

Building Asthma Education

ABOUT ASTHMA EDUCATION

This section provides background information and specific proven components for initiating and expanding asthma education for the entire school population. Some components may take several years to implement and should be plotted across multiple years in your 5-year plan. Do not let multi-year activities intimidate your team! Plan carefully to work deliberately through components.

Some of the activities presented to support education objectives are policy-based. Remember, policy changes can make a long-lasting impact on students with asthma, the overall student body, and staff. Coalitions also should create educational opportunities that can become sustainable, regardless of year-to-year coalition funding or other variables. Work to identify long-term opportunities to incorporate asthma education into a school's structure. These policy changes will have lasting effect even if a coalition were to disband.

School-based asthma education is a critical element in your Asthma-Friendly Schools Initiative (AFSI) project but is not sufficient in and of itself to create an asthma-friendly environment. Education must be supported by all other AFSI elements.

Take time to understand your audience's education needs, involve them in the process and take advantage of specific opportunities within the school community. When working with schools, emphasize that asthma education maintains health of students and can minimize absenteeism, thereby improving students' ability to learn. The resultant decreased absenteeism also may help schools maximize their own funding.

ASTHMA EDUCATION COMPONENTS

Each of the following components is presented in individual hand-outs, most with specific reference materials.

- ◆ Educate all school staff so that they are prepared to respond to an asthma emergency and can support students with asthma
- ◆ Educate students, including those not diagnosed with asthma
- ◆ Educate parents of all students

◆ **Recommended Components: Educate All School Staff**

Asthma education must reach all school staff, including physical education teachers, coaches, bus drivers, administrators, playground supervisors—anyone who may be the adult first responding to an asthma episode.

Educate All School Staff Checklist

- Understand accreditation requirements
- Analyze legislative issues and district policies that affect direction/need for asthma education
- Work with school districts and school boards to require asthma education for all staff
- Conduct all-staff in-services

► **Understand accreditation requirements.** Understanding state accreditation requirements for schools is critical to planning and implementing asthma-friendly schools initiatives. Keep these ideas and issues in mind when leveraging accreditation requirements into asthma and air quality education opportunities:

- Always illustrate how a specific asthma-friendly schools educational program fulfills a school's accreditation need by focusing on the benefits to the school.
- Look for a point of entry via school improvement teams or councils that may require community involvement.
- Invite school contacts to join the community asthma coalition. They can help put asthma and/or IAQ on a school's radar screen; furthermore, they can take an active role in educating school staff about asthma and IAQ.

► **Analyze legislative issues and district policies that affect direction/need for asthma education.** Are there district policies or state legislation that require education about chronic diseases? If so, use those mandates to leverage asthma education as a means to fulfill that state requirement. Are there district policies or state legislation that mandate self-carry/self-administration of asthma medications? If so, organizations with existing programs, services, and other resources can fulfill those mandates for schools. Work with schools to identify ways to meet school mandates.

► **Work with school districts and school boards to require asthma education for all staff.** If there is no policy requiring asthma education, advocate that asthma is a critical school administrative and health issue that demands staff education for safe, effective management. An asthma education policy should ensure three components:

- education for students with asthma on asthma basics, self-management, and emergency response
- training for all faculty school staff and bus drivers on asthma basics, asthma management, trigger management, and emergency response
- asthma awareness and lung health education (e.g., as part of health education curricula and other curricula areas)

Asthma education policies can be created at either the state or district level. If you are working on a state-level policy, work with state associations such as chapters of National Association of School Nurses, American Academy of Pediatrics. If you are working on a district-level policy, identify an "asthma champion" from the school community, a local physician or other healthcare provider, parent leader, or business/civic leader to help you network and move the issue through to decision-makers.

One strategy to consider when working on policies is to incorporate many chronic diseases, which will immediately broaden your base of support and present wide-ranging health issues that impact even more children. For example, a policy related to education can include education on diabetes or epilepsy.

Be sure to focus on staff education as a critical safeguard in preventing asthma crises and potentially minimizing liability issues.

See the following materials included with this hand-out: District Policy Requiring Asthma Education, Michigan State Board of Education's Policy on the Management of Asthma in Schools, Letter to School Districts about the Need for Asthma Education, Outline of Presentation to School Board/Other administrators or Elected Officials About the Need for Asthma Education, and the Outline of Presentation to PTA/PTO or other Parent Meeting About the Need for Asthma Education.

► **Conduct all-staff in-services.** Before planning your program, identify learner outcomes for the program.

- What skills and/or basic concepts do you want staff to focus on?
- What are the critical points they should walk away knowing?

