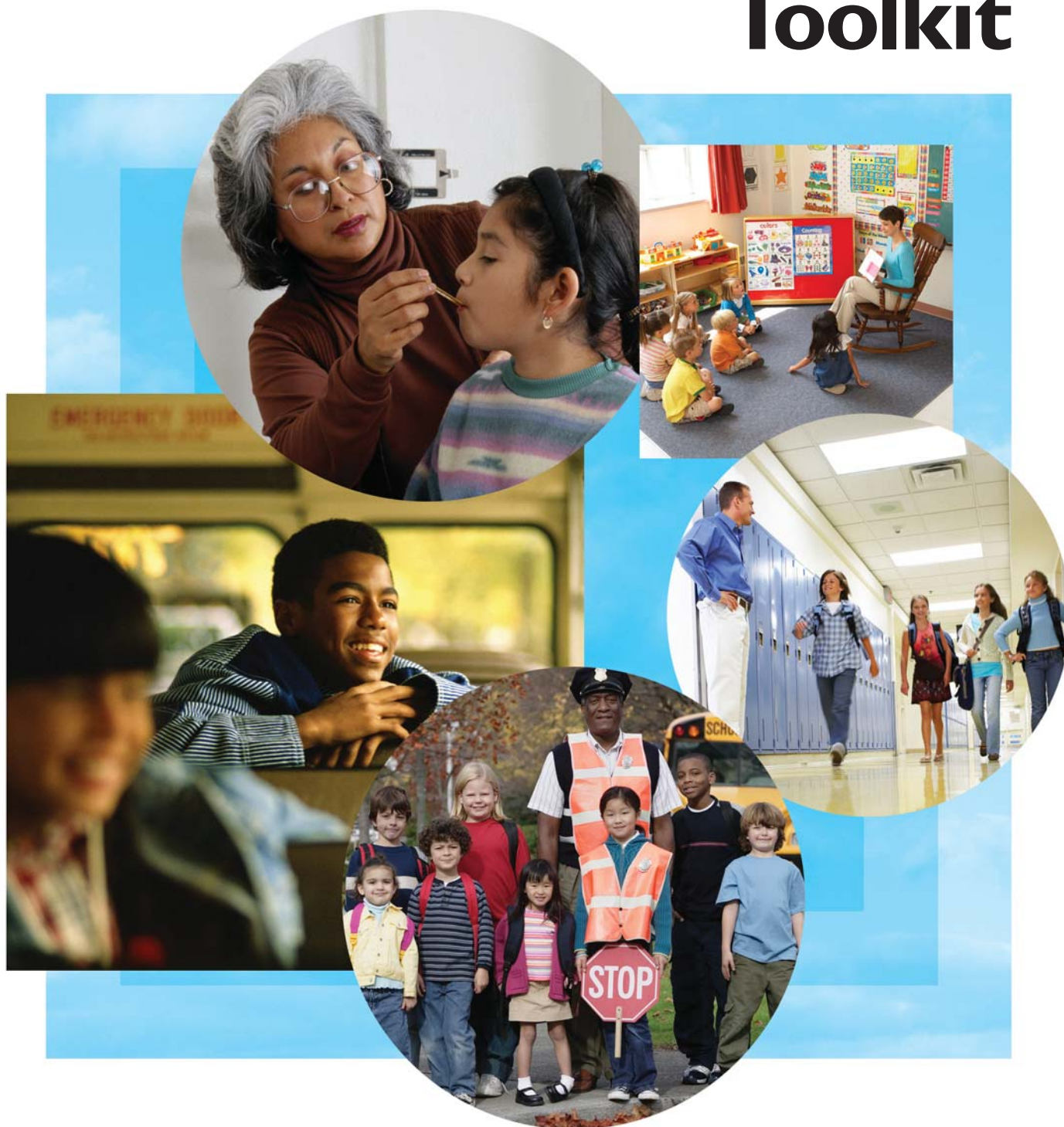


AMERICAN LUNG ASSOCIATION[®]

Asthma-Friendly Schools Initiative[®]

Toolkit



Beginning our second century, the American Lung Association works to prevent lung disease and promote lung health. Asthma is the leading serious chronic childhood illness. Lung diseases and breathing problems are the primary causes of infant deaths in the United States today. Smoking remains the nation's number one preventable cause of chronic illness. Lung disease death rates continue to increase while other major causes of death have declined.

The American Lung Association has long funded vital research to discover the causes and seek improved treatments for those suffering with lung disease. We are the foremost defender of the Clean Air Act and laws that protect citizens from secondhand smoke. The Lung Association teaches children the dangers of tobacco use and helps teenage and adult smokers overcome addiction. We help children and adults living with lung disease to improve their quality of life. With your generous support, the American Lung Association is "Improving life, one breath at a time."

*For more information about the American Lung Association
or to support the work we do, call
1-800-LUNG-USA (1-800-586-4872)
or log on to **www.lungusa.org**.*



This publication was supported by Cooperative Agreement number U58/CCU220205 from the Centers for Disease Control and Prevention Division of Adolescent and School Health (CDC). The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

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Acknowledgments

The American Lung Association Asthma-Friendly Schools Toolkit is the result of the combined efforts of three groups of experts' work over several years. The effort began with the December 2001 Asthma-Friendly Schools Development Conference that pooled the experiences and insight of a range of professionals with specific expertise in asthma, health education and promotion, community organization, school health, environmental health, and program management.

Following a 2002 field test, the toolkit was revised and piloted in eight sites (with grant support from the Centers for Disease Control and Prevention (CDC) and the American Lung Association's educational partnership with Kaiser Permanente). The pilot sites were charged with determining the usefulness of the Toolkit in helping coalitions identify goals, developing strategies, and designing and implementing comprehensive asthma management plans to make schools asthma-friendly.

The overall process and details presented in the Asthma-Friendly Schools Toolkit are complementary to the CDC's *Strategies for Addressing Asthma within a Coordinated School Health Program*. Strategies presented in this document are based on six key elements of school-based education and intervention developed by expert panelists at the November 2000 national conference, "Asthma Prevention, Management, and Treatment: Community-Based Approaches for the New Millennium," sponsored by Kaiser Permanente and the American Lung Association. The Asthma-Friendly Schools Toolkit is grounded in these same elements.

The American Lung Association thanks the panel of nurses, physicians and educators who participated in the initial development conference, coalition members working in the eight pilot sites, and American Lung Association staff and volunteers who pilot-tested the evolving resource during the summer of 2002. They represent a wide range of experts with a tremendous depth of knowledge. Their collective experience provided invaluable insight that will benefit all users of the guide.

The American Lung Association also acknowledges the support of Kaiser Permanente for its ongoing asthma partnerships and to the CDC Division of Adolescent and School Health for their commitment to improving the health and environment of children with asthma through their asthma-friendly schools initiative's support of comprehensive asthma management in schools.

Thank you to the community coalitions of the eight pilot sites who implemented the Asthma-Friendly Schools Toolkit from January 2004-December 2005. Their willingness to try this new approach and share their lessons learned will benefit coalitions nationwide.

American Lung Association of Arizona
Maricopa County Asthma Coalition
Phoenix, AZ

American Lung Association of the Inland
Counties
San Bernardino County Asthma Coalition
San Bernardino, CA

American Lung Association of Kansas
Kansas Asthma Coalition
Wichita, KS

American Lung Association of Maryland
Eastern Shore Asthma Coalition
Salisbury, MD

American Lung Association of Michigan
Childhood Asthma Task Force
Flint, MI

American Lung Association of Ohio
Greater Cleveland Asthma Coalition
Cleveland, OH

American Lung Association of
California—Redwood, Empire Branch
Sonoma County Asthma Coalition
Santa Rosa, CA

American Lung Association of Washington-
Spokane Branch
Inland Northwest Asthma Coalition
Spokane, WA

Introduction

What is an Asthma-Friendly Schools Initiative? Why is it needed?

The American Lung Association's Asthma-Friendly Schools Initiative supports a goal of all schools: Educating children by *keeping them healthy, in school and ready to learn*.

It presents a framework and tools for community organizations to assist schools in assessing the school's needs, current capabilities, and opportunities to strengthen themselves as "asthma-friendly schools." An "asthma-friendly" school is one that provides the infrastructure, education, and support needed to ensure that students with asthma are ready and able to learn.

Schools are the one central point in a community where you can reach children. For most children, school is a great place of consistency, where they are supported by a dependable team focused on the students. This American Lung Association *Asthma-Friendly Schools Toolkit* was created to give Lung Associations and other community organizations the background information and specific materials they need to work with schools to keep kids with asthma healthy and ready to learn.

About Kids & Asthma

Within every school in the United States, teachers, administrators, parents and students share not only educational goals but the reality of asthma. It affects an estimated 22 million Americans¹, including at least 6.5 million children under 18.² School populations face a host of issues directly related to asthma: potential asthma emergencies, absenteeism, student and teacher productivity, health office visits, and access to life-saving medications, to name just a few. In many cases, schools are not prepared to manage these issues, resulting in a school environment that may actually exacerbate an individual's asthma and inhibit students' learning. The goal of this *Asthma-Friendly Schools Toolkit* is to help schools achieve their main goal—the education of students.

Asthma is a serious chronic childhood illness. Asthma is the third leading cause of hospitalization among children under the age of 15.³ Most children have mild to moderate problems, and their illness can be controlled by treatment at home. For some children, however, the illness becomes a formidable problem causing numerous visits to the hospital emergency room. In 2004, 754,000 pediatric emergency room visits were due to asthma. The estimated annual rate for emergency room visits among children under 5 years is 16.8 per 1,000 persons—the highest rate of all age groups.⁴

¹ National Center for Health Statistics. Raw Data from the National Health Interview Survey, U.S., 2005. (Analysis by the American Lung Association, Using SPSS and SUDAAN software).

² National Center for Health Statistics. Raw Data from the National Health Interview Survey, 2005 (Analysis by the American Lung Association, as published in Trends in Asthma Morbidity and Mortality, May 2005; accessed at <http://www.lungusa.org/atf/cf/{7A8D42C2-FCCA-4604-8ADE-7F5D5E762256}/ASTHMA1.PDF>

³ National Center for Health Statistics. National Hospital Discharge Survey

⁴ National Center for Health Statistics. Raw Data from the National Hospital Ambulatory Medical Care Survey, 2004 (Analysis by the ALA).

In addition:

- Asthma accounted for 12.8 million lost school days in 2003 and is the leading cause of school absenteeism attributed to chronic conditions.⁵
- Low-income populations, minorities, and children living in inner cities experience more emergency department visits, hospitalizations, and deaths due to asthma than the general population.⁶
- In 2004, 5.2% of children (3.8 million) had at least one asthma attack in the preceding year.⁷
- In 2004, there were an estimated 750,000 ED visits by children under 18 with a first-listed diagnosis of asthma.⁸

Asthma is a chronic condition that can be life-threatening if not properly managed, yet *asthma can be controlled* with proper diagnosis, appropriate asthma care and management activities. Children with well-managed asthma should live normal, active lives.

Management of asthma in children must involve a coordinated effort by medical providers, families and schools. Effective school asthma management may improve not only individuals' asthma management but also a community-wide response to this growing public health issue.

The strategies and materials presented in the Toolkit will help schools implement the National Asthma Education and Prevention Program (NAEPP) Resolution on Asthma Management at School and the Centers for Disease Control and Prevention's (CDC) *Strategies for Addressing Asthma within a Coordinated School Health Program*. The key components to effective school asthma management include attention to the following principles:

Health & Mental Health Services—Individuals with asthma must have appropriate and immediate access to healthcare. Within the school, this includes access to trained school health services staff with required resources, Asthma Action Plans, existence of medical emergency protocols, immediate access to prescribed medications, and referrals as needed to community and medical resources.

Asthma Education—Education efforts increase knowledge among students with asthma, classmates of students with asthma, parents, and school staff about asthma and their roles in its management.

Healthy Environments—Managing air quality is critical to asthma management in schools. Students and school staff who spend their days in a healthy environment with well-managed facilities and air quality should suffer fewer asthma episodes and other short- and long-term health effects from environmental causes. Schools should manage indoor air quality (IAQ) and implement a procedure for managing students' exposure on high outdoor air pollution days.

⁵ National Center for Health Statistics. Raw Data from the National Health Interview Survey, 2003 (Analysis by the American Lung Association, as published in Trends in Asthma Morbidity and Mortality, May 2005; accessed at <http://www.lungusa.org/atf/cf/{7A8D42C2-FCCA-4604-8ADE-7F5D5E762256}/ASTHMA1.PDF>

⁶ Akinbami LJ, Schoendorf, KC. Trends in childhood asthma: prevalence, healthcare utilization, and mortality. *Pediatrics*, 2002;110(2):315-322

⁷ Raw Data from NHIS, 2005 (Analysis by the American Lung Association).

⁸ 2004 National Hospital Ambulatory Medical Care System.

Physical Education and Activity—Students with asthma can participate fully in physical activity when they are symptom-free, but they may need to make modifications when their asthma is not fully controlled. School staff must be prepared to work with students individually to ensure their ability to participate and to provide appropriate physical activity when needed.

How to Use the Asthma-Friendly Schools Initiative Toolkit

The toolkit is intended for use by community organizations as they collaborate with schools. While individual materials are targeted toward school staff, the entire toolkit is not designed to hand off to a school for implementation. Sample materials throughout the toolkit are intended for reproduction by local organizations and schools. They are available electronically in both Word and PDF documents and can be accessed on the CD-ROM and on the Asthma-Friendly Schools page on the American Lung Association's Web site (www.lungusa.org/afsi).

The Asthma-Friendly Schools Initiative Toolkit is a planning tool based on real-life activities that have been used in schools throughout the United States to create comprehensive asthma management systems. Elements of the Toolkit provide in-depth planning and activities to support CDC's *Strategies for Addressing Asthma within a Coordinated School Health Program*.

As schools and school districts vary within and among regions and states, the Toolkit provides approaches that can and should be customized depending on local variables, priorities, and current situations.

The Toolkit is divided into two successive sections and also contains a list of resources for schools and community organizations.

All activities must be based on community-specific planning; therefore, coalitions and community organizations should work through Part 1, Master Planning, before undertaking any activities detailed in the second half of the Toolkit.

Part 1: Master Planning presents 4 Action Steps for successful planning. It is a step-by-step primer on focused and systematic planning process for coalitions. Work undertaken through careful planning will be the foundation of a community's long-term asthma management in schools and will be the footprint on which all strategies are developed and subsequently implemented.

Part 2: Asthma-Friendly Schools Activities presents a range of activities from which coalitions and schools can achieve their specific goals and objectives, established through Master Planning. While this section details a range of activities, local choices must be based on community needs assessments and coalitions' resultant priorities defined in their long-term planning (Part 1). The text and resource materials are presented as a menu of possible activities, depending on individual school and school district's needs. Activities are organized to reflect the elements of CDC's *Strategies for Addressing Asthma within a Coordinated School Health Program*.

