

PANTA Plus

Asthma



For the latest
Kentucky Youth Risk Behavior Survey data:



ASTHMA

Data

- Over ten million U.S. children under 18 years of age (14%) have ever been diagnosed with asthma; almost seven million children (10%) still have asthma.³⁶
- Approximately 5 percent of all children had one or more asthma attacks in the previous 12 months.³⁷
- Asthma is one of the leading causes of school absenteeism. In 2003, an estimated 12.8 million school days were missed due to asthma among the more than 4 million children who reported at least one asthma attack in the preceding year.³⁸
- On average, children missed nearly four (3.7) days of school in the past year because of asthma; when this number of school days missed is applied to the estimated 5.8 million children in this age group with asthma, the survey estimate translates into approximately 21 million school days lost per year due to asthma.³⁹
- 11.1 percent of Kentucky children 5 years of age and younger have asthma. (BRFSS, 2006).⁴⁰
- 10.2 percent of Kentucky children between the ages of 6 and 11 have asthma (BRFSS, 2006).⁴⁰
- 11.7 percent of Kentucky middle school students have asthma (YRBS, 2009).⁴¹
- 9.7 percent of Kentucky high school students have asthma (YRBS, 2009).⁴²
- 39.5 percent of children live in a household where someone smokes; 17.6 percent smoke inside the home.⁴³



Emerging, Promising and Best Practices

Open Airways for Schools The asthma education program of the American Lung Association (ALA) was developed by Columbia University School of Medicine and has been fully evaluated. The program is a school-based curriculum that educates and empowers children through a fun and interactive approach to asthma self-management. It teaches children with asthma ages 8-11 how to detect the warning signs of asthma, avoid their triggers and make decisions about their health. There is an implementation guide (tool kit) for facilitators. Additional information is available by calling the ALA of the Midland States in Louisville at (502) 363-2652 or visiting <http://www.lungusa.org/lung-disease/asthma/in-schools/open-airways/open-airways-for-schools-1.html>.

Asthma Awareness: Curriculum for the Elementary Classroom This is an asthma curriculum for grades K-6 developed by the National Heart, Lung

and Blood Institute. Two, 30-minute lessons can easily be integrated into a regular curriculum. The lessons provide a basic understanding of asthma and how to help someone with asthma, and provide resources to share with parents and family members. Visit the following web site for ordering information: <http://www.nhlbi.nih.gov/health/prof/lung/asthma/school/index.htm>

Asthma 1-2-3 Asthma 1-2-3 is a one hour in-service program designed to teach basic asthma knowledge to school, child care and other community facility personnel in order to improve the lives of children who are living with asthma. Participants come away with increased knowledge of asthma – its triggers, warning signs and treatment methods. In addition, schools, day-care centers and other facilities are provided with the confidence and knowledge to recognize and respond appropriately to an asthma emergency. Asthma 1-2-3

content strictly adheres to the National Heart, Lung and Blood Institute (NHLBI) guidelines for proper asthma management and is delivered by a Certified Asthma 1-2-3 Facilitator. Facilitator Training and Certification is available to all health educators, nurses or respiratory therapists with advanced training in asthma education who are willing to work with schools and the community to conduct Asthma 1-2-3 in-service presentations. Additional information is available by calling the ALA of the Midland States in Louisville at (502) 363-2652 or visiting <http://www.lungusa.org/associations/charters/midland-states/learning-opportunities/patient-family/asthma-education-programs/Asthma-1-2-3.html>