Consider the probable range of health knowledge of attendees, district policies and state legislation, legal issues such as the Family Educational Rights and Privacy Act (FERPA) and “Section 504” (of the Rehabilitation Act of 1973), emergency protocols, etc. Using an evidence-based, evaluated curriculum will help to ensure complete coverage of important topics in a manner consistent with adult learning techniques.

Focus attention on issues that the community and school have identified as priorities. Remember, the goal of staff asthma education is to prepare faculty and staff to support students with asthma. They must understand the basics of asthma, working with Asthma Action Plans and other documents or protocols, physical activity issues, etc. Discuss the importance of having a clear system of communication among the school nurse and/or clinic aide, teachers, coaches, administrative staff, and transportation staff.

LESSONS LEARNED!

Educating school staff was a very successful strategy for AFSI pilot sites—particularly when efforts included all school staff, especially office staff. Using existing programs with evaluation tools made implementation and evaluation easier and ensured that participants were actively engaged. Evaluation results indicated increased knowledge and awareness of asthma and appropriate emergency responses among school staff participants when an existing program was used.

Whenever possible, use programs and materials proven to be effective. Consider:

- *Asthma 101* from American Lung Association of Illinois presents a basic curriculum for staff.
- *Exercise & Asthma: Helping Students and Athletes Stay Active* from American Lung Association of Wisconsin focuses on physical education/activity issues for students with asthma.
- *Asthma and Physical Activity in the School* from NHLBI/NAEPP provides guidance for physical education teachers and activity monitors.
- *School Nurse Asthma Management Program* from National Association of School Nurses, a comprehensive school nurse education module, including asthma basics, asthma management documents, curriculum, resource guide, and presentations.
- *School Asthma Education Slide Set*, which is available on the NHLBI/NAEPP Web site (http://hin.nhlbi.nih.gov/naepp_slds/menu.htm). Two-part slide presentation offering

background information about the growing problem of asthma in the U.S., what asthma is, what school staff should know about helping students to manage their asthma, including triggers and warning signs of asthma episodes.

- *Asthma Management in Educational Settings* from American Lung Association of Washington/Idaho, which includes curricula for teachers, administrators, physical education teachers, and custodians.
- *Meeting in a Box: Managing Asthma in Schools* from Allergy & Asthma Foundation of America, which includes the presenter's guide, two scripts, slides, asthma diary, Student Asthma Action Cards, reproducible handouts for the audience, and a peak flow meter and spacer for demonstration.
- *American Academy of Pediatrics (AAP)*, the American Academy of Allergy, Asthma & Immunology (AAAAI), and the National Association of School Nurses (NASN) all provide asthma education for school nurses and are developing specific curricula. AAP and AAAAI are developing a School Nurse Toolkit for asthma education; AAP has developed a physician school asthma program; NASN has a School Nurse Asthma Management Program and a Managing Asthma Triggers program. Check their Web sites (listed in the Resources section) for updated information.

(See the *Resources* section for program ordering information.) Supplement any existing program with local policy information, such as self-carry/self-administration of asthma medications. Be sure to work with administrators to clarify policies and procedures, prior to your program.

REFERENCE MATERIALS

- ❖ Sample District Policy Requiring Asthma Education
- ❖ Michigan State Board of Education's Policy on the Management of Asthma in Schools
- ❖ Letter to School Districts About the Need for Asthma Education
- ❖ Outline of Presentation to School Board/Other Administrators or Elected Officials About the Need for Asthma Education
- ❖ Outline of Presentation to PTA/PTO or Other Parent Meeting About the Need for Asthma Education



District Policy on Asthma Education

WHEREAS asthma has a severe impact on schools, specifically:

- *An estimated 27.6 million Americans have been diagnosed with asthma.¹*
- *An estimated 8.9 million Americans under age 18 have been diagnosed with asthma at some point in their lives.²*
- *Asthma accounts for 14 million lost school days annually and is the leading cause of school absenteeism due to chronic conditions.³*
- *Asthma accounts for one in six of all pediatric emergency visits in the United States.⁴*
- *Asthma episodes can happen anytime and can be life-threatening, requiring emergency response by staff.*

AND

WHEREAS, asthma can be self-managed and improved by asthma education; and

WHEREAS, all school personnel must be prepared to support or administer emergency response to an asthma episode by a student or staff member, and must be trained to do so;

BE IT RESOLVED, that the _____ (district name) shall require that annual asthma education will be mandatory for all students, faculty and staff.