Defined Terms Used throughout the Toolkit

Vocabulary varies among public health and education practices. For the purposes of the Asthma-Friendly Schools Initiative, this Toolkit incorporates the following terms consistently:

Goals: A set of aims that set the AFSI project’s long-range direction

SMART Objective: Specific level of achievement, based on goals. ‘SMART’ stands for “specific, measurable, achievable, realistic and time-sensitive.”

Activities: Actions that must occur to meet objectives and work toward long-term goals

Outcomes: Measurable changes that ultimately affect students (i.e., in students’ education, disease awareness, disease management, etc.)

Evaluation: The process of monitoring progress in meeting objectives and achieving desired outcomes, which may involve modifying plans as you move forward

Master Planning

INTRODUCTION

The Asthma-Friendly Schools Initiative (AFSI) is a powerful public health project that has the potential to positively impact the millions of American students with asthma. Its success relies on collaborative efforts among schools, community agencies and leaders, and a planning process that considers virtually every factor that can influence its success. AFSI planning is based on a five-year plan, with year-by-year task planning and ongoing assessment.

The Need to Invest in Planning

The axiom *failing to plan is like planning to fail* could have been created specifically for the Asthma-Friendly Schools Initiative. Creating asthma-friendly schools involves multi-year commitments by schools and coalition members and must be funded through various partnerships and grants that will support long-term activities.

It is based on needs and/or resources of students, faculty and staff, parents, the medical community, community agencies, and others—all woven together through a series of activities that can transform school-based asthma management.

If you want to impact asthma in your community by efficiently implementing an Asthma-Friendly Schools Initiative, **do nothing until you plan!**

Planning will ensure success by providing the roadmap to:

- organize coalition members and/or community stakeholders
- maximize community resources
- prevent duplication among community groups
- determine and prioritize school needs
- determine and work toward specific goals that support the program's long-range purpose
- track short-term results and modify activities to be more efficient and effective
- systematically evaluate activities and public health outcomes
- measure long-term achievements

Elements Needed for Local Asthma-Friendly Schools Initiative

Creating and sustaining a local asthma-friendly schools effort is a long-term proposition. It requires creative and resourceful thought, cooperation, and action among a range of individuals and organizations. As individuals and/or organizations are recruited and join the effort, acknowledge the ground-level elements the initiative needs:

- *People*—From school and community stakeholders, the medical community, children and their parents, and organizational staff, many groups of people make an AFSI program move forward.
- *Partnerships*—These can range from professional organizations, local medical and business corporations, and funding sources.
- *Flexibility*—Even the most carefully conceived plans will need modification. Be prepared to assess progress and make meaningful changes. Organizations also must be willing to view partnerships and situations from new perspectives and possibly modify some of their own work and/or relationships.
- *Time*—This is a multi-year project that first relies on an investment of time-intensive planning among a core group, as well as task-specific activities that will demand various amounts of time shared among several individuals and organizations.
- *Resources*—AFSI projects will depend on the expertise of a range of professionals, as well as long-term funding. Coalition members and others must bring their network of resources to the initiative to maximize a community-wide effort.
- *Cooperation*—Coalition members must bring their specific skills, networks, and strengths to the table and be willing to collaborate through a meaningful and long-term commitment.

Using the Toolkit to Guide Your Planning Process

This Toolkit is based on the premise that a successful, long-term AFSI program that can positively impact students with asthma must be grounded in a structured planning process. AFSI is rooted in community planning by a coalition representing community-wide input, resources, and support.

There are as many ways to plan as there are organizations. As you pull a community coalition into the planning process, realize that organizations and individuals all think differently and plan differently.

This Toolkit presents one suggested planning system, which is organized into four action steps. Tools presented allow you to design customized long-term planning based on specific community needs.

Each action step includes a detailed explanation of how a coalition can work through the step, with ideas for modifying your local effort, as well as reference materials that follow each step. Those reference and sample materials provide the details you will need. All planning action steps and subsequent implementation activities will be framed by your own specific community's needs and resources.

All resources provided to guide local planning are based on real-life experience among coalitions and schools. Many of the resources are based on the experience of American Lung Association staff and coalition members who piloted this Toolkit.

REFERENCE MATERIALS

❖ American Lung Association's AFSI Planning Challenges & Tips

[Note: Planning challenges presented incorporate issues pilot sites faced throughout the planning process and are discussed throughout the remainder of this Master Planning section.]



American Lung Association's AFSI Planning Challenges & Tips

Note: The following challenges and tips are based on the experience of local coalitions who participated in AFSI pilot programs. Planning challenges presented incorporate issues pilot sites faced throughout the planning process and are discussed throughout the remainder of this Master Planning section. For details, see the Lessons Learned included throughout the AFSI Toolkit.

Challenge: Prioritizing asthma among other health issues in schools

- Tip:* Highlight data, including absenteeism. According to CDC, on average, students with asthma are absent three to five more days per year than students without asthma and some students are absent much more.
- Tip:* Work with other chronic disease organizations to address systems changes that apply to all chronic disease vs. just asthma. Systems changes that work for asthma will generally work well for other chronic conditions the schools deal with like Diabetes, seizures, and food allergies.

Challenge: Lack of asthma data, particularly school- or district-specific data

- Tip:* Use the AFSI process as a mechanism for gathering specific data. Utilize the AIR database at a pilot school to determine the burden of asthma (see page 101 of this toolkit).
- Tip:* Contact state asthma program coordinator about new and pending data collection activities.
- Tip:* Use the School Health Index to establish baseline information. Future use of the SHI will help to show improvement.

Challenge: Coalition members not closely involved with project

- Tip:* Agree on specific tasks with clear areas of responsibility and deadlines.
- Tip:* Identify those who are best utilized as “advisors” and ask them for recommendations for other representatives from their organization to work as part of planning work group, etc.
- Tip:* Recognize member accomplishments and celebrate successes.

Challenge: High-level school decision-makers not involved

- Tip:* Recruit a school board member to join coalition and possibly to participate actively in long-term planning work group.
- Tip:* Secure superintendent involvement in advisory role, to help inform planning and implementation; ultimately, this will support implementation.
- Tip:* Include as many school decision-makers as possible in needs assessment, using assessment process as first point of AFSI promotion.
- Tip:* Involve the school district lead nurse. Include the lead in the needs assessment, stakeholder meetings and perhaps AFSI planning work group.
- Tip:* Keep state school nurse coordinator actively involved in AFSI coalition; include the coordinator in needs assessment.
- Tip:* Involve school district manager of health services. Include the manager in the needs assessment, stakeholder meetings and perhaps AFSI planning work group.

Challenge: Need greater involvement of school nurses

- Tip:* Involve them in school needs assessment; request their input for your assessment and try to recruit nurses as leads within each school during needs assessment process.
- Tip:* Recruit school nurse into AFSI planning work group.
- Tip:* Present 5-Year AFSI Plan at state school nurses' conference.
- Tip:* Pitch article about the 5-Year AFSI Plan to state school nurses' newsletter or magazine.

American Lung Association's AFSI Planning Challenges & Tips (cont.)

Challenge: Need involvement of health care providers

- Tip:* Include them in needs assessment, using assessment process as the first point of promotion for AFSI.
- Tip:* Invite local health care leaders to stakeholder meetings

Challenge: Need for more parent involvement

- Tip:* Network through school-based parent organizations, school nurses, and other staff with whom you have existing relationships to identify parents of children with asthma who may be interested in getting involved.
- Tip:* Include as many parents as possible in your survey sample during your needs assessment. Include a question on survey tools or during interviews about parent interest in working on AFSI.
- Tip:* Invite PTO/PTA leaders to your stakeholder meeting(s) where you present needs assessment findings and define the long-term AFSI plan.

Challenge: Lack of expertise writing survey/assessment tools and difficulty finding good existing survey(s)

- Tip:* Consider using the School Health Index as your needs assessment survey tool. This validated tool contains asthma questions and is used by schools for other needs assessment processes. The schools may already be familiar with the forms and the process.
- Tip:* Sample surveys are included as reference materials at the back of Action Step 2.
- Tip:* Web-based survey tools are available. Check into www.surveymonkey.com and others.
- Tip:* Recruit a university-based researcher to write assessment tools (and help analyze and prioritize results).

Challenge: Low rate of participation in needs assessment (surveys, etc.)

- Tip:* Use incentives. Examples used by pilot sites included gift certificates, free movie tickets, a free shopping trip to the teacher supply store, and even posters for the classroom.
- Tip:* Make sure you plan your needs assessment around the school calendar. Completion of the needs assessment is much more likely when it is convenient for school personnel to participate.
- Tip:* Make sure you have high level school administrative support on your planning team. This will help to ensure the schools participation in a needs assessment process. Support from the Board of Education or Superintendent can be key to ensuring completion.

Challenge: Need to integrate evaluation and identify outcomes with planning

- Tip:* Recruit a public health professional with specific planning and evaluation experience to work with your AFSI planning work group.
- Tip:* Take each prioritized need documented and in your needs assessment report and create a planning grid (see sample) that detail year-by-year measurements (indicators and data sources) for each outcome defined.

Challenge: School calendars and coalition timelines conflict

- Tip:* Increase timeframe for planning, working back from the school calendar.
- Tip:* Plan activities according to 9-month school calendar to allow for more school personnel involvement.

ACTION STEPS

AFSI Planning Action Steps

1. Organize stakeholders
2. Conduct needs assessment
3. Create 5-year plan
4. Develop Year 1 workplan

As you begin, keep these rules of thumb in mind:

- Do not skip steps! This community-planning system is based on real-life experiences and is structured specifically to guide your planning to maximize resources by following an efficient roadmap.
- The basic information that guides you through each step is presented as text, with resources and sample materials compiled after each step. Take advantage of existing reference materials whenever feasible; this will save you time and possibly money!

◆ **Action Step 1: Organize Stakeholders**

To Organize Stakeholders:

- Establish an AFSI coalition
- Review AFSI purpose and establish planning process
- Identify existing programs and resources
- Develop list of additional participants & plan recruitment
- Determine preliminary scope of AFSI project
- Determine organizational structure

LESSONS LEARNED

Before you begin, ask yourself: “Where are the schools?”

AFSI is a collaborative process between the community and the schools. The schools must be equal partners in the process. Pilot sites found that AFSI planning and implementation cannot be successful without school full participation in all aspects of the project. Stop and strategize bringing both “ground level” staff (nurses, teachers) and high-level administrators (superintendent, school board) into the project at the beginning of the process. Including individuals with fiduciary responsibility in the school district is particularly important!

Bringing schools to the planning and implementation process as full partners is recommended by pilot sites. Based on their experiences, your program will not be successful without the schools’ participation—from conducting a needs assessment, to recruiting program champions, and implementing long-term activities, and evaluation.

Take time to learn about schools, network among existing contacts to meet with high-level administrators, and systematically apply everything you learn from them as you move forward. Find the school/district that is willing to be a full partner in the process and is willing and able to change.

Establish and convene an AFSI coalition

AFSI is designed to be planned and implemented by a community coalition—either through an existing asthma coalition or another structured community group. One organization, such as the American Lung Association, usually will act as the “sponsoring organization” that convenes the group and provides initial leadership. As an organization, your AFSI coalition will need to determine a specific structure, which may include many options—such as whether you are forming a formal coalition or a limited-time task force. Most AFSI pilot sites implemented the project under a coalition effort.

[Note: Within this AFSI Toolkit, the larger group is referred to as a coalition, while smaller task-oriented groups within the larger coalition are referred to as “work groups.”]

As with any coalition effort, leaders will emerge, individual strengths and resources should be maximized, responsibilities should be specifically assigned, and organizations should be accountable for their share of work.

Coalition-building is a dynamic process that changes as needs are identified and analyzed, membership grows, and programs are implemented. Local groups can tap into a range of existing resources for guidance on coalition-building. (See the Resources section of this Toolkit.)

If you are establishing a new asthma coalition to initiate your AFSI project, consider inviting known health agencies, business, community, and education leaders to serve as your core planning group. The core group’s first responsibilities will be to identify and recruit additional members to fortify your efforts and provide knowledgeable direction for your AFSI project.

Remember: Coalition start-up and coalition efforts will require time and resources among all participants; a lead agency, in particular, should be committed to the long-term coalition effort!

Make schools a part of the process

Schools must be part of the AFSI planning process and coalition-building is paramount to ensuring a successful working relationship with schools. This way, coalition members can define and create opportunities for schools to tap into community resources, and schools can define and create opportunities for the coalition and/or individual members to tap into school resources. AFSI requires this collaborative effort to be successful. Take advantage of the Centers for Disease Control and Prevention’s (CDC) Coordinated School Health Program materials (see CDC Coordinated School Health Program Fact Sheet in Reference Materials at the end of this section).

Consider hosting a meeting of all willing participants (schools and coalition members) before moving forward with planning. Be sure that everyone is ready and willing to take on the project and to work collaboratively.

Keep three key points in mind as you move forward with schools:

- AFSI is a collaborative process between the schools and the community. The project cannot move forward without that collaboration. Schools and the coalition are equal partners.
- Involve student and parent leaders in your community asthma coalition.
- Work to identify an “asthma champion” within each school, who will help you navigate through the school/district system. Keep in mind that this individual may not be a teacher or nurse; it may be an administrator, parent leader, coach, or a facilities manager.

LESSONS LEARNED!

Tips for developing a relationship with schools

1. Learn about districts: Know key players, budget issues, bureaucracy.
2. Network: Talk to anyone you know, professionally or personally, who is involved in the district.
3. Take a customer-friendly approach: Take time to understand different groups who could become involved in asthma-friendly schools efforts. Approach each group by focusing on “selling points.” (See reference materials at the end of this section.) Understand “what’s in it” for them.
4. Get to “the issues”: Understand policies, state legislation and federal statutes that affect health programs and services in schools. Use that knowledge to your advantage and don’t let policies catch you off guard.
5. Be persistent yet patient: Relationship-building takes time.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Does the purpose of the AFSI process fit with your organization’s goals?
- Do you have the time and resources to start a planning process?
- Have you formed a partnership with a school district that is ready and willing to do the work needed?

Review AFSI’s purpose and establish your planning process

Bring the initial group together and educate them about AFSI’s purpose, its design as a coalition-based initiative, and the overall planning and implementation process recommended. Focus on the AFSI purpose to keep kids with asthma healthy and ready to learn!

Highlight the proven effective planning process and implementation activities presented in this Toolkit. Define the group’s goals in planning and implementing an AFSI project over several years. This will be a pivotal time in the process to analyze your schools’ schedules and other high-level issues your partner school brings to the discussion; remember, AFSI is a collaborative process with your school(s). Together, review the planning process and document any modifications that your coalition strongly recommends and determine a timeline for completing the planning process. Consider creating a planning work group from the larger coalition membership. The planning process may be up to one year.

A note of caution: The tendency of community collaboratives is to want to start activities right away and members may not want to consider long-term planning. But one of the critical tasks of this first meeting is to sell the importance of the planning process itself. Work hard not to trim the process unless absolutely necessary. Keep in mind that the process was pilot-tested and is based on real-life experience by coalitions throughout the U.S.

