 5-30 minutes before vigorous exercise
More Asthma Triggers

- Furred and feathered animals
- Dust mites
- Cockroaches
- Pollens from grass and trees
- Molds (indoors and outdoors)

Control Dust Mites

- Use hard surface floors & washable rugs
- Clean all smooth surfaces daily with a damp microfiber cloth
- Clean fabrics & soft objects weekly with hot water & hot dryer or HEPA vacuum
- Clean vents and filters
- Store toys in closed containers

Still More Asthma Triggers

- Fumes and strong odors, scents
- Tobacco smoke
- Food and environmental allergies

Tobacco Smoke

- Second hand smoke: smoke from the burning end of a cigarette, cigar or pipe & smoke breathed out by a smoker
- Third hand smoke: nicotine left behind on clothing, furniture, walls, and carpeting after someone smokes
- Third hand smoke: smoke that become airborne a second time from surfaces

Food & Environment Allergies

- Complete a Care Plan – form on the ECELS website at www.ecels-healthychildcarepa.org
- Understand symptoms of allergy
- Severe allergic reaction (anaphylaxis) = emergency: requires an injection of adrenalin (epinephrine). Symptoms: swelling of mouth and oral structures, difficulty breathing. Use auto injector and Call 911

Poll: Are any asthma triggers present in programs involved in your work?

- Yes
- No
- Don’t Know
Asthma Care and Action Plans

Every person with asthma needs a personalized Special Needs Care Plan and an Asthma Action Plan

Care Plan for Children with Special Needs on ECELS website: www.ecels-healthychildcarepa.org


Forms on CDC website: http://www.cdc.gov/asthma/tools_for_control.htm

- Print and Fill Forms
- Electronic Forms

Lesson from Dr. Sue’s Patient

http://www.nhlbi.nih.gov

Parenting Tips for Managing Asthma in the Child Care Setting

http://www.pacnj.org
Asthma Severity Determines Treatment

**Intermittent:** symptoms 2x or less/week; night time waking 2x or less/month; quick relief med used for asthma (not EIB) 2 or less days/week*

**Persistent Mild -> Moderate -> Severe:**
- Daytime symptoms more than 2x/week -> daily
- Night time waking
  - 0-4 years: 1-2x/month -> 3-4x/month -> 1x/week
  - 5 years & older: 3-4x/month -> 1x/week, not nightly
- Often 7x/week

* Teachers/Caregivers: Rule of 2s determines needs more control

This child’s wheezing! Now what?

- Remove child from asthma triggers
- Use Peak Flow Meter if available
- Administer prescribed medication
- Contact child’s parents right away

Still wheezing! Now what?

- If breathing heavy and fast and can’t talk well, or lips or fingernails are blue or grey, call 911 and the parents
- If child’s symptoms are less severe, but the child doesn’t improve 15-20 minutes after medicine, call parents
- If parents are unavailable, call emergency contact person

Asthma Medications

- Medications should be given at home whenever possible!
- Any medication which can be prescribed for twice daily use can usually be given at home
- Use AAP national curriculum “Medication Administration in Early Education and Child Care Settings
  www.healthychildcare.org/HealthyFutures.html

Types of Asthma Medication

- **Quick relief** (bronchodilators or rescue for an asthma flare)
- **Controller-Long-term** daily medicine for persistent asthma (maintenance, preventer, controller, anti-inflammatory, inhaled corticosteroid)

PA Child Care Regulations

§ 3270.133. Child medication and special diets

The operator shall make reasonable accommodation in accordance with applicable Federal and State laws to facilitate administration of medication or a special diet that is prescribed by a physician, physician’s assistant or CRNP as treatment related to the child’s special needs. Facility persons are not required to administer medication or special diets which are requested or required by a parent, a physician, a physician’s assistant or a CRNP but are not treatment related to the child’s special needs.
Quick Relief Medication

- Treats symptoms of an asthma flare
- Helps stop coughing, wheezing, trouble breathing
- Generally short acting (3-4 hours maximum)
- Common side effects: shaking, pounding heart, nervousness, restlessness

Forms of Asthma Medications

- Liquid
- Tablets
- Capsules
- Inhaled medication

See excellent videos about gadgets used for asthma at [http://www.pacnj.org/] - select “About Asthma”