National Asthma Training Curriculum This is an asthma training curriculum based on the National Asthma Education and Prevention Program (NAEPP) Expert 2 Guidelines for the Diagnosis and Management of Asthma. It is designed to train school nurses, employees of federal health and environmental agencies, health care providers, and others with a vested interest in controlling asthma. The curriculum provides a basic overview of asthma outlined in six modules including: 1) Pathophysiology and Diagnosis, 2) Asthma Management, 3) Epidemiology, 4) Asthma Surveillance, 5) Asthma Education for the Patient, Provider and the Public, and 6) Administration of Asthma within Public Health. Visit the following web site for ordering information:

http://www2a.cdc.gov/tceonline/registration/detailpage.asp?res_id=1006

Initiating Change: Creating Asthma-friendly Schools This toolkit was developed to help advocates at the district and school levels persuade people in their schools and communities--teachers, school nurses, school administrators, school health councils, school business leaders, school board members, community leaders, community asthma coalitions, and parents – of the importance of promoting asthma-friendly schools. The ultimate goal of this toolkit is that it will initiate change in schools or communities so that students with asthma will receive the support they need to fully participate in all school activities. Visit the following website to download a free tool-kit: <http://www.cdc.gov/HealthyYouth/asthma/creatingafs/>

Asthma Communications Toolkit The purpose of this toolkit is to provide school leaders with a one-

stop online resource to obtain information, forms, and templates to communicate about asthma management in schools with staff, parents, the community, and the media. It was created by the American Association of School Administrators and the National School Boards Association. It is available to members and non-members. You do not need to sign in to access the Asthma Communications Toolkit. Visit the following website to access available resources:

<http://www.aasa.org/asthmatoolkit.aspx>



Creating Asthma Friendly Schools in Kentucky: A Resource Guide The Kentucky Department of Education and the Kentucky Respiratory Disease Program created a resource guide for schools in Kentucky seeking to create asthma friendly environments for their students and staff. This guide was modified from a version developed by the Montana Asthma Control Program and includes seven simple steps that can be used to create an asthma friendly school. Visit the following website to view this resource guide: <http://chfs.ky.gov/rdp>.

Policy and Environmental Change

Policy and environmental change interventions are population-based approaches that complement and strengthen other public health programs and activities that traditionally have focused on individual behavior change.

Policies include laws, regulations, and formal and informal rules. Examples include all schools offering physical education during school hours, laws and regulations for what should be included in vending



machines at school, laws and regulations to restrict smoking on school campuses, and regulations permitting students to carry and administer their own asthma medications.

Environmental changes are implemented to improve the economic, social or physical environments of the school. Examples include incorporating walking paths or recreation areas into school campuses, offering low-fat foods in school cafeterias, removing designated smoking areas from school campuses, and reducing exposure to asthma triggers, such as secondhand smoke in schools.

Model Policies

Suggested school health policies for schools to adapt and implement to provide a safe learning environment for students with asthma⁴³:

- Each student with asthma should have on file at school a written action plan for managing and treating his/her asthma while at school or school-related activities. The plan should include the student's triggers; medications, doses and times; what to do in an emergency; parent/guardian contact information, including cell phone numbers; and permission from the parent/guardian and physician for the student's asthma medications.
- Students with asthma should be allowed to self-carry asthma medications and to self-administer those medications in the event of an episode or attack (in accordance with KRS 158.834 and KRS 158.836).
- Have an emergency procedure policy in place in the event that a student has an asthma episode or attack.
- Provide a full-time registered nurse all day, every day for each school.
- Educate school administrators, faculty and staff on asthma, asthma triggers, asthma management and emergency procedures in the event of an asthma emergency or attack. (The policy should not be to *only* call 911.)
- Allow students to fully participate in physical activities (PE class and recess) when well. Students should have access to medications before and during activity if needed (see above policy recommendation).

- Prohibit tobacco use at all times, on all school property, in any school transportation, and at any school-sponsored events. Implement and enforce 100 percent smoke-free campus policies.
- Mitigate all asthma triggers, including humidity, mold, dust/dust mites, cockroaches, live animals (animal dander) and secondhand smoke.
- Implement the Tools for Schools toolkit, an EPA program that helps schools target and address indoor air quality issues.

American Academy of Pediatrics Policy Statements (excerpts)

The American Academy of Pediatrics Committees on School Health and Environmental Health have issued several policy statements directly related to the care of students and staff with asthma. Below are highlights from these policy statements.