Identify existing asthma-related programs and resources

Work group members should document existing programs and resources, including key individual contacts. This will provide the backdrop for your AFSI work and needs assessment (Action Step 2) and will document:

- member organizations' involvement in asthma and current programs and resources dedicated to asthma
- detailed list of state/local programs and services (asthma, school health)
- state/county/municipality departments and staff involved in asthma and school health
- hospital/HMO and group practices' programs
- existing asthma and school program funders and contact individuals
- asthma researchers
- contact person for a CDC-funded coordinated school health program (located at state departments of health or education for funded states)
- state asthma coordinator, within the state department of health
- other community asthma lead persons who may already be tapped into an informal network of decision makers

To minimize your assessment time and to initiate contact with some important individuals, tap into existing resources and contacts. Community asthma resources can help you identify existing data, add a depth of knowledge about existing programs, and provide technical assistance for planning and implementation. Remember, involving healthcare providers and other health-related organizations and professionals can result in outcomes that will bolster your asthma-friendly schools efforts.

Several existing resources can help get you started. One specific Web site (<http://ctb.ku.edu/>) is an extensive "Community Toolbox" with a range of materials, such as a section on assessing community needs. Many customized tools are available to assess community and/or state needs and services. Network through coalition members and contacts within municipal and state health departments to identify resources.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Have you identified asthma programs in the community?
- What asthma resources are currently available to schools?

Develop a list of additional participants and plan recruitment

Coalition membership should be truly representative of your community. Stakeholders from all populations and geographic neighborhoods should be involved. A diverse membership will ensure that all needs are being examined and that programs and resources developed are culturally appropriate and culturally competent. Plan recruitment based on your local project needs; membership does not have to include representation from all potential sources presented in this AFSI toolkit. Of course, membership can and should grow as you learn more about key individuals and/or organizations who can make things happen in your local community, such as:

- community-based organizations
- potential funders

- parent and student leaders
- health/medical professionals (primary healthcare providers, pharmacists, respiratory therapists, etc.)
- community elected officials
- business and community opinion leaders
- school personnel and school board members with access to resources
- health plan representatives
- urgent care, emergency department, and hospital representatives
- public health representatives

(See the American Lung Association Tip Sheet—Recruiting an AFSI Coalition: Know Your Audiences & Benefits at the end of this section.)

LESSONS LEARNED!

AFSI pilot sites recommend a diverse membership! Individuals will be provide a wide range of perspectives and experience, and can connect the coalition with varied networks for funding and other resources.

Your work group’s list of existing asthma programs and resources should be the foundation for recruiting additional members into the AFSI planning process. Be sure to look beyond the existing programs list to recruit representatives from other community organizations who bring diversity to the group—both in populations served and in function (health, business, youth services, etc.).

Delegate responsibilities for recruiting specific individuals to your members. Everyone should work toward a relatively quick deadline to keep the process moving forward!

SELF-CHECK!

Are you on the right track? Ask yourself:

- What school representatives are participating in the planning process? Do you have access to decision-makers? Is an asthma champion on board?
- What skills will your group need that are currently missing from your participants? Who from the community could provide those skills?
- Are the participating schools ready for the process and the changes that will be required to implement AFSI?

Determine target of the AFSI project

Although the final decision about which and how many schools or districts with whom you’ll work will be made after your needs assessment, the coalition should identify a preliminary concept of the target of your AFSI project. Will you focus on one school, one district, or a geographic region?

AFSI pilot sites reported that their coalitions needed a general definition of their work early in the planning process, with the understanding that it may be refined after the needs assessment is complete.

SELF-CHECK!

Are you on the right track? Ask yourself:

- What level of school representation is working on the project? Can they make changes at one school, one district, or the whole state?
- Considering your scope, how large a needs assessment should you undertake? For example, if you are focusing the program on the entire district, do you need information on the entire district or a representative sample?

Determine organizational structure

If your AFSI project is not being planned under the auspices of an existing organizational structure, you will need some understanding of how the group will function. The group should define staff lead(s), a chairperson, subcommittee or work group leads, and its overall goals.

A community asthma coalition should work under the philosophy that individual members/groups are working cooperatively, specifically to increase options for funding and policy change related to creating asthma-friendly schools. To facilitate that cooperative work, a coalition should consider the following issues for effective coalition management, and implement decisions and direction of the group as agreed upon by members:

- All organizations should share agendas, strategic plans, program information, audiences, and roles, so that resources are clarified.
- The group should identify and formally define its goals and objectives, roles, strengths, and weaknesses.
- Members should agree on a written purpose and clarify basic organizational systems, whether they are formal or informal. These include processes for decision-making and conflict resolution, as well as a communications system.
- Members should determine and agree how finances are managed and which organization(s) are willing to serve as fiduciary agents.
- Members should determine whether all community voices are at the table and continuously recruit others who are identified as filling gaps.
- Members should seek out other coalitions to learn/share information locally; these resources could include information about health/medical systems, municipal/state information, etc.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Who is sitting at the table and why?
- Are coalition members willing to work together and share resources even as the project impacts individual organizations?
- Have coalition members agreed on specific, written goals?
- What are the procedures for AFSI?
- Who is charged with ensuring AFSI work continues on schedule?
- What are the mechanisms of conflict resolution that are in place?

REFERENCE MATERIALS

- ❖ Centers for Disease Control & Prevention Coordinated School Health Program Fact Sheet
- ❖ American Lung Association Tip Sheet—Recruiting an AFSI Coalition: Know Your Audiences & Benefits

Centers for Disease Control & Prevention (CDC) Coordinated School Health Program Fact Sheet

CDC has established a national framework to support coordinated school health programs (CSHP). More than 60 national non-governmental education and health organizations work with CDC to develop model policies, guidelines, and training to assist states in implementing high-quality school health programs.

What is a CSHP?

A coordinated school health program (CSHP) model consists of eight interactive components. Schools by themselves cannot, and should not be expected to, address the nation's most serious health and social problems. Families, health care workers, the media, religious organizations, community organizations that serve youth, and young people themselves also must be systematically involved. However, schools could provide a critical facility in which many agencies might work together to maintain the well-being of young people.

Eight Component Model

The following are working descriptions of the eight components of a coordinated school health program.

1. *Health Education:* A planned, sequential, K-12 curriculum that addresses the physical, mental, emotional, and social dimensions of health. The curriculum is designed to motivate and assist students to maintain and improve their health, prevent disease, and reduce health-related risk behaviors. It allows students to develop and demonstrate increasingly sophisticated health-related knowledge, attitudes, skills, and practices. The comprehensive health education curriculum includes a variety of topics such as personal health, family health, community health, consumer health, environmental health, sexuality education, mental and emotional health, injury prevention and safety, nutrition, prevention and control of disease, and substance use and abuse. Qualified, trained teachers provide health education.
2. *Physical Education:* A planned, sequential K-12 curriculum that provides cognitive content and learning experiences in a variety of activity areas such as basic movement skills; physical fitness; rhythms and dance; games; team, dual, and individual sports; tumbling and gymnastics; and aquatics. Quality physical education should promote, through a variety of planned physical activities, each student's optimum physical, mental, emotional, and social development, and should promote activities and sports that all students enjoy and can pursue throughout their lives. Qualified, trained teachers teach physical activity.
3. *Health Services:* Services provided for students to appraise, protect, and promote health. These services are designed to ensure access or referral to primary health care services or both, foster appropriate use of primary health care services, prevent and control communicable disease and other health problems, provide emergency care for illness or injury, promote and provide optimum sanitary conditions for a safe school facility and school environment, and provide educational and counseling opportunities for promoting and maintaining individual, family, and community health. Qualified professionals such as physicians, nurses, dentists, health educators, and other allied health personnel provide these services.
4. *Nutrition Services:* Access to a variety of nutritious and appealing meals that accommodate the health and nutrition needs of all students. School nutrition programs reflect the U.S. Dietary Guidelines for Americans and other criteria to achieve nutrition integrity. The school nutrition services offer students a learning laboratory for classroom nutrition and health education, and serve as a resource for linkages with nutrition-related community services. Qualified child nutrition professionals provide these services.
5. *Counseling and Psychological Services:* Services provided to improve students' mental, emotional, and social health. These services include individual and group assessments, interventions, and referrals. Organizational assessment and consultation skills of counselors and psychologists contribute not only to the health of students but also to the health of the school environment. Professionals such as certified school counselors, psychologists, and social workers provide these services.
6. *Healthy School Environment:* The physical and aesthetic surroundings and the psychosocial climate and culture of the school. Factors that influence the physical environment include the school building and the area surrounding it, any biological or chemical agents that are detrimental to health, and physical conditions such as temperature, noise, and lighting. The psychological environment includes the physical, emotional, and social conditions that affect the well-being of students and staff.

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7. *Health Promotion for Staff:* Opportunities for school staff to improve their health status through activities such as health assessments, health education and health-related fitness activities. These opportunities encourage school staff to pursue a healthy lifestyle that contributes to their improved health status, improved morale, and a greater personal commitment to the school's overall coordinated health program. This personal commitment often transfers into greater commitment to the health of students and creates positive role modeling. Health promotion activities have improved productivity, decreased absenteeism, and reduced health insurance costs.
8. *Family/Community Involvement:* An integrated school, parent, and community approach for enhancing the health and well-being of students. School health advisory councils, coalitions, and broadly based constituencies for school health can build support for school health program efforts. Schools actively solicit parent involvement and engage community resources and services to respond more effectively to the health-related needs of students.



American Lung Association Tip Sheet Recruiting an AFSI Coalition: Know Your Audiences and Benefits

Recruiting and building relationships with key individuals and organizations are critical to successful planning and subsequent project implementation. Consider any potential members of your AFSI coalition and other collaborators “customers.”

Your customer groups are anyone with whom you need to work to implement AFSI locally. You may be considering individuals from any of these groups as potential coalition members, and some will become partners in the actual implementation of the project.

AFSI customer groups include:

- administrators/school boards
- school nurses
- teachers/coaches/physical education teachers
- bus drivers
- building/facilities personnel
- parents
- state, county, and local health and education departments
- community health professionals
- students with asthma
- classmates of students with asthma
- civic/business leaders
- additional community partners

Understanding how each audience or customer group will benefit from the asthma-friendly schools initiative will be a key to success. Just as few people would buy a product without believing they will benefit from it personally, individuals within the school and civic community will not “buy into” the asthma-friendly schools initiative without understanding how the program (and/or specific activities) will benefit them directly.

When working with each customer group or audience, focus your communication on key benefits or “selling points” for that particular audience. Incorporate these in specific written materials, as well as group presentations and small meetings. The following are lists of baseline benefits per audience. As you work with different groups and learn more about them and their perspectives, add specific benefits to these lists.

Administrators/School Boards

Superintendents, principals and school boards or board of education members should support elements of asthma-friendly schools activities—not only in setting policy, but also in supporting the concept, providing staff direction and budget support. Asthma-friendly schools activities benefit school administrators because these activities:

- are evidence-based
- may greatly reduce or eliminate asthma crises in schools
- may reduce student absenteeism and improve the student learning environment
- may increase school income as absenteeism rates decline
- may enhance the well-being of members of the school community and increase teacher productivity
- include strategies for low-cost and no-cost indoor air quality management
- provide resource and potential partnership links within the community, including funders
- include education for faculty and staff to improve the school's asthma management, responses to asthma emergencies and facilities management
- can help minimize potential liability issues

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American Lung Association Tip Sheet— Recruiting an AFSI Coalition: Know Your Audiences & Benefits (cont.)

- can increase the school's medical/health resources, which can help with management of other chronic illness
- can improve faculty/staff productivity and performance

School Nurses

School nurses are the core of the school health services, pivotal in responding to health issues and emergencies. Asthma-friendly schools activities benefit school nurses because these activities:

- may decrease the number of acute care visits to the school nurse or clinic
- may improve indoor air quality, thereby decreasing the potential for asthma episodes and other building-related illnesses by students and staff
- include specific asthma training for all school staff
- support strengthened roles and expanded resources for school nurses
- support expanded school health structures, such as creation of a school health council and introduction of a consulting physician or other health care professional into the school
- include more coordinated use of Asthma Action Plans by school staff
- may reduce student absenteeism, enhance well-being of members of the school community and improve student learning environment
- clarify communications among school nurses and all other school staff about the needs of students with and without asthma, as well as those students with other chronic health conditions

Teachers/Coaches/Physical Education Teachers

These individuals are the first line of response during a student's asthma episode. Their involvement is critical, as is their understanding of both the broad and specific issues of asthma management.

Asthma-friendly schools activities benefit teachers and coaches because these activities:

- include specific asthma training for all faculty and staff, including effective and appropriate responses to asthma episodes and other respiratory emergencies
- may improve IAQ, thereby decreasing the potential for related student and staff asthma episodes, and improving work environment, which potentially reduces teacher absenteeism, enhances well-being and increases teacher productivity
- include more coordinated use of Asthma Action Plans by school staff
- may reduce student absenteeism and improve the student learning environment
- clarify communication among school staff about the needs of students with asthma
- include strategies to coordinate efforts between administration and school employees

Bus Drivers/Transportation Company Staff

Without bus driver training in asthma response skills, students who ride buses to and from school may be left with a void during the time—up to two hours per day—between their homes and school.

Asthma-friendly schools activities benefit bus drivers/transportation company staff because these activities:

- include asthma training for bus drivers, including effective and appropriate responses to asthma emergencies
- include strategies to improve communication between school and transportation staff
- may improve air quality inside buses, thereby improving drivers' work environment and the well-being of drivers and student passengers

Building/Facilities Staff

Because environment plays such a critical role in asthma management, building/facilities staff must understand their vital part in asthma-friendly schools activities. Asthma-friendly schools activities benefit building/facilities staff because these activities:

- can help save money through indoor air quality (IAQ) management, including integrated pest management (IPM)
- include strategies for involving faculty and staff in IAQ management
- include IAQ training for staff and focus on IAQ management, which can reduce physical plant and equipment deterioration
- include activities that rely on facilities staff, who are recognized as valuable participants in the school's work to ensure students' health and well-being
- can improve facilities staff working environment and enhance their well-being

American Lung Association Tip Sheet— Recruiting an AFSI Coalition: Know Your Audiences & Benefits (cont.)