¹ Akinbami LJ, Scheindorf, KC. Trends in childhood asthma: prevalence, health care utilization, and mortality. *Pediatrics*, 2002; 110(2):315-322.

² National Center for Health Statistics. Raw Data from the *National Health Interview Survey, US, 1997-2000*. (Analysis by the American Lung Association Epidemiology and Statistics Unit, Using SPSS and SUDAAN software).

³ Surveillance for Asthma—United States, 1980-1999. Center for Disease Control and Prevention. *Morbidity & Mortality Weekly Report*. March 29, 2002. Vol. 51, No. 55-1.

⁴ Popovic JC. 1999 National Hospital Discharge Survey: Annual Summary with Detailed Diagnosis and Procedure Data. National Center for Health Statistics. *Vital Health Stat*, 2001; 13(151):21, Table 10.

MICHIGAN
STATE BOARD OF EDUCATION

**POLICY ON THE MANAGEMENT OF
ASTHMA IN SCHOOLS**

Asthma is the most common chronic disease of childhood and is the leading cause of preventable hospitalizations in Michigan children.^{1,2} About five percent of Michigan children under the age of 15 will experience an asthma attack each year.³ Nationally, it is the leading chronic disease cause of school absences, resulting in over 14 million absences each year.⁴ According to a National Association of School Nurses survey, asthma is more disruptive of school routines than any other chronic condition. Furthermore, a survey of Michigan public schools found that most staff are not aware of asthma's disruptive impact to the school day.⁵ However, there is hope that with proper management, asthma can be controlled. Children with properly managed asthma can participate in normal activities and not have symptoms during or miss school. Schools cannot achieve their educational mission if students with asthma cannot appropriately manage their asthma.

The State Board of Education is convinced that the benefits of a clear school policy for asthma management can make a difference in school performance. This policy builds on existing asthma best practices including Michigan's asthma inhaler law,⁶ the State Board of Education Policy on Coordinated School Health Programs to Support Academic Achievement and Healthy Schools,⁷ national strategies from the Centers for Disease Control and Prevention,⁸ and the National Asthma Education and Prevention Program.⁹

The Board, therefore, recommends that each Michigan school and district establish asthma-friendly schools by implementing the following coordinated school health practices.

- I. Establish asthma **management and support systems** to ensure asthma practices are communicated and coordinated in schools and that asthma program strategies and policies are annually evaluated, including:
 - a. Coordination of asthma management activities by the School Health Program Coordinator (see State Board of Education Policy on Coordinated School Health Programs to Support Academic Achievement and Healthy Schools).⁷
 - b. Individual asthma action plan forms in annual enrollment materials.
 - c. Facilitation of communication among school staff that interact with children with asthma using a student list developed from enrollment materials and other existing sources.

- d. A system to make staff aware of school policy on acute and routine management of asthma, including information on signs of an asthma attack, asthma medication and administration, and emergency protocols for handling asthma exacerbations in "unusual" situations such as field trips.
- II. Provide **appropriate school health and mental health services** for students with asthma, including:
- a. Procedures to obtain, maintain, and utilize written asthma action plans, signed by the child's physician, for every student with asthma.
 - b. A standard emergency protocol in place for students in respiratory distress if they do not have a written asthma action plan on site.
 - c. Policies that ensure students have immediate access to asthma medications at all times and that allow students to self-carry and self-administer asthma medications, inhalers, and Epi-Pens, as prescribed by a medical professional and approved by parents or legal guardian.
 - d. Smoking prevention and cessation programs for students and staff.
 - e. Case management for students with frequent school absences, school health office visits, emergency department visits, or hospitalizations due to asthma.
 - f. Access to a consulting health professional for the district to address asthma questions.
- III. Provide asthma education and awareness programs for students and staff, including:
- a. Education programs for students with asthma on asthma basics, self-management, and emergency response.
 - b. Professional development training for all school staff on asthma basics, asthma management, trigger management, and emergency response including classroom teachers, physical education teachers, coaches, secretaries, administrative assistants, playground aides, principals, facility and maintenance staff, food service staff, and bus drivers.
 - c. Asthma awareness and lung health education as part of health education curricula and other curricula areas.