Medications administered or taken while at school should require written statements from the parent and physician. For students that self-medicate, the school should not be held responsible for ensuring that medication is taken. Parents must provide the medication, labeled containers, and medical devices. Parents are also responsible for maintenance of the medication and devices. Protocols for therapy administered at school should be established.⁴⁴

All school nurses should be educated in emergency care, to include use of metered-dose inhalers and nebulizers. Individual emergency care plans should be in place for students and staff members with health conditions that may cause emergencies.⁴⁵

Children's exposure to diesel exhaust should be minimized; idling of diesel vehicles in places where children congregate should be minimized. Schools should pursue programs to fund conversion of diesel school buses to cleaner alternative fuels and technologies.⁴⁶

Additionally, the Committee on Substance Abuse recommends that "schools, child care programs, and other places frequented by children maintain a tobacco-



co-free environment.²⁷⁴⁷

State and Federal Laws

State Laws

158.834 Self-administration of medications by students with asthma or anaphylaxis - Authorization -- Written statement -- Acknowledgment of liability limitation -- Duration of permission.

(1) The board of each local public school district and the governing body of each private and parochial school or school district shall permit the self-administration of medications by a student with asthma or by a student who is at risk of having anaphylaxis if the student's parent or guardian:

(a) Provides written authorization for self-administration to the school; and

(b) Provides a written statement from the student's health care practitioner that the student has asthma or is at risk of having anaphylaxis and has been instructed in self-administration of the student's prescribed medications to treat asthma or anaphylaxis. The statement shall also contain the following information:

1. The name and purpose of the medications;
2. The prescribed dosage;
3. The time or times the medications are to be regularly administered and under what additional special circumstances the medications are to be administered; and
4. The length of time for which the medications are prescribed.

(2) The statements required in subsection (1) of this section shall be kept on file in the office of the school nurse or school administrator.

(3) The school district or the governing body of each private and parochial school or school district shall inform the parent or guardian of the student that the school and its employees and agents shall incur no liability as a result of any injury sustained by the student from the self-administration of his or her medications to treat asthma or anaphylaxis. The parent or guardian of the student shall sign a statement acknowledging that the school shall incur no liability and the parent or

guardian shall indemnify and hold harmless the school and its employees against any claims relating to the self-administration of medications used to treat asthma or anaphylaxis. Nothing in this subsection shall be construed to relieve liability of the school or its employees for negligence.

(4) The permission for self-administration of medications shall be effective for the school year in which it is granted and shall be renewed each following school year upon fulfilling the requirements of subsections (1) to (3) of this section.

Effective: April 21, 2004

History: Amended 2004 Ky. Acts ch. 132, sec. 6, effective April 21, 2004. -- Created 2002 Ky. Acts ch. 50, sec. 3, effective July 15, 2002.

158.836 Possession and use of asthma or anaphylaxis medications.

Upon fulfilling the requirements of KRS 158.834, a student with asthma or a student who is at risk of having anaphylaxis may possess and use medications to treat the asthma or anaphylaxis when at school, at a school-sponsored activity, under the supervision of school personnel, or before and after normal school activities while on school properties including school-sponsored child care or after-school programs.

Effective: April 21, 2004

History: Amended 2004 Ky. Acts ch. 132, sec. 7, effective April 21, 2004. -- Created 2002 Ky. Acts ch. 50, sec. 4, effective July 15, 2002.

Federal Laws

Section 504 of the Rehabilitation Act of 1973:

Forbids organizations and employers from excluding or denying individuals with disabilities an equal opportunity to receive program benefits and services. It defines the rights of individuals with disabilities to participate in, and have access to, program benefits and services. Section 504 regulations require that schools follow procedures to safeguard the rights of parents, students, and school employees and ensure that decisions and their implementation regarding a child's needs are fair and appropriate.

Title II, Americans with Disabilities Act of 1990: is a civil rights law written to protect all individuals, adults and children, with any disability, "physical" or "mental."