Parents

Involving parents will be critical to supporting specific student education, educating parents themselves, and assisting parents in accessing additional community resources. Asthma-friendly schools activities benefit parents because these activities:

- include education about asthma for all students, and specific asthma management education for students with asthma
- may reduce student absenteeism and improve the student learning environment
- may greatly reduce or eliminate asthma crises in schools
- prepare school personnel to respond to asthma episodes and other respiratory emergencies by providing specific asthma training for all school staff
- may improve IAQ, thereby decreasing the potential for related asthma episodes by students
- include strategies for better communication between nurses and other school staff, including a coordinated use of Asthma Action Plans
- include strategies for improving communication among home, school, and health care providers
- may improve air quality, increasing teacher well being and increasing productivity, thereby minimizing disruptions to student learning
- are based on programs, documents, and research conducted by medical and public health experts and members of professional organizations

State Education & Health Departments

Asthma issues should and must be on these departments' agendas, whether or not they are currently focused on asthma. These organizations' employees can provide resources and information and benefit from direct involvement in asthma-friendly schools efforts. Asthma-friendly schools activities benefit state education and health departments because these activities:

- are based on programs, documents and research conducted by education, medical and public health organizations, including American Lung Association, CDC, American Academy of Pediatrics (AAP), National Association of School Nurses (NASN), National Education Association (NEA), National Heart, Lung and Blood Institute (NHLB) and the Environmental Protection Agency (EPA)
- may greatly reduce or eliminate asthma crises in schools
- may reduce student and teacher absenteeism and improve student's learning and teacher's working environments
- incorporate community-wide collaboration among the school community, healthcare providers, community-based organizations, civic/business leaders, and insurance providers
- help minimize potential liability issues
- increase the school's medical/health resources which can help with management of other chronic illnesses
- maximize resources

Healthcare Providers and Clinicians

Local health departments, hospitals/clinics, and individual primary health care providers can and should play important advisory and hands-on roles in asthma-friendly schools activities. Asthma-friendly schools activities benefit community health professionals because these activities:

- improve compliance with prescribed asthma management
- improve the quality of adults' observation and the validity of history that doctors receive regarding a child's symptoms
- address two significant health issues—asthma and air quality
- focus on a holistic, community-wide approach
- include opportunities for professional development, such as consulting services, volunteer medical services, and advisory activities (school health council, etc.)
- may result in decreased asthma episodes and emergencies by students and school faculty and staff
- provide positive community relations/public relations opportunities for organizations and individuals
- are based on programs, documents, and research conducted by education, medical and public health organizations, including American Lung Association, Centers for Disease Control and Prevention (CDC), American Academy of Pediatrics (AAP), National Association of School Nurses (NASN), National Education Association (NEA), and Environmental Protection Agency (EPA)

Students with Asthma

Benefits to children with asthma will reflect the benefits and results of specific asthma and healthy indoor environmental education, such as Open Airways For Schools and IAQ Tools for Schools, from which students may receive the following:

- specific asthma self-management skills
- fewer symptoms
- improved self-esteem
- opportunity to participate more fully in activities they enjoy
- opportunity to relate feelings about asthma and interact with others with asthma
- positive reinforcement
- focused attention from teacher or asthma education instructor
- improved school performance

Additional benefits of improved/expanded school health services as a result of asthma-friendly schools activities include:

- more asthma management support by teachers and other school staff
- better access to asthma medications
- greater referral to and use of medical and other community resources
- better IAQ management

Classmates of Students with Asthma

Classmates of students with asthma may include individuals who have not yet been diagnosed with asthma. Those individuals will benefit from asthma-friendly schools activities by:

- increased faculty and staff awareness of signs and symptoms of asthma and appropriate responses to the student
- improved IAQ at the school
- their awareness of other students' asthma in general and the warning signs of an asthma episode
- having increased empathy for those with asthma
- learning to assist peers with asthma management
- possibly earning service-learning credit for their involvement in school-based or community-focused asthma awareness activities

Civic/Business Leaders

These include individuals and organizations who may become involved in an asthma coalition, fund specific activities, or become involved in awareness campaigns and programs. Asthma-friendly schools activities benefit civic and business leaders because these activities:

- address two significant health issues that affect the entire community—asthma and air quality
- focus on a holistic, community-wide approach, which provides networking opportunities
- provide positive community/public relations opportunities for organizations and individuals
- involve a range of prominent local professionals and organizations
- can save public funds and maximize resources
- positively affect students' and school staff's health and well-being

Additional Community Partners

These include community-based organizations that may or may not be related to general health issues or asthma, specifically, or individual professionals who contribute needed skills and/or resources to your initiative. Examples may include: community foundations, community development associations, youth organizations, minority business organizations, community housing advocates, environmental justice advocates, attorneys, epidemiologists, university professors, and public relations professionals.

While these organizations and individuals may not at first be priority partners, keep in mind that they offer a variety of resources, including education and leadership training and social and support services. These additional partners will be valuable in both planning and implementing your initiative and their experiences may tap into existing resources. They are another link to parents and are often trusted by community members. They provide the home and community component of a community-based strategy, as well as professional skills/services that will strengthen implementation and program outreach. Asthma-friendly schools activities benefit these organizations and individuals because these

**American Lung Association Tip Sheet—
Recruiting an AFSI Coalition: Know Your Audiences & Benefits (cont.)**

activities:

- provide individual referrals between programs
- promote community programs/resources
- ensure a continuum of community services to a target population (including and beyond asthma services)
- support resource networking and may minimize duplication of effort
- create joint/increased funding opportunities
- provide opportunities for individual contributions to a community health issue

◆ Action Step 2: Conduct a Needs Assessment

To Conduct a Needs Assessment

- List information needed
- Identify existing data, data gaps, and sources of that information
- Review existing asthma needs assessment tools
- Assign responsibilities & timeline
- Collect new data
- Analyze data and prioritize needs
- Summarize needs assessment results

Your needs assessment will walk you through the following elements:

What school and community information do you need to plan your AFSI project?

What information and resources already exist?

What information is missing?

How can you capture that information?

A needs assessment may be more easily accomplished by a small work group focused on this defined task. A thorough needs assessment will inform the overall direction of your AFSI project and serve many other roles as you move forward, including:

- document a detailed picture of your school needs and community resources
- serve as baseline data for interim and long-term assessment
- increase the level of data to build evidence of asthma as a major health issue
- document needs of school staff, which will bolster efforts to initiate the project within schools

The needs assessment process also will serve as entrée to influential individuals by educating them about asthma issues and the initiative before planning is underway. Be sure to involve high-level school administrators and/or school board members, as well as other important community stakeholders. Consider the needs assessment the first step in your project promotion.

This process may help you identify “program champions” within individual schools and/or school systems, as well as community leaders who are interested in getting involved in your AFSI project. Be aware that you also may need to incorporate expert guidance and/or involvement to efficiently and effectively document your community’s data and to subsequently prioritize needs.

Work systematically through the following tasks to build a meaningful needs assessment.

List information needed

Local AFSI projects should tailor the information needed to their specific AFSI project. Typically, coalitions examine the following categories of information:

- asthma-friendly school policies and practices—examine policies and programs related to school health services, asthma education, physical activity, and environment
- state/local programs and services
- asthma data (estimated prevalence per population per service area, hospitalization data,

disparities among ethnic/racial populations); be sure to hone in on statistics specific to your targeted school(s) or school district(s).

- legislation and policies affecting asthma in schools (see the American Lung Association Tip Sheet: Policies & Legislative Issues Affecting Asthma in Schools, included in Reference Materials at end of this section)
- Individuals on your coalition may already have or have access to the school and community data you need.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Where is the school now?
- What are the questions we want answered?
- How much information do we need?

Identify existing data, gaps in data, and sources of that information

Coalition members will have some of the data required. Identify who has which data, document that information and sources of the data.

SELF-CHECK!

Are you on the right track? Ask yourself:

- What data can members of the coalition provide?
- What data can government agencies provide?
- What additional data is available locally?

Tap into existing data sources, which will save time and resources. Types of existing data may include mortality data, hospitalizations and emergency department visits for asthma from a specific area. In many states, data is available by zip code, which may support customized regional approaches.

Partner with coalition members to pool resources and work with contacts who may already have compiled the specific data you may need. Other community sources of data may include:

- state health and education departments
- municipal health departments
- school districts
- HMOs, health insurers
- state medical associations
- state Medicaid agency
- local hospitals

Also gather absentee data and other asthma-related student data from the state education department and/or school districts. These data may be collected via:

- absentee records
- school-health intake cards

- medication forms
- case-management reports
- nurse-visit tracking forms

As you identify data gaps, consider possible sources of that information, and take time to decide if information is critical to moving your AFSI project forward or secondary to your planning. Research information through:

- web searches
- school administrators
- teachers or teachers' organizations
- parent organizations
- school nurses
- local or state department of health
- local or state department of education
- health insurance companies
- hospitals (ER visits, hospitalizations, etc.)
- local and state chapters of education-related organizations (for boards of education, teachers, administrators, school nurses)
- local and state chapters of medical organizations such as American Academy of Pediatrics, American Association of Family Physicians, etc.

SELF-CHECK!

Are you on the right track? Ask yourself:

- What questions have we answered?
- What questions remain?

Review existing asthma needs assessments tools

Three key tools are available to assess schools: *How Asthma-Friendly Is Your School?* Questionnaire, CDC's School Health Index, and the American Association of School Administrators' *Powerful Practices: A Checklist for School Districts Addressing the Needs of Students With Asthma*. All are detailed in the reference materials that follow this section, and the complete *Powerful Practices* document is included. Review each to determine if either or both are appropriate for your local needs assessment and/or can be modified to gather the desired information.

Additionally, examples of needs assessment tools from AFSI pilot sites are included in the Reference Materials at the end of this section; see Eastern Shore Asthma Coalition/Wicomico County School Nurse Survey, Asthma Treatment Services Community Assessment, and Greater Cleveland Asthma Coalition Needs Assessment components (School Asthma Needs Assessment Details, School Survey, and Report of School Asthma Needs Assessment). These may be appropriate to use and/or modify for your local initiative.

SELF-CHECK!

Are you on the right track? Ask yourself:

- What tools do we have access to?
- How well do they address our remaining questions?
- Can we live with getting most of our answers with a validated, existing form, or do we really need to create something new?

If your work group decides that neither is sufficient, develop custom needs assessment tools. Developing new tools will require expert guidance or direct involvement of a professional researcher. Recruit help from college or university faculty, or staff within a municipal or state health department to develop a new tool and help direct your efforts. You will need professional expertise analyzing data and prioritizing results later in the process as well.

LESSONS LEARNED!

Pilot sites who created their own tools ran into many challenges! Try to use an existing, validated survey or other tools whenever possible. Consider a custom tool a last resort.

SELF-CHECK!

Are you on the right track? Ask yourself:

- If we create something new, do we have the expertise on the coalition to complete the process?
- Do we have the resources (time and money) to create a custom tool?
- Is the school willing to use a new tool vs. an existing validated instrument?

Assign data collection, analysis and report-writing responsibilities with timelines

Organize the balance of the needs assessment process by assigning specific responsibilities and tasks to work group members. Tasks could be detailed with specific deadlines so that the entire group can move forward together and keep the project's momentum going. Consider assigning these tasks:

- Recruit research expert
- Gather and document existing school-based data
- Gather and document existing community-based data
- Define data collection tool
- Collect new data
- Analyze all data
- Prioritize needs
- Write data report for presentation to full coalition

Caution! Needs Assessment Challenges!

Pilot sites found that quantifying asthma's impact in specific schools can be a challenge!

Be prepared to talk about asthma's impact nationally and understand that you might have to extrapolate to the local level. If you want to be able to quantify the true impact of asthma at the individual school level, consider using a database tool (such as the AIR database; see page 101) to gather the data and provide a time-delineated sample. (Keep in mind that only school nurses and other school staff have access to student records; most likely, volunteers would not be able to assist data entry or analysis.)

Remember that getting a good data sample might mean taking a year just to collect the school impact data. But don't let that stop your planning process. Think about how much information you need to begin your AFSI project and how you will use that specific data, versus information that would be "good to know." Perhaps some of the new data collection can take place within the first year of your AFSI project in a particular school or district.

Using an existing needs assessment tool (such as the School Health Index) will greatly simplify your needs assessment process but will not give you individual school asthma impact information.

Again, remember that the needs assessment is the first point of promotion for the AFSI project. Include high-level stakeholders and parents in your data collection so that they are learning about the project at the earliest stages of development. You are also searching for program champions during each step of the planning process!

LESSONS LEARNED!

Pilot sites advise: Involve as many audiences as possible, especially teachers, high-level administrators and school board members, and parents.

Define your data collection tool, keeping in mind cost, training that may be required (for interviews, etc.), completion time, and response rates. If you conduct any surveys or questionnaires in schools, you will need to obtain permission to do so and make specific arrangements for logistics. This may require a few weeks' lead time, so consider budgeting that time into your overall needs assessment plans.

Methods of data collection include: review of records, self-administered participant questionnaires, interviews, and rating by a trained, independent observer. Using or modifying an existing data collection instrument is the most cost-effective route. Developing a new instrument may be necessary, but be sure to budget for time and cost. Review the American Lung Association Tip Sheet: Data Collection Instruments (included in the reference materials at the end of this section) for more information.

Several reference materials are included at the end of this section that local coalitions can modify as they gather school and community data.

LESSONS LEARNED!

Pilot sites advise: *Use Incentives!* People are busy but you need as much data as possible! Use incentives to move nurses, teachers, parents, and others to complete questionnaires, interviews, or other data collection tools. Incentives can be anything that is acceptable to the school district; make sure you have approval for incentives. Examples used by pilot sites included gift certificates, free movie tickets, a free shopping trip to the teacher supply store, and even posters for the classroom.

Analyze data and prioritize needs

If possible, work with your data expert to analyze your results. Data results should be analyzed by topic area and by response per audience segment within each topic.

Based on your needs assessment findings, prioritize school and community needs. While the larger coalition may shift priorities somewhat, the needs assessment work group should offer specific priorities from their work of analyzing the data.

Prioritizing needs must be an objective process to ensure that your long-term AFSI plan is addressing new and/or improved policies, programs, resources, and services your schools and/or community need. Prioritizing needs should not be based on a subjective group consensus or brainstorming of coalition members.

Consider using a numerical ranking system to remove individual member bias so that your planning and implementation work is based on objective data.

If you use the School Health Index (SHI), the index will automatically give you a numerical system by comparing schools' individual module scorecards and the overall scorecard. These are generated through the online SHI, or you can tabulate scores manually if using the paper version.

If you do not use the SHI, your school assessment tools must incorporate a numerical ranking score to eliminate subjective analysis of the raw data. A scorecard should be developed and used to tally all responses to your assessment tool(s), based on what programs and systems schools have in place and to what degree. Cumulative scores can then be compared with one another. A worksheet (Using a Numerical Ranking System to Prioritize Needs) is included in the Reference Materials at the end of this section, as well as Sonoma County (California) Prioritization Matrix.

As coalition members review results of your needs assessment, focus attention and discussion on the objective numerical ranking and “table” subjective comments and ideas. Your objective here is to document priorities based on the numerical ranking without individuals' opinions.

Analyze contributing factors

Once you have documented priority areas by numerical ranking, you must consider contributing factors. Analyzing some of these factors will be objective, but some will involve subjective input of coalition members' experience, expertise, and estimates of time required and complexity of implementation, for example.

Contributing factors that should be discussed and documented may include:

- Ease of implementation
- Odds of success
- Potential long-term impact

- Resources available
- Time required
- Potential expense

Set priority areas

Weight your priority areas given their numerical rankings and contributing factors that may impact implementation. Document all items clearly, as this data will become the basis for building your detailed plans with goals, objectives, and strategies.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Did all stakeholders participate in the prioritization process?
- Was the prioritization process fair and balanced?
- Did the group feel comfortable with the determined priority areas?