- IV. Take actions to reduce asthma trigger exposure to promote a safe and healthy school environment by the development/adoption of the following policies and practices:
 - a. A tobacco-free school policy that is 24-hours per day, 7 days a week, on all school property, in any form of school transportation, and at school-sponsored events both on and off school property.
 - b. Prevent indoor and outdoor air quality problems by implementing best practice policies for common issues such as: preventative maintenance on heating/cooling systems; construction and remodeling projects; bus idling and retrofitting; integrated pest management techniques and pesticide application notification; cleaning practices that address fumes, dust mites, and molds; chemicals and solutions storage; and the presence of warm-blooded animals in the classroom.
 - c. Limit student outdoor activity on high ozone and extremely cold days.
- V. Provide students with asthma-safe, enjoyable physical education and activity opportunities, including:
 - a. Full participation in physical activities when students are well.
 - b. Modified activities as indicated by student's asthma action plan, 504 plan, or Individualized Education Plan (IEP).
 - c. Access to preventative medications before activity (as prescribed by their providers) and immediate access to emergency medications during activity.
 - d. Communication regarding student health status between parents, physicians, coaches, and physical education teachers.
- VI. Coordinate school, family, and community efforts to better manage asthma symptoms and reduce school absences among students with asthma, including:
 - a. Obtaining written parental permission for school health staff and primary care providers to share student health information.
 - b. Communicating between all caregivers and providers including, but not limited to, a yearly update of the asthma action plan.
 - c. Educating, supporting, and involving family members in efforts to better manage students' asthma.

- d. Identifying and utilizing available community resources such as local asthma coalitions and community programs, community healthcare providers, and social service agencies.

- ¹ Dey AN, Schiller JS, Tai DA. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2002. National Center for Health Statistics. Vital Health Stat 10(221), 2004.
- ² Wasilevich E and Lyon-Callo S. "Epidemiology of Asthma In Michigan: 2004 Surveillance Report." Michigan Department of Community Health Bureau of Epidemiology, Fall 2004.
- ³ Dey AN, Schiller JS, Tai DA. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2002. National Center for Health Statistics. Vital Health Stat 10(221), 2004.
- ⁴ National Health Interview Survey data, 2001.
- ⁵ Wasilevich E and Lyon-Callo S. "Epidemiology of Asthma In Michigan: 2004 Surveillance Report." Michigan Department of Community Health Bureau of Epidemiology, Fall 2004.
- ⁶ Michigan Compiled Law 380.1179. Available at <http://www.michiganlegislature.org/mileg.asp?page=getObject&objName=mcl-380-1179>.
- ⁷ Michigan State Board of Education. "Policy on Coordinated School Health Programs to Support Academic Achievement and Healthy Schools," (September, 2003).
- ⁸ Centers for Disease Control and Prevention. Strategies for Addressing Asthma Within a Coordinated School Health Program. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2002.
- ⁹ National Asthma Education and Prevention Program. Managing asthma: a guide for schools. Bethesda, Maryland: National Asthma Education and Prevention Program, National Heart, Lung, and Blood Institute, 2002.

Adopted January 11, 2005

Sample Letter to Districts About the Need for Asthma Education

(The following letter could be signed by the community asthma coalition, American Lung Association, PTA/PTO and/or an individual parent.)



Dear:

As faculty and staff throughout the district can attest, asthma is an issue that the school community faces daily. It affects student and faculty absenteeism and productivity, and it demands an immense amount of time and attention of our school nurses and health services staff. It is one of the leading serious chronic childhood illnesses and is a leading medical cause of school absenteeism. Asthma demands a comprehensive education approach in our school district.

Asthma is a growing health problem nationwide. It is estimated that of the 27.6 million Americans who have been diagnosed with asthma, more than one-third of them (at least 8.9 million) are under the age of 18.¹ According to the American Lung Association of _____ (name), more than _____ (number) children in _____ (area) under 18 have asthma. Asthma is a chronic condition that can be life-threatening if not properly managed. *Management of asthma in children must involve a coordinated effort by medical providers, families, and schools. The _____ (district) schools' involvement in a community-wide asthma approach is critical.*

_____ [name of coalition] urges _____ (district) to require asthma education for students, faculty, and staff. While asthma education directly benefits students who must manage their disease on a daily basis, it also can result in a significant reduction of asthma crises in schools; reduce student absenteeism and improve student learning; improve district schools' response to asthma emergencies; and minimize potential liability.

Several community resources and programs are available to help _____ (district) initiate and maintain a comprehensive asthma education effort. We would like an opportunity to present specific programs and services to the district leaders and to discuss how a comprehensive asthma education program can be initiated, with the full support of the local health organizations. _____ (contact name/title) will call you within the next week to discuss this issue; you may reach her at _____ (phone). Thank you.

Sincerely,

¹ Akinbami LJ, Scheendorf, KC. Trends in childhood asthma: prevalence, health care utilization, and mortality. *Pediatrics*, 2002; 110(2):315-322.