The law is written to provide all individuals access to federally funded facilities and programs, including public schools. The law states that any child who has an “impairment that substantially limits one or more major life activities” is covered. Attending school can be regarded as a “major life activity” for a child. Asthma can interfere with the child’s ability to participate in school. In school, a safe environment must be provided where triggers are eliminated or minimized and medications are allowed for children with asthma.

Pro-Children Act of 1994: Prohibits smoking in facilities where federally-funded children’s services are provided on a regular basis. The law applies to virtually all public elementary and secondary education and library facilities. It also applies to facilities used for Head Start, WIC and certain health care services for children.

Pro-Children Act of 2001: The Pro-Children Act of 2001 is the same as the Pro-Children Act of 1994 except that a civil penalty has been added for violation. Under the new act, a person who commits the violation (allows smoking in facilities where federally-funded children’s services are provided on a regular basis) may be liable for a civil penalty in an amount not to exceed \$1,000 for each violation. Each day a violation continues constitutes a separate violation.

Asthmatic School Children’s Treatment and Health Management Act of 2004: Preference for federal funding will be given to states that allow students to self-administer medication for asthma and anaphylaxis. Specifically, the state must require that each public elementary school and secondary school will grant any student in school authorization to self-administer medication for asthma or anaphylaxis if the following are met:

1. A health care provider prescribed the medication to be taken during school hours and has instructed the student on correct use of the medication,
2. Student demonstrates to the health care provider and school nurse that they know how to use the medication and any device related to delivery of the medication,
3. The health care provider and the student develop a written management and treatment plan for school,
4. The student’s parent/guardian have submitted the required documentation to the school.

Additionally, the student must be allowed to carry and use the medication while in school, at a school-sponsored activity, and/or while in transit to or from school or school-sponsored activities. The authorization for the student to possess and self-administer the medication must be effective for the school year and renewable each subsequent school year with appropriate documentation.

Assessment and Planning

Promoting Healthy Youth, Schools, and Communities: A Guide to Community-School Health Councils American Cancer Society This guide is designed to assist school districts in developing new school health councils, strengthening existing councils and maintaining them as effective entities that can support and guide school health practices, programs and policies. The guide includes a CD-ROM that facilitates customizing worksheets and other materials. Web site: <http://www.schoolwellnesspolicies.org/resources/AGuideToCommunitySchoolHealthCouncils.pdf>

School Health Index Centers for Disease Control and Prevention (CDC). - Easy-to-use self-assessment and planning tool that enable school health councils and others to analyze the strengths and weaknesses of their school health policies, curricula and services. It is available free to download or request a hard copy. A new interactive web version is also available at <http://www.cdc.gov/healthyyouth/shi/index.htm>. Training and technical assistance is available upon request by contacting the Kentucky Department of Education, Coordinated School Health at (502) 564-2706.

Indoor Air Quality Tools for Schools Kit (re-released) Environmental Protection Agency (EPA). This kit helps schools implement a practical action plan to improve indoor air problems at little or no cost. The kit provides best practices, industry guidelines, sample policies, a sample management plan, and simple activities that can be done by school faculty and staff. The kit is co-sponsored by the American Association of School Administrators, the American Federation of Teachers, the American Lung Association, the Association of School Business Officials International, the Council of Educational Facility Planners International, the Healthy Schools Network, the National Association of School Nurses, the National Education Asso-



ciation-Health Information Network, and the National Environmental Health Association. For more information visit <http://www.epa.gov/iaq/schools/>

Managing Asthma: A Guide for Schools The National Asthma Education and Prevention Program (NAEPP). This guide was developed in collaboration with the U.S. Department of Health and Human Services, the Office of Safe and Drug-Free Schools, and the U.S. Department of Education. The guide assists schools that are planning or maintaining asthma management programs for students and staff with asthma. The guide provides school personnel with practical ways to help students with asthma go to school each day healthy and ready to learn. For more information contact the NAEPP through the NHLBI Health Information Center at (301)592-8573 or visit http://www.nhlbi.nih.gov/health/prof/lung/asthma/asth_sch.htm.