Summarize needs assessment results

The results of your school and community needs assessment will be the basis for planning session(s) to develop an AFSI Five-Year Plan. Your long-term decision-making about the program will rely on the data gathered through a solid needs assessment. Subsequent goals, objectives, and activities must be set against the detailed backdrop of your schools' and community's asthma situations.

Presenting the needs assessment to your coalition in an organized manner will set your decision-making on a clear path. Summary text must prioritize needs, and statistics presented should quantify those priorities. A user-friendly needs assessment report should organize data as follows:

- Asthma data
- School data (policies, education, staffing, health services, etc.)
- Community data (services, stakeholder groups, etc.)

Two samples from AFSI pilot sites illustrate options for written summaries. The results from Cleveland detail responses between school nurse and principals, while the Wicomico County (Maryland) results present data from a school nurse survey. See Eastern Shore Asthma Coalition/Wicomico County School Nurse Survey, and Greater Cleveland Asthma Coalition Needs Assessment components (School Asthma Needs Assessment Details, School Survey, and Report of School Asthma Needs Assessment).

If you use the School Health Index, the eight module scorecards and overall scorecard generated through the process will simplify your work organizing school data. Organizing the results of your community needs assessment may be more complex. Determine what will work best for your coalition. Be sure to include all references for statistics presented (published document name, organization, date, etc.).

LESSONS LEARNED!

Remember to share the results of your needs assessment with individuals who participated in collecting information. Consider this good promotion for your AFSI project, and it helps lay the foundation when you go back to these same people to ask for help with the project's next phases.

Remember: Needs assessment results present objective data that will be reviewed as you set goals, objectives and activities related to asthma education; health & mental health services; healthy school environment; and physical education & activity. Present information that is clear and as simple as possible to read and reference.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Are the needs assessment results easy to understand?
- Did we provide the results to the appropriate people?
- Where there any surprise results?
- Are the results summarized in a way that will make planning easier?

REFERENCE MATERIALS

- ❖ American Lung Association Tip Sheet: Policies & Legislative Issues Affecting Asthma in Schools
- ❖ *How Asthma-Friendly Is Your School?* Questionnaire
- ❖ CDC's School Health Index Fact Sheet
- ❖ *Powerful Practices: A Checklist for School Districts Addressing the Needs of Students With Asthma* (American Association of School Administrators)
- ❖ Eastern Shore Asthma Coalition/Wicomico County School Nurse Survey
- ❖ Greater Cleveland Asthma Coalition Needs Assessment components
 - School Asthma Needs Assessment Details
 - School Survey
 - Report of School Asthma Needs Assessment
- ❖ Asthma Treatment Services Community Assessment
- ❖ American Lung Association Tip Sheet: Data Collection Instruments
- ❖ American Lung Association Worksheet: Using a Numerical Ranking System to Prioritize Needs
- ❖ Sonoma County (California) Prioritization Matrix



American Lung Association Tip Sheet: Policies & Legislative Issues Affecting Asthma in Schools

When working with schools, the coalition must research and understand federal, state, and local legislative and policy issues that shape their administration and directly affect asthma management and education issues, including facilities and air quality management. Being aware of the range of issues administrators and teachers face will help you present program activities that reflect their work environments.

Establishing specific policies and legislation can create long-term, institutionalized change focused on supporting asthma-friendly schools activities. This backgrounder presents information about federal and state policies and legislative issues, as well as ideas for approaching local and state issues.

Federal Statutes

Several federal laws affect asthma management within schools. These include:

- *The No Child Left Behind (NCLB) Act*, signed into law in 2002, has had a profound impact on schools as each state is required to provide an implementation plan and statewide testing. This work impacts curriculum schedules, time availability for outside programs, and school health. Contact your state department of education to determine how NCLB is impacting schools in your state. Providing solutions to a school that fit within the schools' commitment to NCLB mandates will be important. For specific information about NCLB, visit <http://www.ed.gov/nclb/landing.jhtml?src=pb>.
- *Health Insurance Portability and Accountability Act of 1996 ("HIPAA")*: HIPAA's Privacy Rule addresses the use and disclosure of individuals' health information—called "protected health information" by organizations subject to the Privacy Rule—called "covered entities," as well as standards for individuals' privacy rights to understand and control how their health information is used.¹ The Privacy Rule is not school-focused but it does affect the ability of schools and physicians to communicate with each other about patients. If schools do bill for medical services, they would fall under HIPAA.
- *The Family Educational Rights and Privacy Act (FERPA)* is designed to protect the privacy of a student's education records. FERPA also gives parents certain rights with respect to their children's education records.² This encompasses health inquiry forms, Asthma Action Plans and other health records. Generally, schools must have written permission from the parent before releasing any information from a student's record to all teachers, coaches, a community program, a private physician, etc. The law does allow schools to disclose records without consent to limited parties including school employees who have a need to know, such as the student's teachers or coaches.³
- *"Section 504"*—Section 504, Rehabilitation Act of 1973, prohibits discrimination against individuals with a disability under any program receiving Federal financial assistance.⁴ This applies to public schools. Children covered under Section 504 must have a disability that substantially limits a major life activity. Depending on the level to which the disability limits a student's learning, a school district must determine if a student is also eligible under the Individuals with Disabilities Education Act (see below).⁵
- *Individuals with Disabilities Education Act of 1997 (IDEA)*—The IDEA "guarantees that eligible children with disabilities have the right to receive a free appropriate public education in the least restrictive setting."⁶ Implementation of this law includes schools' creation of Individualized Health Plans and Individualized Education Plans for students with disabilities, including some students with asthma, to ensure their individual education. If a student with asthma is eligible for IDEA due to another disability (e.g., learning disability), the student's asthma needs are also covered by IDEA.
- *Pro-Children Act of 1994*: This prohibits smoking within any indoor facility (in some cases, portions of facilities) in which certain federally funded children's services are provided on a routine or

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American Lung Association Tip Sheet: Policies & Legislative Issues Affecting Asthma in Schools (cont.)

regular basis. The provisions apply if funds are being provided through an applicable federal grant, loan, loan guarantee, or contract.⁷ This applies to practically all public elementary and secondary education and library facilities.

- *Americans with Disabilities Act (ADA)*: The basic requirements of ADA relevant to schools is that they not discriminate against persons with disabilities on the basis of disability; that is, that they provide children and parents with disabilities with an equal opportunity to participate in programs and services. This is particularly relevant for private schools, who must accept children with chronic conditions. The ADA requires that private schools accept students with asthma and allergies, with the exception of a facility that is part of a religious institution (which would be exempt from the law).⁸ Reasonable modifications and services should be provided for students with disabilities.

State and Local Issues

State and local laws and policies will impact asthma management within schools. You may also want to research these issues on CDC's web site (www.cdc.gov/healthyyouth) or the National Conference of State Legislatures' web site (www.ncsl.org). Types of issues that will affect your AFSI planning and implementation include:

- *Healthy School Environments/Air Quality*—State laws will vary and would have been established as either education or health bills, depending on each piece of legislation. These issues may include requirements of a coordinated, reported IAQ management system, which could be fulfilled by EPA's IAQ Tools for Schools. They also may include managing students' and staff's exposure to particle pollution and ozone on Orange and Red days per the Air Quality Index. The Environmental Law Institute's report *Healthier Schools: A Review of State Policies for Improving Indoor Air Quality* can be used as a guide when IAQ legislation is being researched/drafted. (See the Resources section for ordering information.)
- *Smoke-Free/Tobacco-Free Schools*—Are schools legally required to develop policies such as CDC's Guidelines for School Health Programs to Prevent Tobacco Use and Addiction, cessation programs to support policies such as the American Lung Association's Not On Tobacco (N-O-T), or programs to respond to policy violations, such as American Lung Association's Alternative to Suspension? (See the Resources section for ordering information.)
- *School Accreditation Requirements*—These state-by-state requirements include curricular and facilities/buildings requirements. For example, the video *Asthma 101*, *Open Airways For Schools* or *Quest for the Code* may meet curricular requirements; IAQ Tools for Schools may meet facilities management requirements. (See the Resources section for ordering information.)
- *Self-Carry/Self-Administration of Asthma Medications*—Provide resources and expertise to help schools communicate with parents and primary health care providers, educate school faculty and staff, and track students' self-administration.

1. Summary of the HIPAA Privacy Rule, U.S. Department of Health & Human Services Web site (April 20, 2006), <http://www.hhs.gov/ocr/privacysummary.pdf>

2. U.S. Department of Education Web site (November 28, 2005), <http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

3. U.S. Department of Education Web site (January 29, 2002), <http://www.ed.gov/offices/OM/ferpa.html>

4. U.S. Department of Education Web site (November 28, 2005), <http://www.ed.gov/about/offices/list/ocr/504faq.html>

5. National Association of School Nurses Issue Brief. *School Health Nursing Services Role in Health Care: Section 504 of the Rehabilitation Act of 1973*.

6. National Association of School Nurses Issue Brief. *School Health Nursing Services Role in Health Care: School Nurses and the Individuals with Disabilities Education Act (IDEA)*

7. *Pro-Children Act of 1994*, United States Code Title 20, Education, Chapter 68.

8. U.S. Department of Justice Web site (August 8, 2002), <http://www.usdoj.gov/crt/ada/childq%26a.htm>



How Asthma-Friendly Is Your School?

School Asthma Needs Assessment

1. Is your school free of tobacco smoke at all times, including during school-sponsored events?	YES	NO	
2. Does your school have a written IAQ management plan? (If no, continue with Question 3.)	YES	NO	
a. If yes, does it reduce or eliminate allergens and irritants that can make asthma worse, including:			
i. cockroaches	YES	NO	
ii. dust mites	YES	NO	
iii. mold	YES	NO	
iv. pets with fur or feathers	YES	NO	
v. strong odors or fumes (such as dry erase boards, copy machines, art and craft supplies, pesticides, paint, perfumes, chemicals)	YES	NO	
3. How often is a school nurse in your school?			
Specify number of hours per day and/or number of days per week: ____ hours/day ____ days/week			
4. If a nurse is not in your school all day, every day, is a nurse regularly available to help the school write asthma plans and give the school guidance on asthma issues?	YES	NO	
a. Is someone assigned and trained to give medications?	YES	NO	
b. Does the school nurse supervise and monitor that person at least monthly?	YES	NO	
5. Is there a written policy that allows children to take asthma medications at school as prescribed by their doctor and permitted by parent?	YES	NO	
a. If yes: Does the written policy specify if children may carry and administer their own medications?	YES	NO	
b. If no: Is the medication where the child can access it all day, every day?	YES	NO	
c. If no: where is it located? ____ teacher ____ classroom ____ nurse's office ____ main office other: _____			
d. Is there a functional plan for asthma medications on field trips?	YES	NO	

—continued—

How Asthma-Friendly Is Your School?

School Asthma Needs Assessment

6. Does your school have a written Asthma Action Plan for each child with asthma in case of a severe asthma episode? (If Yes, continue below. If No, proceed to Question 7.)	YES	NO	
a. Does the plan include what action to take?	YES	NO	
b. Does the plan include whom to notify and when?	YES	NO	
c. Is there a procedure established to discuss the asthma management measures together with the student, teachers, and parent?	YES	NO	
7. Is there an established asthma education program that includes general asthma information, asthma management plans, asthma emergency procedures, and asthma medications for each of the following:			
a. All school staff (incl. PE teachers and bus drivers)?	YES	NO	
b. Students with asthma?	YES	NO	
c. Classmates of students with asthma?	YES	NO	
d. Parents?	YES	NO	
8. Regarding physical education:			
a. Do students have options for fully and safely participating in physical education class and recess activities?	YES	NO	NOT ALWAYS
b. Is premedication available, if needed?	YES	NO	NOT ALWAYS
c. Are modified activities available, if needed?	YES	NO	NOT ALWAYS
d. Are PE instructors and activity monitors aware of individual needs?	YES	NO	NOT ALWAYS

This form was modified from the NATIONAL HEART, LUNG AND BLOOD INSTITUTE/NATIONAL ASTHMA EDUCATION AND PREVENTION PROGRAM *How Asthma Friendly Is Your School?* form.



American Lung Association Fact Sheet: Using CDC's School Health Index for AFSI

The Centers for Disease Control and Prevention's (CDC) School Health Index (SHI) provides an easy-to-use self-assessment and planning tool that will simplify school needs assessments for AFSI planning. Although it is designed for use by and in schools the SHI can be used with organizations, such as the AFSI coalition, to assess schools. Using the SHI ensures that you gather all pertinent school data on which to build your AFSI plan.

Note: The SHI is designed to be used on a school-by-school basis. When working throughout a district, or with several schools within a region, complete the SHI for each school and compile the data to identify and prioritize needs.

The SHI helps schools identify strengths and weaknesses of their health and safety policies and programs and has been used successfully by schools in nearly every state. It provides tools for both collecting and analyzing data. It addresses factors in eight modules, reflecting a coordinated school health program; four modules should be completed for AFSI (health education, physical education, health services, and healthy school environment).

The 2005 edition of the SHI addresses five issues, including asthma. The SHI incorporates discussion questions and self-assessment questionnaires ("score cards") focused on strengths and weaknesses of a school's asthma programs and policies in the eight coordinated school health program modules. You can use either an interactive online format (www.cdc.gov/healthyYouth/shi) or a paper version (available at same URL) as you conduct a school needs assessment for your AFSI efforts.

School Health Index, Step-by-Step

1. Assemble team
2. Identify coordinator
3. Meet with team
4. Review and assign modules
5. Create an Account (for online SHI)
6. Answer discussion questions
7. Review score cards and plan for improvement

Schools using the SHI involve individuals from different parts of the school community who share information and plan together, resulting in connections among individuals and departments that are among the most important outcomes of the process.

Schools follow a step-by-step process:

1. *Assemble the SHI Team:* Create a new team; use an existing team, such as the school health council; or create a new subcommittee of the school management council. Broad and diverse participation is important for meaningful assessment and successful planning and implementation. You may want to include people from the school community and from the local community. Possible members from the school community include: principal, assistant principal; physical education teacher; health education teacher; classroom teacher; student; school psychologist or social worker; school nurse; bus driver; custodial and maintenance staff. Possible members from the local community include: parent or other family member; community-based health care and social services provider; asthma coalition representatives; local health department staff member.
2. *Identify a SHI Coordinator:* Many schools have found that it is best to have someone from outside the school facilitate the SHI process. A SHI coordinator should be a skilled group facilitator; an excellent listener who does not attempt to impose his or her own opinions on the group; and highly respected by all participants and by the school administration. A member of the AFSI coalition can function as the SHI coordinator if they are acceptable to the school team.
3. *Meet with All Members of the SHI Team:* Explain the SHI and its purposes to the team. Make sure they understand that results will not be used for punishing schools or comparing schools to one another. Team members should understand that their work on the SHI can make a great

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in the lives of your school's students. Emphasize that the purpose of the SHI is not to find out if the school is "passing" or "failing"; rather, the purpose of the SHI is to help the school identify the strengths and weaknesses of its policies and programs for creating an asthma-friendly school.