Metered Dose Inhaler

- Delivers inhaled medication in a fine mist
  - Inhalers work best when used with a spacer
  - See video demo at [http://www.pacnj.org/] - select “About Asthma”

Metered Dose Inhaler with a Spacer (Holding Chamber)

- Spacer catches mist from inhaler
- Large droplets fall out leaving fine mist
- Use with mouthpiece or mask to increase medicine reaching the lungs of infants, toddlers, children & adults

Nebulizer

A machine that delivers medication in a fine mist over 5-15 minutes

For a video demo of how to use a nebulizer and a peak flow meter, go to [http://www.pacnj.org/] - select “About Asthma”

Cleaning and Replacement

- Spacers:
  - Always review instructions: usually advised to disassemble, clean with soap and water, then air dry
  - Follow directions for how often to replace equipment
Cleaning and Replacement

**Nebulizers:**
- Never share machines, masks or tubing
- Clean mouthpiece and medication cup with soap and water and air dry
- Shake excess moisture out of tubing; don’t soak or do other tubing cleaning

Wipe the machine with a damp cloth after each use
- Replace filters and machine as advised
- Some machines are temporary and should be replaced after anywhere from 2 weeks to every 6 months

Long-term Medications

- When taken daily, “controllers” reduce swelling of the airways & help lungs react less to triggers
- Generally taken once or twice a day, so should be given at home

Allergy Medications

Some children with asthma take allergy medications either daily or intermittently to reduce allergy symptoms which act as triggers for asthma symptoms
- E.g. sneezing, runny nose, watery, itchy eyes, coughing

All Medications

- Require Care Plan completed by the child’s health care provider with instructions for use of medications
- Use medication administration documentation packet for each medication given in child care

Poll: Check What You Know

If a child needs to take quick-relief medicine every day to stop asthma symptoms, then:
- Keep giving the quick-relief medicine every day to stop the asthma symptoms
- Check for triggers and ask the parent to talk to the doctor about a controller medicine
- Send the child home until the symptoms stop
PA Asthma Education Programs

- ECELS-Healthy Child Care PA (statewide)
- Breathe Pennsylvania (10 counties in Western PA)
- Community Asthma Prevention Program (North and West Philadelphia)
- American Lung Association (Harrisburg, Scranton, Plymouth Meeting & Pittsburgh)
- Crozer-Keystone Kids Asthma Management Program (KAMP - Delaware County)

See Resource Handout: 5 pages with links and contact info

An Asthma Educator’s Approach

Zalika Shani, MPH, MCHES
Program Manager (Crozer-Keystone)
Kids Asthma Management Program
610 - 497-7367 or Zalika.shani@crozer.org

Goals of K.A.M.P.

Reduce the Long-Term Impact of Asthma by:

- Identifying all children with asthma and developing Asthma Action Plans with the child, parent and physician.
- Providing education to children, parents and school/center staff to ensure that children with asthma are able to turn to adults at school, early learning centers and at home.
- Improving asthma management to allow children to lead healthier lives.

K.A.M.P. Services:

- Asthma Screening
- Referral to Lung Function Testing
- Individual and Group Education for students, parents and school staff
- Distribution of Asthma Action Plan Forms to encourage development of individualized management plans
- Facilitate Partnership between families, school nurses, healthcare providers and others in asthma management
- Support of Special Programs: Asthma Camps, Asthma Awareness Days, Community Asthma Awareness

Kids Asthma Management Program

- Approach
- Materials
- Outreach activities
Professional Development
PQAS Credit

- 1 Hour
  Introduction to pediatric asthma and center issues
- 2 Hour
  Symptoms unique to infants and toddlers
- 3 Hour
  Assess your center/ asthma action plans
  4 Hour: All of the above/Develop Strategic Plan for Center

Questions or Comments?

- www.ecels-healthychildcarepa.org
  Use the ECELS website for self-learning modules, and many useful materials
- 1-800-24-ECELS (in PA only)
  484-446-3003
  Email: ecels@paaap.org

Wrap Up

- For University of Pittsburgh CME or PA Key credit, fax your completed evaluation form to ECELS at 484-446-3255 by 2/18/2015. (Form is at www.ecelshealthychildcarepa.org in Professional Development tab, select Webinars)
- For PA Key Credit, you will receive an email from ECELS that will give instruction about steps to complete in PD Registry
- Send email to ecels@paaap.org any unanswered questions or comments you’d like to share with ECELS or the presenters