Students with Chronic Illnesses: Guidance for Families, Schools and Students National Heart, Lung, and Blood Institute. This guidance sheet presents positive actions schools and families can take to address multiple chronic diseases at once using the same action steps. The guidance sheet is brief—a one-page document front and back—and the suggestions given are both practical and low cost. It is designed for possible use as a checklist for those who wish to rate their current level of activity or to monitor progress toward achieving a higher level of activity. <http://www.nhlbi.nih.gov/health/public/lung/asthma/guidfam.pdf>

Is the Asthma Action Plan Working?—A Tool for School Nurse Assessment This brief assessment tool offers guidance to school nurses in determining how well an asthma action plan is working for a student. It includes information about good asthma control and a checklist of assessment items. This tool can also be used by asthma educators, primary care providers and asthma specialists. This is a joint document of the National Asthma Education and Prevention Program and the National Association of School Nurses. http://www.nhlbi.nih.gov/health/prof/lung/asthma/asth_act_plan_frm.pdf

Schooled in Asthma The American Academy of Pediatrics (AAP) - The AAP received funding through a 5-year cooperative agreement with the Centers for Disease Control and Prevention (CDC) and the Divi-



sion of Adolescent and School Health (DASH). The Schooled in Asthma project developed, implemented, and is currently evaluating a training program encouraging pediatricians to incorporate school health concepts with current asthma treatment guidelines. In part, it encourages the use of Asthma Management Plans as well as increasing communication between school personnel and pediatricians. This program also encourages the participation of pediatricians in chapter level projects surrounding school health and asthma issues. For more information about project goals, objectives, and expected outcomes, please visit this website: <http://www.aap.org/schooledinasthma/>

School Tools - Allergy & Asthma Resources for Professionals American Academy of Allergy, Asthma, and Immunology (AAAAI) - The AAAAI's School Tools library includes information for both a clinical and management overview of several allergy and asthma topics, particularly in relation to the school setting. It provides resources to keep children with allergic disease safe in school environments. Materials are updated frequently -- be sure to check back for the most current resources.

Website: https://www.aaaai.org/professionals/school_tools.stm

Healthy School Environments Assessment Tool version 2 (HealthySEATv2) Environmental Protection Agency (EPA). This software tool was developed through a collaborative effort between the Ohio Department of Health and the EPA to help school districts evaluate and manage their school facilities for key environmental, safety and health issues. The HealthySEAT tool can be customized and used by district-level staff to conduct voluntary self assessments



of schools and other facilities, and allow staff to track and manage information on environmental conditions school by school. The tool is available for download from the EPA website at no cost. Once it is downloaded, staff can customize and use it as necessary and appropriate. For more information visit: <http://www.epa.gov/schools/healthyseat/index.html>.

Managing Asthma in Schools – What have we learned? Journal of School Health. -This special issue of the American School Health Association's Journal of School Health features more than 25 research articles, brief reports, and case studies that cover a range of activities, such as asthma education programs for students and staff members, asthma-related health services, and policy changes. It includes an up-to-date list of resources for school-based asthma programs. Five key lessons for successful school-based asthma programs emerged from the research and case study findings:

- Establish strong links with asthma care clini-

cians to ensure appropriate and ongoing medical care.

- Target students who are the most affected by asthma at school to identify and intervene with those in greatest need.
- Get administrative buy-in and build a team of enthusiastic people, including a full-time school nurse, to support the program.
- Use a coordinated multi-component and collaborative approach that includes school nursing services, asthma education for students and professional development for school staff.
- Support evaluation of school-based programs and use adequate and appropriate outcome measures.

For a link to a free copy of the special issue, visit <http://www.cdc.gov/HealthyYouth/asthma/josh/>

What if students with asthma medications share

Frequently Asked Questions

their medicines with other students?

Students and staff should be aware that it could be dangerous if other students share their medicines. Students and parents should understand that allowing the student to carry their medications is a privilege that can be taken away.