4. *Review and Assign the Modules.* Assign at least two people to each module, because having more than one person involved will increase accuracy and elicit a variety of creative insights for improving school policies and programs.
5. *Create an Online Account and SHI.* Create an account on the SHI home page (www.cdc.gov/HealthyYouth/shi) and distribute the login information to the team members. Members of your team can log into the system at any time by using the account information to answer the discussion questions assigned to them or to perform other tasks.
6. *Answer the Discussion Questions:* The discussion questions are displayed in eight modules according to the topic(s) (asthma) selected. The modules correspond to the CSHP's eight components; focus only on the four pertinent to AFSI. Cross-cutting questions will always appear, regardless of the topic(s) you have selected. If a question does not apply to your school, you can designate it as not applicable. If you are not sure or need more information before you can answer the question, you can skip the question and return to it at another time. You do not have to answer all the questions in a module. The online SHI will calculate your total points and a module score (percentage). SHI also will create an overall scorecard that can be used to identify strengths and weaknesses.
7. *Review the scorecards with team:* Meet again with the team and review scorecards for each module; discuss the identified strengths, weaknesses and recommended actions in each module; review the overall scorecard.

POWERFUL PRACTICES:

A Checklist for School Districts Addressing the Needs of Students With Asthma

Read the following *Powerful Practices*, and check the column that best describes the status of each practice in your district:

- **NOT YET** – This practice has not yet been addressed in our district.
- **IN PROCESS** – This practice is in development or just beginning in our district.
- **YES** – This practice has been implemented in our district.

This checklist is intended primarily for school administrators, although you may need input from other school district personnel such as nurses, teachers, and coaches in order to complete it. It should help your district identify areas in which it is currently doing well, as well as areas in which it may want to focus more energy. Regardless of where your school district is in instituting its asthma management programs, we encourage you and your team to use this checklist periodically to gauge your progress and to identify areas that could use more attention.


Once you have identified program areas in need of more attention within your district's asthma management program, school district leaders may wish to use the Centers for Disease Control and Prevention's "School Health Index: A Self-Assessment and Planning Tool" to help develop an action plan to improve asthma programs and policies. The index can be found at www.cdc.gov/healthyyouth.



AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS

Powerful Practices: A Checklist for School Districts Addressing the Needs of Students With Asthma (American Association of School Administrators) (cont.)

	CHECK THE APPROPRIATE COLUMN		
	NOT YET	IN PROCESS	YES
A. Providing School District Leadership			
1. The superintendent is an advocate for asthma management.			
2. Asthma management is recognized by school district leaders as a possible way to improve attendance.			
3. School administrators ensure that asthma education services are culturally, linguistically, and in other ways appropriate to the district population.			
4. The board of education has adopted policies to address asthma and other chronic diseases among students, which may include: <input type="checkbox"/> Permitting students with a doctor's note and appropriate training to carry inhalers. <input type="checkbox"/> Designating a district staff member to coordinate asthma wellness activities. <input type="checkbox"/> Assigning asthma wellness roles for school district health-care staff that are consistent with best practices and relevant national standards. <input type="checkbox"/> Ensuring that qualified staff members are available to implement asthma action plans and to provide asthma-related health-care services, including quick-relief medication, to children in school or at school-related activities.			
5. District leaders ensure that systems and procedures are in place to collect data about students with asthma, including data about: <input type="checkbox"/> Absenteeism. <input type="checkbox"/> Visits to the health office <input type="checkbox"/> Non-participation in physical education. <input type="checkbox"/> Asthma attacks on campus or at a school activity. <input type="checkbox"/> 911 or other emergency calls related to asthma attacks. <input type="checkbox"/> Students sent home early because of asthma symptoms.			
B. Identifying and Monitoring Students With Asthma			
1. Designated staff members are trained to identify students with asthma.			
2. At the beginning of each school year, parents or guardians are asked to complete (and regularly update) a form used to identify their child's: <input type="checkbox"/> Chronic health problems. <input type="checkbox"/> Emergency care needs and history. <input type="checkbox"/> Medications. <input type="checkbox"/> Health-care providers.			
3. All staff members with direct student contact are informed about the health needs of all students with whom they have regular contact.			
4. Students with asthma have access to pre-exercise preventive medications.			
5. The school nurse provides peak flow monitoring to measure air flow out of the lungs, as well as periodic instruction in and review of inhaler use.			
6. All teachers, coaches and other personnel monitor students with asthma, especially during physical activities.			
7. The school nurse or designee monitors information about absences of children with asthma and refers concerns to attendance personnel or counselors.			




Powerful Practices: A Checklist for School Districts Addressing the Needs of Students With Asthma (American Association of School Administrators) (cont.)

	CHECK THE APPROPRIATE COLUMN		
	NOT YET	IN PROCESS	YES
C. Ensuring that Students With Asthma Receive Appropriate Care			
1. The district's asthma management practices are consistent with recognized standards, such as the National Asthma Education and Prevention Program (NAEPP) guidelines.			
2. School personnel ensure that every child with asthma has an asthma action plan that considers the context of the school and is written by a health-care provider.			
3. School personnel ensure that students' school health records are up-to-date and accurate.			
4. After every asthma attack on campus or at a school activity, school personnel review what action was taken and determine whether proper procedures were followed.			
5. Students with symptoms are referred to their primary care providers, or families are helped to locate care and payment sources such as the State Child Health Insurance Program (SCHIP).			
6. Health fairs, school open houses, and parent-teacher conferences are used to inform families about SCHIP and other providers and payment sources.			
7. The district seeks reimbursement for services provided at school, such as by obtaining a Medicaid reimbursement code for asthma education and asthma-related services.			
8. The district collaborates with community agencies to help families pay for back-up medications such as inhalers, which are kept by the school nurse or other qualified staff member.			
D. Reducing Environmental Contributors			
1. The district uses the Environmental Protection Agency's "Tools for Schools" toolkit to improve indoor air quality (available at www.epa.gov/iaq/schools/).			
2. The district focuses on eliminating mold, mildew, and leaks, and reduces indoor humidity and dust as much as possible.			
3. The district ensures that bus exhaust fumes do not enter schools or outdoor areas used by students.			
4. The district prohibits furred and feathered animals from classrooms and monitors plants for mold.			
5. The district reduces the amount of carpeting in schools and requires the use of special vacuuming procedures/equipment where carpeting remains.			
6. The district reviews building maintenance procedures periodically, updates them as necessary, and ensures that all maintenance staff is properly trained in these procedures.			
7. School personnel review all requirements in the materials safety data sheets concerning the handling of caustic and other dangerous substances and ensure that the requirements are met.			
8. School personnel regulate the use of potentially dangerous supplies and chemicals, including science and art supplies.			
9. The district ensures that integrated pest management techniques are used on school property.			
10. The district enforces a tobacco-free environment for all students, staff, and visitors on all school properties, in all school vehicles, and at all school-sponsored events – on and off campus.			
E. Educating School Staff			
1. All staff with student contact are trained to identify asthma symptoms, asthma emergencies (including the signs and symptoms of anaphylaxis) and learn the appropriate steps to take in such emergencies.			
2. School nurses or other staff members are trained to implement asthma education programs for children and/or parents and in how to use community volunteers to help carry out these programs.			
3. The district promotes staff awareness of health and wellness through presentations by health professionals, health fairs, or other in-service activities.			
4. The district provides and supports smoking cessation programs for school staff.			

Powerful Practices: A Checklist for School Districts Addressing the Needs of Students With Asthma (American Association of School Administrators) (cont.)

	CHECK THE APPROPRIATE COLUMN		
	NOT YET	IN PROCESS	YES
F. Educating Students			
1. Students with asthma are educated about asthma management, including the proper use of medications and the emergency response procedures.			
2. The district collaborates with local or state organizations to offer asthma education programs such as the American Lung Association's "Open Airways."			
3. Support groups are offered to children with asthma through the school district or cooperation with community volunteers.			
4. School personnel or community volunteers promote schoolwide asthma awareness through activities such as: <input type="checkbox"/> Sponsoring a health and wellness day with asthma education. <input type="checkbox"/> Integrating asthma education into the health education curriculum. <input type="checkbox"/> Distributing asthma educational materials that are culturally and linguistically appropriate to the district population.			
5. Student smoking cessation programs are provided and supported in the school district.			
G. Educating Families and Caregivers			
1. The school district provides families with information about identifying asthma symptoms and triggers (including home environmental factors), as well as about asthma management and actions to take during an asthma emergency.			
2. The district reaches out to those who care for children with asthma before and after school, including parents, guardians, babysitters, and siblings.			
3. The district collaborates with community organizations to provide asthma-related education for families and caregivers.			
4. The district regularly holds family health fairs.			
5. The district provides students' families with information about smoking cessation programs.			
H. Communicating With Healthcare Providers			
1. The district develops and provides easy-to-use form letters to help communicate with healthcare providers.			
2. The district relays important information about students' health directly to doctors and other healthcare providers (with parental permission).			
3. The district fosters open lines of communication between school officials and hospitals, clinics and other care providers.			
4. The district encourages partnerships and collaborations between schools and healthcare providers.			
I. Collaborating With the Community			
1. The district encourages school personnel to participate in community asthma coalitions that: <input type="checkbox"/> Conduct needs assessments to identify barriers, resources, and opportunities to address asthma in the community. <input type="checkbox"/> Set a common agenda to address asthma in the community. <input type="checkbox"/> Collect data and conduct community research. <input type="checkbox"/> Involve the media in increasing the awareness of asthma management. <input type="checkbox"/> Support asthma-related legislative initiatives, including the funding of school nurse positions.			



This document was developed by AASA and partners under a cooperative agreement with the Division of Adolescent and School Health of the U.S. Centers for Disease Control and Prevention; grant number U58/CCU820135-01. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Center for Disease Control and Prevention.

For more information or additional copies of the Powerful Practices, please visit www.aasa.org and click on Focus on Children. October 2005

WICOMICO COUNTY SCHOOL ASTHMA SURVEY SCHOOL NURSES ONLY

How knowledgeable are you about asthma (choose one)?	Response Percent	Response Total
Very	42.9 %	9
Somewhat likely	57.1 %	12
Not at all	0 %	0

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

What classification best describes your job (choose one)?	Response Percent	Response Total
PE Teacher	0 %	0
Other Teacher	0 %	0
School Nurse	100 %	21

How familiar are you with the NAEPP (National Asthma Education and Prevention Program) Guidelines and the "Rules of Two" (choose one)?	Response Percent	Response Total
Very	0 %	0
Somewhat	28.6 %	6
Not at all	71.4 %	15

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

Do you administer a long-term controller during the school day (choose one)?	Response Percent	Response Total
Yes	19 %	4
No	81 %	17

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

What percentage of your students with asthma use a Beta2Agonist (bronchodilator) more than twice a week (choose one)?	Response Percent	Response Total
0 - 24%	57.1 %	12
25 - 49%	14.3 %	3
50 - 74%	23.8 %	5
75 - 99%	4.8 %	1
100%	0 %	0

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

How many times a day do asthma-related symptoms usually required you to administer rescue medication—inhaler or nebulizer (choose one)?

0	1-2	3-4	5-6	7-8	more than 8	Response Total
23.8 %	23.8 %	14.3 %	19 %	4.8 %	14.3 %	21
(5)	(5)	(3)	(4)	(1)	(3)	

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

How many times per month do you (answer all three):

0	1-2	3-4	5-6	7-8	more than 8	Response Total
95.2 %	4.8 %	0 %	0 %	0 %	0 %	21
(20)	(1)	(0)	(0)	(0)	(0)	21

Send a student out via 911 due to asthma?

47.6 %	47.6 %	4.8 %	0 %	0 %	0 %	21
(10)	(10)	(1)	(0)	(0)	(0)	21

Remind parents to bring refill inhalers or nebulizer supplies/equipment?

85.7 %	14.3 %	0 %	0 %	0 %	0 %	21
(18)	(3)	(0)	(0)	(0)	(0)	21

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

If you had a peak flow meter for each student with asthma, how likely would you be to use an asthma action plan to help you manage these students more effectively (choose one)?

Very likely	61.9 %	13
Somewhat likely	28.6 %	6
Not at all likely	9.5 %	2

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

Please mark the answer that best reflects the percentage of your students with asthma who use a spacer with their inhaler (choose one):

0 - 24%	71.4 %	15
25 - 49%	19 %	4
50 - 74%	4.8 %	1
75 - 99%	4.8 %	1
100%	0 %	0

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

Please rate your students' overall level of knowledge in managing their asthma—for example, how often they use their rescue inhaler/use it correctly (choose one).

Excellent	0 %	0
Very good	9.5 %	2
Good	47.6 %	10
Fair	28.6 %	6
Poor	14.3 %	3
Very poor	0 %	0


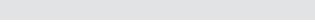




Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

Please rate your perception of the overall parental knowledge of asthma (choose one).


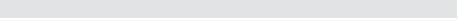






Excellent	0 %	0
Very good	14.3 %	3
Good	33.3 %	7
Fair	28.6 %	6
Poor	23.8 %	5
Very poor	0 %	0

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.







WICOMICO COUNTY SCHOOL ASTHMA SURVEY SCHOOL NURSES ONLY

What barriers do you think exist to the proper management of asthma in the school setting (check all that apply)?	Response Percent	Response Total
Time 	76.2 %	16
Availability of educational materials for students and parents 	52.4 %	11
Student compliance 	71.4 %	15
Parental compliance 	71.4 %	15
Lack of knowledge/understanding on the part of administration/staff 	57.1 %	12
Other not listed 	23.8 %	5

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

What type(s) of presentations/programs would you like to see used in schools to educate students/parents/school staff/faculty about asthma (check all that apply)?	Response Percent	Response Total
Presentations at PTA meetings 	57.1 %	12
Presentations at faculty meetings 	76.2 %	16
Presentations to all students (not just those with asthma) 	57.1 %	12
Curriculum-based programs just for students with asthma 	47.6 %	10
Videos that students with asthma can watch in the nurse's office 	52.4 %	11
Yearly Lunch & Learns or other special time for students with asthma to spend educational time with School Nurse 	52.4 %	11
Informational brochures that can be sent home to parents 	85.7 %	18
Other not listed 	4.8 %	1

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

What other groups within the school system do you think would benefit from training about how to handle early warning signs of an asthma attack or how to handle an asthma emergency (check all that apply)?	Response Percent	Response Total
Teachers 	100 %	21
PE teachers 	100 %	21
Administration 	90.5 %	19
Bus drivers 	85.7 %	18
Custodians 	33.3 %	7
Cafeteria workers 	42.9 %	9

Total # of respondents 21. Statistics based on 21 respondents 0 filtered; 0 skipped.

Asthma-Friendly Schools Initiative School Asthma Needs Assessment Details

I. Purpose

The Asthma-Friendly Schools Initiative will help the Cleveland Municipal School District (CMSD):

- a. Identify the strengths and weaknesses of school asthma-related policies, procedures, and programs;
- b. Develop an action plan for improving asthma education and management.

The overall goal is to develop and implement a comprehensive asthma management plan (CAMP) for the CMSD. In 2004, the CAMP will be developed and in 2005, pieces of the CAMP will be implemented. Funding is provided by the American Lung Association and Kaiser Permanente to the Greater Cleveland Asthma Coalition. The Coalition will look for and secure additional funds to implement the CAMP in 2005.