Outline of Presentation to School Board/Other Administrators/Elected Officials About the Need for Asthma Education



I. Asthma overview

- definition; an estimated 8.9 million Americans under the age of 18 have been diagnosed with asthma at some point during their lives¹
- local statistics of children with asthma
- can be life-threatening; focus on emergency response and school preparedness as life-saving elements
- highlight number of asthma episodes per year in district and any asthma crises that have occurred
- demands on school nurse; nurse not able to be everywhere at once; issues of immediate access to medication

II. How does asthma affect the school?

- students and staff with asthma
- potential asthma emergencies
- student absenteeism
- teacher absenteeism/reduced productivity
- liability issues

III. What are components of school-based asthma education?

- Students with asthma: focus on specific asthma management skills, communicating with parents and school staff.
- Faculty and staff: using an Asthma Action Plan; responding to asthma emergencies; recognizing signs of an asthma episode; helping students manage mild episodes; providing asthma-appropriate physical activity
- All students: Understanding asthma; recognizing signs of an asthma episode; seeking help during an episode; supporting students with asthma
- Parents: How to help manage child's asthma; communication among parents, healthcare provider, school

IV. What will asthma education in the school accomplish?

- decrease asthma crises in schools
- meet specific state health or education policy recommendations (if applicable)
- meet state/county law (if applicable)
- diminish potential liability issues
- improve teacher productivity
- decrease student absenteeism
- improve communication systems among various departments/staff
- address strategies to maximize school health services
- decrease the number of school nurse visits
- prepare staff to respond to specific emergencies
- present opportunities to link with community partners
- present opportunities for positive publicity
- help minimize bad publicity as a result of potential asthma crises and tragedies

V. How is asthma education in the school implemented?

- work with community asthma coalition/local Lung Association to identify best available programs and individuals
- teach faculty, staff, parents, students
- education programs based on NHLBI guidelines
- faculty-staff in-services
- nurse role in education/management of information among all faculty/staff
- specific programs for those students with/without asthma
- parent education opportunities
- budget considerations

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I. What is asthma?

- chronic health condition
- affects an estimated 8.9 million Americans under the age of 18,¹ including (number) in (state)
- can be life-threatening
- causes breathing problems called asthma “attacks” or “episodes” that can range from mild to serious

II. Who gets asthma?

- can affect anyone; some groups are disproportionately affected
- can be diagnosed at any age
- not “outgrown”
- an estimated 27.6 million Americans have been diagnosed; more than one-third of them (at least 8.9 million) are children under 18²

III. How does asthma affect the school?

- students and staff with asthma
- potential asthma emergencies
- student absenteeism
- teacher absenteeism/reduced productivity

IV. How does the school manage asthma?

- school health services (nursing care, liaison with primary health care provider, emergency protocols, Asthma Action Plans)
- school health team/council
- provide healthy indoor air quality, keeping potential asthma triggers in the forefront of efforts
- case management of students with increased absenteeism due to asthma and respiratory illness
- student/family referrals/links with other community resources
- education of students
- education of faculty/staff

V. What will asthma education in the school accomplish?

- A. For students with asthma (Content and skills will vary by age but will incorporate):
- definition of asthma
 - identifying triggers
 - avoiding triggers
 - using peak flow meters, knowing your peak flow
 - knowing your medications
 - signs of an asthma episode
 - seeking help
 - administering your medications, (including use of spacers)

- B. For all students (Content will vary by age but will incorporate):

- definition of asthma
- who gets asthma/how
- medications
- asthma episodes
- signs/symptoms of an asthma episode
- responding to an asthma episode

- C. For faculty/staff:

- definition of asthma
- communications among staff
- signs/symptoms of an asthma episode
- asthma medications
- peak flow meters, charts
- responding to an asthma episode/using an Asthma Action Plan
- emergency protocol for students without Asthma Action Plans
- preventing asthma episodes, including modified physical activity

- D. For parents:

- definition of asthma
- parental responsibilities
- school response/responsibilities
- Asthma Action Plans
- critical communication with schools
- possibly identifying undiagnosed cases of asthma in students

VI. How is asthma education in the school implemented?

- work with community asthma coalition/local Lung Association to identify best available programs and individuals to teach faculty, staff, parents, students
- education programs based on NHLBI guidelines
- faculty-staff in-services
- nurse role in education/management of information among all faculty/staff
- specific programs for those students with/without asthma
- parent education opportunities
- budget considerations

¹ Akinbami LJ, Scheendorf, KC. Trends in childhood asthma: prevalence, health care utilization, and mortality. *Pediatrics*, 2002; 110(2):315-322.

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