If a student is having an asthma attack, shouldn't we just call 911?

No. Each student with asthma should have an emergency plan in response to an asthma attack. This may include medication the student needs, who should be contacted (i.e. parent/guardian, physician), and if/when the student needs to go to the emergency room.

Can kids with asthma play sports and participate in physical education classes?

Yes. Students with well managed asthma can participate in sports and other physical activi-

ties.

What types of triggers can be found in schools?

Common triggers in schools include mold, secondhand smoke, anything with strong odors such as candles or potpourri, pets in the classroom, and pests such as cockroaches.

What if teachers think that having classroom pets is an important learning experience for students and restrict students with asthma from handling the animals?

Dander from animals can become airborne and settle on furniture and students. This is what can cause an asthma attack, even if the student doesn't handle the animal. Dander is also difficult to remove and can be present in the environment for several months after the animal is removed.



Resources

Allergy and Asthma Foundation of America: www.aafa.org

Allergy & Asthma Network Mothers of Asthmatics: www.aanma.org/faqs/asthma

American Academy of Allergy Asthma and Immunology: www.aaaai.org

American Academy of Pediatrics (AAP): www.aap.org

American Association of School Administrators: www.aasa.org

American Lung Association: www.lungusa.org

American Lung Association of the Midland States: www.midlandlung.org

Centers for Disease Control and Prevention: www.cdc.gov/asthma

Environmental Protection Agency: www.epa.gov/asthma/index.html

Family Asthma Guide in English and Spanish: www.childrenshealthfund.org/publications/family-asthma-guide

Kentucky Respiratory Disease Program: www.chfs.ky.gov/rdp

Managing Asthma Triggers is a National Association of School Nurses continuing education program: <http://www.nasn.org/Portals/0/education/flyermat.pdf>

National Asthma Education and Prevention Program: www.nhlbi.nih.gov/about/naepp/

National Heart, Lung and Blood Institute (NHLBI): www.nhlbi.nih.gov

2009 State Plan for Addressing Asthma in Kentucky: www.chfs.ky.gov/rdp

American Academy of Pediatrics Schooled in Asthma: www.aap.org/schooledinasthma/

Asthma and Physical Activity in the School: www.nhlbi.nih.gov/health/prof/lung/asthma/asth_sch.pdf.

EPA Managing Asthma in the School Environment www.epa.gov/asthma/publications.html.

How Asthma-Friendly Is Your School? www.nhlbi.nih.gov/health/public/lung/asthma/friendhi.htm

Kentucky State Plan for Addressing Asthma in Kentucky: www.chfs.ky.gov/rdp

Kentucky School Board Association, Model Policies on School Health, Dara Bass, Director of Policy and Procedure Services, 1-800-372-2962, Ext. 220

Strategies for Addressing Asthma within a Coordinated School Health Program: This document recommends six strategies for schools to consider when addressing asthma within a coordinated school health program. The six strategies are:

- Establish management and support systems for asthma-friendly schools.
- Provide appropriate school health and mental health services for students with asthma.
- Provide asthma education and awareness programs for students and school staff.
- Provide a safe and healthy school environment to reduce asthma triggers.
- Provide safe, enjoyable physical education and activity opportunities for students with asthma.



- Coordinate school, family and community efforts to better manage asthma symptoms and reduce school absences among students with asthma.

For more information or to request copies of **Strategies for Addressing Asthma within a Coordinated School Health Program**, contact CDC's Division of Adolescent and School Health at 1-888-231-6405, by email at HealthyYouth@cdc.gov, or visit www.cdc.gov/healthyouth/asthma/index.htm

Students with Chronic Illnesses: Guidance for Families, Schools and Students:
www.nhlbi.nih.gov/health/public/lung/asthma/guidfam.pdf

Suggested Emergency Protocol for Students with Asthma Symptoms:
<http://www.nhlbi.nih.gov/health/prof/lung/asthma/sch-emer-protocol.htm>