II. Population

- a. Cleveland Municipal School District, beginning in The Cleveland EcoVillage
- b. Schools to Approach:
 1. Barbara Booker Montessori Center Elementary (preK-8), definitely in EcoVillage (EV)
 2. Joseph M. Gallagher (Magnet Schools), (6-8, will be K-8 in 2005), probably in EV
 3. Waverly Elementary (K-5), majority of elementary go here
 4. Watterson-Lake Elementary (K-5), some elementary may go here
 5. John Marshall High (9-12), some high school go here
 6. Lincoln-West High (9-12), majority high school go here
 7. Max S. Hayes Vocational High (9-12), some may go, draws from all of Cleveland
 8. Urban Community School, private (preK-8), moving to just outside EV, new building
 9. Metro Catholic Parish School? (preK-8), definitely in EV
 10. Our Lady of Mt. Carmel (preK-8), definitely outside EV, but some may go here
- c. Needs Assessment to be completed by (see sample letter):
 1. Principals
 2. Nurses
 3. Physical Education Teachers
 4. Building Maintenance Staff?
 5. Classroom Teachers?
 6. Others?
 - Need enough returned surveys for a legitimate, representative sample size

III. Needs Assessment Instrument

- a. Refer to attached School Asthma Needs Assessment form.
- b. This form was modified from: The American Lung Association and National Heart, Lung and Blood Institute's *How Asthma-Friendly Is Your School?*; and Oregon's *Asthma-Friendly Schools Needs Assessment* based upon the Centers for Disease Control and Prevention's *Strategies for Addressing Asthma Within a Coordinated School Health Program*.
- c. Simple nine-question survey that should take less than 10 minutes to complete.

IV. Methods

- a. Needs Assessment can be:
 1. Delivered to schools and completed in person – any upcoming staff meetings?
 2. Faxed
 3. Mailed – Coalition can pay for postage
 4. Completed over the phone
 5. Emailed
- b. Must code forms for particular schools and individual categories (principal, nurse, etc.) since strengths and weaknesses may vary from school to school and individual to individual
 1. Schools can be numbered beginning with 1
 2. Individual categories can be lettered beginning with A
 - Principal = A; Nurse = B etc.
 - Refer to needs assessment form, pg. 2, right bottom corner
- c. Form includes an *optional* completed by section: Name, title, and school
- d. The Coalition can provide incentives for completing the needs assessment (~\$2,800)
 1. Goals: To receive as many surveys back as possible
To thank people for their time
 2. What kind of incentives are permitted:
 - Money to individuals?
 - Money to schools?
 - Gift certificates to individuals: Grocery, Office Max, movies, restaurant etc.?
 - Gift certificates to schools
- e. System to follow-up with non-respondents
 1. Phone call, in person visit?

V. Data Analysis

- a. Identify strengths, weaknesses, and priorities
- b. Select a priority strategy
 1. Use Oregon's *Priority Setting Worksheet*
 - 5 point scale to rank each Strategy for Addressing Asthma by 3 dimensions: Satisfaction, Importance, and Responsiveness to Change
 - 5 = Greatest dissatisfaction with results, worst problem
 - 1 = Very satisfied, not a problem
 - 5 = Very important, need immediate attention
 - 1 = Not important, not essential to effective asthma management
 - 5 = Most amendable to change, within power of school
 - 1 = Not amendable to change, outside the scope of influence of school

VI. Results and Recommendations

- a. Use the prioritized results from the needs assessment to develop the CAMP
- b. Share the results with the schools and seek feedback
- c. Develop a plan to implement the CAMP in 2005
- d. Secure funding for implementation in 2005

**Greater Cleveland Asthma Coalition Needs Assessment
School Survey**

Greater Cleveland Asthma Coalition: School Asthma Needs Assessment

Directions: Since healthy kids learn better, this tool is designed to help schools address the needs of students with asthma by identifying and improving asthma-friendly school policies. Please answer the following questions as accurately as possible and feel free to add additional comments. Questions, call 216-524-5864 x16. Thank you!

1. Is your school free of tobacco smoke at all times, including during school-sponsored events?	YES	NO	
a. Are smoking prevention classes for students provided?	YES	NO	
b. Are quit smoking classes for students provided?	YES	NO	
c. Are quit smoking classes for staff provided?	YES	NO	
2. Does your school have a written Indoor Air Quality (IAQ) management plan? (If no, continue with Question 3.)	YES	NO	
a. If yes, does it reduce or eliminate allergens and irritants that can make asthma worse, including:			
i. cockroaches	YES	NO	
ii. dust mites	YES	NO	
iii. mold	YES	NO	
iv. pets with fur or feathers	YES	NO	
v. strong odors or fumes (such as dry erase boards, copy machines, art and craft supplies, pesticides, paint, perfumes, chemicals)	YES	NO	
b. If yes, are integrated pest management techniques (IPM) used to control pests?	YES	NO	
3. How often is a school nurse in your school?			
a. Specify number of hours per day and/or number of days per week: _____ hours/day and/or _____ days/week			
b. What is the student/nurse ratio? _____ students/nurse			
c. How many students are enrolled in your school? _____			
d. Do you know how many students have diagnosed asthma?	YES	NO	
e. If yes, indicate how many: _____			
f. If no, what percentage of students in your school do you estimate to have diagnosed asthma? _____%			
g. What percentage of students in your school do you estimate to have undiagnosed asthma? _____%			
4. If a nurse is not in your school all day, every day, is a nurse regularly available to help the school write asthma plans and give the school guidance on asthma issues?	YES	NO	
a. Is someone, other than the nurse, assigned and trained to give medications?	YES	NO	
b. If yes, does the school nurse supervise and monitor that person at least monthly?	YES	NO	
c. Is a person designated to coordinate asthma activities at:	YES	NO	
i. the school level?			
ii. the district level?	YES	NO	
iii. If yes, who? _____			
d. Are existing school health records used to identify all students with asthma?	YES	NO	
e. Are existing school health and/or attendance records used to track students' absences due to asthma?	YES	NO	

-Continued-

**Greater Cleveland Asthma Coalition Needs Assessment
School Survey (cont.)**

**Greater Cleveland Asthma Coalition (GCAC)
School Asthma Needs Assessment continued**

5. Is there a written policy that allows children to take asthma medications at school as prescribed by their doctor and permitted by parent?	YES	NO	
a. If yes, does the written policy specify if children may carry and administer their own medications?	YES	NO	
b. If no, is the medication where the child can access it all day, every day?	YES	NO	
c. If no, where is it located? __teacher __classroom __nurse's office __main office __other: _____			
d. Is an extra quick relief inhaler available at school?	YES	NO	
e. Is there a functional plan for asthma medications on field trips?	YES	NO	
6. Does your school have a written Asthma Action Plan for each child with asthma in case of a severe asthma episode?	YES	NO	
If Yes:	YES	NO	
a. Does the plan include what action to take during a severe asthma episode?	YES	NO	
b. Does the plan include whom to notify and when?	YES	NO	
c. Is there a procedure established to discuss the asthma management measures together with the student, teacher, and parent?	YES	NO	
If No:	YES	NO	
aa. Does the school have a standard emergency protocol for students in respiratory distress if they do not have their own asthma action plan?	YES	NO	
7. Is there an established asthma education program that includes general asthma information, asthma management plans, asthma emergency procedures, and asthma medication for each of the following:			
a. All school staff, including physical education teachers and bus drivers?	YES	NO	
b. Students with asthma?	YES	NO	
c. Classmates of students with asthma?	YES	NO	
d. Parents?	YES	NO	
8. Regarding physical education and asthma: Are modified activities available, if needed?	YES	NO	NOT ALWAYS
a. Do students with asthma have options for fully and safely participating in physical education classes and recess activities?	YES	NO	NOT ALWAYS
b. Do students with asthma have access to premedication, if needed?	YES	NO	NOT ALWAYS
c. Do students with asthma have immediate access to emergency medications during activity, if needed?	YES	NO	NOT ALWAYS
d. Are physical education instructors and activity monitors aware of individual needs of children with asthma?	YES	NO	NOT ALWAYS
9. Are there systems to promote ongoing communication among students, parents, teachers, school nurses, and health care providers to ensure that students' asthma is well-managed at school?	YES	NO	
a. Is case management provided for students with frequent school absences, school health office visits, emergency department visits, or hospitalizations due to asthma?	YES	NO	
b. Does your school have access to a consulting physician?	YES	NO	
c. Are students without primary care providers referred to child health insurance programs and providers?	YES	NO	

Thank you for completing this needs assessment. Questions, please call 216-524-5864 x16.

Completed by (optional – include name, title, and school): _____

Fax to the GCAC at 216-524-7647 or mail to 6100 Rockside Woods Boulevard, #260 Independence, Ohio 44131.

This form was modified from: The American Lung Association and National Heart, Lung and Blood Institute's *How Asthma-Friendly Is Your School?* and Oregon's *Asthma-Friendly Schools Needs Assessment* based upon the Centers for Disease Control and Prevention's *Strategies for Addressing Asthma Within a Coordinated School Health Program*.

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment**

**Greater Cleveland Asthma Coalition (GCAC)
Report of School Asthma Needs Assessment Project**

Q1:- Comparison of responses between Principals & Nurses

			Respondent		Total
			Nurses	Principals	
Is your school free of tobacco smoke at all times, including during school-sponsored events?	N	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
	Y	Count	10	3	13
		% within Respondent	83.3%	100.0%	86.7%
	Total	Count	12	3	15
		% within Respondent	100.0%	100.0%	100.0%

			Respondent		Total
			Nurses	Principals	
Are smoking prevention classes for students provided?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	6	0	6
		% within Respondent	50.0%	.0%	40.0%
	Y	Count	5	3	8
		% within Respondent	41.7%	100.0%	53.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Are quit smoking classes for students provided?	N	Count	11	3	14
		% within Respondent	91.7%	100.0%	93.3%
	Y	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Are quit smoking classes for staff provided?	N	Count	11	3	14
		% within Respondent	91.7%	100.0%	93.3%
	Y	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Does your school have a written Indoor Air Quality (IAQ) management plan?	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	9	2	11
		% within Respondent	75.0%	66.7%	73.3%
	Y	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
Total		Count	12	3	15

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
If Yes, does it reduce or eliminate allergens that can make asthma worse, including cockroaches?	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	9	2	11
		% within Respondent	75.0%	66.7%	73.3%
	Y	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Dust mites?	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	10	2	12
		% within Respondent	83.3%	66.7%	80.0%
	Y	Count	1	0	1
		% within Respondent	8.3%	0%	6.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Mold?	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	9	2	11
		% within Respondent	75.0%	66.7%	73.3%
	Y	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Pets with fur or feathers?	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	10	2	12
		% within Respondent	83.3%	66.7%	80.0%
	Y	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Strong odors or fumes (such as dry erase boards, copy machines, art and craft supplies, pesticides, paint, perfumes, chemicals?)	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	9	2	11
		% within Respondent	75.0%	66.7%	73.3%
	Y	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
Total		Count	12	3	15

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
If Yes, are integrated pest management techniques (IPM) used to control pests?	B	Count	0	1	1
		% within Respondent	.0%	33.3%	6.7%
	N	Count	9	2	11
		% within Respondent	75.0%	66.7%	73.3%
	Y	Count	3	0	3
		% within Respondent	25.0%	0%	20.0%
Total		Count	12	3	15

	N	Minimum	Maximum	Mean	Std. Deviation
How often is a school nurse in your school, number of days/week	14	1.0	5.0	2.536	1.0089
Valid N (listwise)	14				

The average number of days/week that a school nurse is in a school is 2.5, the minimum is 1 day/week and the maximum is 5 days/ week with standard deviation of ±1 day

	N	Minimum	Maximum	Mean	Std. Deviation
Student:Nurse ratio What is the student/nurse ratio?	14	200	2200	828.36	576.827
Valid N (listwise)	14				

The average student/nurse ratio is 828.36/1. The minimum is 200/1 and the maximum is 2200/1 with a SD± 576.8 students.

		Frequency	Percent	Valid Percent	Cumulative Percent
Do you know how many students have diagnosed asthma?	Valid	N	5	33.3	33.3
		Y	10	66.7	100.0
	Total		15	100.0	

66.7% reported that they know how many students have diagnosed asthma

	N	Minimum	Maximum	Mean	Std. Deviation
If Yes, indicate how many:	10	9	74	41.70	22.745
Valid N (listwise)	10				

The reported average number of students diagnosed with asthma is 41.7 with a SD±22.7; the minimum is 9 and maximum is 74 students.

	N	Minimum	Maximum	Mean	Std. Deviation
If No, what percentage of students in your school do you estimate to have diagnosed asthma?	3	5 %	10 %	6.67 %	2.89 %
Valid N (listwise)	3				

The estimated average number of students diagnosed with asthma is 6.7% with SD± 2.9%. The minimum is 5% and the maximum is 10%

	N	Minimum	Maximum	Mean	Std. Deviation
What percentage of students in your school do you estimate have undiagnosed asthma?	5	1 %	27.5 %	10.7 %	10.12 %
Valid N (listwise)	5				

The estimated percent of students undiagnosed with asthma is 10.7% with SD± 10.1%. The minimum is 1% and the maximum is 27.5%

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
If a nurse is not in your school all day, every day, is a nurse regularly available to help the school write asthma plans and give the school guidance on asthma issues?	N	Count	4	2	6
		% within Respondent	33.3%	66.7%	40.0%
	NA	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Y	Count	7	1	8
		% within Respondent	58.3%	33.3%	53.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Is someone, other the nurse, assigned and trained to give medications?	NA	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Y	Count	11	3	14
		% within Respondent	91.7%	100.0%	93.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
If Yes, does the nurse supervise and monitor that person at least monthly?	N	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
	Y	Count	10	3	13
		% within Respondent	83.3%	100.0%	86.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Is a person designated to coordinate asthma activities at the School level?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	6	2	8
		% within Respondent	50.0%	66.7%	53.3%
	Y	Count	5	1	6
		% within Respondent	41.7%	33.3%	40.0%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Is a person designated to coordinate asthma activities at the District level?	B	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	N	Count	9	2	11
		% within Respondent	75.0%	66.7%	73.3%
	Y	Count	2	0	2
		% within Respondent	16.7%	.0%	13.3%
Total		Count	12	3	15

If YES, WHO? Seven were n/a; five were blank; two said nurse and one said "George."

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
Are existing school health records used to identify all students with asthma?	N	Count	1	1	2
		% within Respondent	8.3%	33.3%	13.3%
	Y	Count	11	2	13
		% within Respondent	91.7%	66.7%	86.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Are existing School health and/or attendance records used to track students' absences due to asthma?	N	Count	10	2	12
		% within Respondent	83.3%	66.7%	80.0%
	Y	Count	2	1	3
		% within Respondent	16.7%	33.3%	20.0%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Is there a written policy that allows children to take asthma medications at school as prescribed by their doctor and permitted by parent?	Y	Count	12	3	15
		% within Respondent	100.0%	100.0%	100.0%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
If Yes, does the written policy specify if children may carry and administer their own medications?	N	Count	0	1	1
		% within Respondent	.0%	33.3%	6.7%
	Y	Count	12	2	14
		% within Respondent	100.0%	66.7%	93.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
If No, is the medication where the child can access it all day, every day?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	NA	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	Y	Count	8	3	11
		% within Respondent	66.7%	100.0%	73.3%
Total		Count	12	3	15

If No, where is it located? One blank, six n/a, 3 nurses office, 4 main office and one in classroom.

			Respondent		Total
			Nurses	Principals	
Is an extra quick relief inhaler available at school?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	9	1	10
		% within Respondent	75.0%	33.3%	66.7%
	Y	Count	2	2	4
		% within Respondent	16.7%	66.7%	26.7%
Total		Count	12	3	15

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
Is there a functional plan for asthma medications on field trips?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	5	2	7
		% within Respondent	41.7%	66.7%	46.7%
	Y	Count	6	1	7
		% within Respondent	50.0%	33.3%	46.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Does your school have a written Asthma Action plan for each with asthma in case of a severe asthma episode?	N	Count	8	1	9
		% within Respondent	66.7%	33.3%	60.0%
	Y	Count	4	2	6
		% within Respondent	33.3%	66.7%	40.0%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
If Yes, does the plan include what action to take during a severe asthma episode?	N	Count	8	1	9
		% within Respondent	66.7%	33.3%	60.0%
	Y	Count	4	2	6
		% within Respondent	33.3%	66.7%	40.0%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Does the plan include whom to notify and when?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	8	1	9
		% within Respondent	66.7%	33.3%	60.0%
	Y	Count	3	2	5
		% within Respondent	25.0%	66.7%	33.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Is there a procedure established to discuss the asthma management measures together with the student, teacher and parent?	N	Count	9	1	10
		% within Respondent	75.0%	33.3%	66.7%
	Y	Count	3	2	5
		% within Respondent	25.0%	66.7%	33.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
If No, does the school have a standard emergency protocol for students in respiratory distress if they do not have their own asthma action plan?	B	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	N	Count	1	2	3
		% within Respondent	8.3%	66.7%	20.0%
	Y	Count	8	1	9
		% within Respondent	66.7%	33.3%	60.0%
Total		Count	12	3	15

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
Is there an established asthma education program that includes general asthma information, asthma management plans, asthma emergency procedures, and asthma medication for all school staff, including physical education teachers and bus drivers?	N	Count	11	3	14
		% within Respondent	91.7%	100.0%	93.3%
	Y	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Students with asthma?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	8	3	11
		% within Respondent	66.7%	100.0%	73.3%
	Y	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Classmates of students with asthma	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	10	3	13
		% within Respondent	83.3%	100.0%	86.7%
	Y	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Parents?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	8	3	11
		% within Respondent	66.7%	100.0%	73.3%
	Y	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Regarding physical education and asthma: Are modified activities available, if needed?	Not Always	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	Y	Count	9	3	12
		% within Respondent	75.0%	100.0%	80.0%
	Total	Count	12	3	15

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
Do students with asthma have options for fully and safely participation in physical education classes and recess activities?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	NAL	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	Y	Count	8	3	11
		% within Respondent	66.7%	100.0%	73.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Do students with asthma have access to premeditation, if needed?	N	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Not Always	Count	3	0	3
		% within Respondent	25.0%	.0%	20.0%
	Y	Count	8	3	11
		% within Respondent	66.7%	100.0%	73.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Do students with asthma have immediate access to emergency medications during activity, if needed?	Not Always	Count	4	0	4
		% within Respondent	33.3%	.0%	26.7%
	Y	Count	8	3	11
		% within Respondent	66.7%	100.0%	73.3%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Are physical education instructors and activity monitors aware of individual needs of children with asthma?	Not Always	Count	6	2	8
		% within Respondent	50.0%	66.7%	53.3%
	Y	Count	6	1	7
		% within Respondent	50.0%	33.3%	46.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Are there systems to promote ongoing communication among students, parents, teachers, school nurses, and healthcare providers to ensure that students' asthma is well-managed at school?	N	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	4	0	4
		% within Respondent	33.3%	.0%	26.7%
	Y	Count	6	3	9
		% within Respondent	50.0%	100.0%	60.0%
	Total	Count	12	3	15

**Greater Cleveland Asthma Coalition Needs Assessment
Report of School Asthma Needs Assessment (cont.)**

			Respondent		Total
			Nurses	Principals	
Is case management provided for students with frequent school absences, school, health office visits, emergency department visits, or hospitalizations due to asthma?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	N	Count	8	2	10
		% within Respondent	66.7%	66.7%	66.7%
	Y	Count	3	1	4
		% within Respondent	25.0%	33.3%	26.7%
Total		Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Does your school have access to a consulting physician?	N	Count	12	3	15
		% within Respondent	100.0%	100.0%	100.0%
	Total	Count	12	3	15

			Respondent		Total
			Nurses	Principals	
Are students without primary care providers referred to child health insurance programs and providers?	B	Count	1	0	1
		% within Respondent	8.3%	.0%	6.7%
	Y	Count	11	3	14
		% within Respondent	91.7%	100.0%	93.3%
Total		Count	12	3	15

Potential Preliminary Recommendations:

- 1: Develop an established asthma education program that includes general asthma information, asthma management plans, asthma emergency procedures, and asthma medication for staff, teachers, and drivers.
 - 2: Develop an individualized asthma management plan for every student with asthma.
 - 3: Develop a written Asthma Action plan for each school.
 - 4: Develop an established procedure to discuss the asthma management measures together with students, teachers, and parents for every school.
 - 5: Develop an established asthma education plan for parents.
 - 6: Develop a plan for access to a consulting physician at every school.
 - 7: Clarify areas where principal and nurse replies differed.
 - 8: Repeat survey, including staff or staff supervisor and teachers, as well as principals and nurses.
- Other??



Asthma Treatment and Services Community Assessment

Please fill out one **Section A. Agency Information** for your agency and copy and complete one **Section B. Asthma Services Provided** for **EACH** asthma service your agency provides.

Please return the completed assessment.

A. Agency Information		
1. Agency Name:		
2. Address:		
City:	State:	Zip:
3. Phone:	4. FAX:	5. Hours/Days of Operation:
6. Contact Person:		7. Email:

Please fill out one **Section B. Asthma Services Provided** for **EACH** asthma service your agency provides.

B. Asthma Services Provided	
1. Name of Service:	
2. Short Description of Service:	
3. Available to Age Groups (Select all that apply): <input type="checkbox"/> Senior (65+) <input type="checkbox"/> Adult (18-64) <input type="checkbox"/> Teen (13-17) <input type="checkbox"/> Child (6-12) <input type="checkbox"/> Young Child (0-6)	4. Primary ethnic group(s) served (select all that apply): <input type="checkbox"/> Hispanic <input type="checkbox"/> Black <input type="checkbox"/> White <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> American Indian, Eskimo, Aleut <input type="checkbox"/> Other <input type="checkbox"/> All
5. Cost of the service provided?	6. Date(s)/Time(s) service provided:
7. Location service is provided: <input type="checkbox"/> Clinic <input type="checkbox"/> Hospital <input type="checkbox"/> Home <input type="checkbox"/> Agency office <input type="checkbox"/> Community <input type="checkbox"/> Other: _____	



American Lung Association Tip Sheet: Data Collection Instruments

Instrument	Pros	Cons
Mail Survey <i>Purpose:</i> <ul style="list-style-type: none"> to obtain individual, written information within several days or weeks of program activity to obtain primarily closed-ended responses on a range of issues 	<ul style="list-style-type: none"> time-efficient lower unit cost easy to implement less staff intensive good for sensitive topics 	<ul style="list-style-type: none"> generally low response rates slow data collection few open-ended questions may require additional incentives literacy issues need to be addressed
In-Person Written Survey <i>Purpose:</i> <ul style="list-style-type: none"> to obtain immediate written, individual information to obtain primarily closed-ended responses on a range of issues 	<ul style="list-style-type: none"> immediate responses less staff intensive good for sensitive topics specific written responses 	<ul style="list-style-type: none"> people may rush to complete it at the end of a training, etc. literacy issues
E-mail Survey <i>Purpose:</i> <ul style="list-style-type: none"> to obtain individual, written information electronically almost immediately after program activity to obtain primarily closed-ended responses on a range of issues 	<ul style="list-style-type: none"> time-efficient lower unit cost easy to implement less staff intensive electronic responses for easier data entry 	<ul style="list-style-type: none"> may not be option for all being surveyed possible low response rate few open-ended questions may require additional incentives literacy issues need to be addressed possible concerns about anonymity
Face-to-Face Interview <i>Purpose:</i> <ul style="list-style-type: none"> to have individual, open-ended discussion on a range of issues to obtain in-depth information on an individual basis about perceptions and concerns 	<ul style="list-style-type: none"> immediate responses high flexibility reach diverse populations high response rate 	<ul style="list-style-type: none"> not anonymous interviewee may alter responses to "please interviewer" relies on accuracy of interviewers' recording of answers
Telephone Survey <i>Purpose:</i> <ul style="list-style-type: none"> to have individual conversations on a range of issues to obtain information on individual basis on both open- and closed-ended topics 	<ul style="list-style-type: none"> speed of data collection potential for high responses rates good for long or detailed answers 	<ul style="list-style-type: none"> role of interviewer in eliciting responses cost
Focus Groups <i>Purpose:</i> <ul style="list-style-type: none"> to have an open-ended group discussion on a range of issues to obtain in-depth information about perceptions and concerns from a group 	<ul style="list-style-type: none"> gather information from several people at once individual responses can stimulate additional ideas from others 	<ul style="list-style-type: none"> individual responses influenced by group transcription can be expensive participants choose to attend and may not be representative of target population participants may give "politically correct" answers, due to group pressure harder to coordinate than individual interviews



American Lung Association Worksheet: Using a Numerical Ranking System to Prioritize Needs¹

Use this worksheet as a scorecard for coalition members to prioritize needs identified in your needs assessment. Use the 5-point scale defined in each column to rank each Strategy for Addressing Asthma on 3 dimensions of satisfaction, importance, and responsiveness to change. Add the ranking points for each strategy to get total points. Use Total Points to help you choose priority areas to be addressed in your 5-Year AFSI Plan.

Strategy for Addressing Asthma Within a Coordinated School Health Program	How Satisfied am I? 5 = greatest dissatisfaction with results – worst problem 1 = very satisfied – not a problem	How Important is this? 5 = very important, needing most immediate attention, most essential to effective management of asthma 1 = not important, not essential to effective management of asthma	How Responsive to Change is it? 5 = most amenable to change, within power of school 1 = not amenable to change, outside the scope of influence of the school	Total Points	Overall Score	Priority Strategy for Addressing Asthma
Management and Support Systems for Asthma Friendly Schools						
School Health and Mental Health Services for Students with Asthma						
Asthma Education and Awareness Programs for Students and School Staff						
Healthy School Environment						
Physical Education and Activity Opportunities for Students with Asthma						

¹ Based on State of Oregon Asthma-Friendly Schools Demonstration Project materials



AFSI Roseland School District, Sonoma County Based in part on the six strategies for addressing asthma within a coordinated School Health Program (CDC)

Elements for each module	Needs Assessment finding	Priority 0 – 5 (20 points total)			
		support	impact	cost	time
Module 1: Mgmt. & Support for AFSI					
a. Asthma mgmt and ed recognized by admin staff as high priority	Admin recognize as serious, but not a high priority				
b. School staff designated to coordinate and organize asthma program and activities	School Dist has identified staff to participate in AFSI project, but no further commitment beyond planning				
c. Written policies developed and written for asthma ed and mgmt.	None exist on school or district levels Nurses follow state mandated policy for asthma (document and follow meds) Nurses recommend policy on requiring all student w/asthma to have inhaler at school.				
d. Asthma programs are culturally and linguistically appropriate	No programs exist at this time				
e. All students w/asthma are identified and tracked	Reliance on self-report, parent report (via Student Health Hx form completed upon initial registration and/or Emergency Form completed annually) and nurse identification of asthma during health screening for vision, hearing or scoliosis. Medication use is supposed to be tracked by office staff, but no system of informing parents or physician/clinic of usage is in place.				
f. Funds exist for school asthma programs	Asthma Coalition looking to pilot Open Airways in at least 6 school in Sonoma County				
g. Systems that support ongoing communication among students, parents, teachers, school nurses, and health care providers are in place and effective	Informal communication system at back to school night, and through a “teacher help” system that allows for a broad range of issues to be addressed (Coordinated Services Team). Letters sent home to parents of identified students w/asthma to fill out more detailed info on child’s asthma are rarely sent back to school				
h. Asthma policies and program strategies are assessed annually	No policies or programs to assess				



AFSI Roseland School District, Sonoma County Based in part on the six strategies for addressing asthma within a coordinated School Health Program (CDC)					
Elements for each module	Needs Assessment finding	support	impact	cost	time
Module 2: School Health and Mental Health Services for Students w/Asthma					
a. Use of written Asthma Action Plans (AAP)	No, Nurse completes "Health Inventory" form for each child. Also, "Student Health Hx" form that parents fill out (if they do), emergency cards filed.				
b. AAP are shared w/ appropriate staff	Lists of students w/ asthma are generated for teachers each school year				
c. Immediate access to medications Meds kept locked office. Focus group reports meds not always locked, often very unorganized due to the number of inhalers, spacers etc.	Meds that are hard for office staff to find add to their frustration which is displaced onto students....resulting in students not wanting to go to office for their meds. Nurses report concern over access to meds for kids in p.e. due to proximity of field to office.				
d. Students permitted to self-carry and administer	No, Admin generally against, teachers mixed, parents mostly want. Pending legislation will guide this element in the future.				
e. Standard emergency protocol in place (for students w/o a plan)	Nothing formal... send to office for meds, or call 911 if real trouble				
f. Case mgmt for students w/ severe asthma	None. Parent focus group reveal parents very stressed and concerned about child well being				
g. Provide and coordinate school-based counseling, psychological and social services as appropriate	No Children who have issues can be referred to the Coordinated Services Team, but is used for crisis situations.				
h. Staff will be trained and supervised to administer meds Staff are not trained	Focus group revealed that office staff unorganized w/meds and appear bothered and even mad about having to find/get out meds. Report of staff telling kids they should have taken meds before p.e., but not in a nice way.				
i. Refer students w/asthma who don't have a medical provider	Parent focus group: good care critical to getting control of asthma, meds paid for and support and education. No referral loop has been systematized.				
j. Provide access to a consulting physician for each school.	Roseland has the clinic				

AFSI Roseland School District, Sonoma County Based in part on the six strategies for addressing asthma within a coordinated School Health Program (CDC)						
Elements for each module	Needs Assessment finding	support	impact	cost	time	Priority 0 – 5 (20 points total)
Module 3: Asthma Education and Awareness for Students and Staff						
a. Students w/asthma will be educated on asthma basics, mgmt. and emergency response	No ed provided Parents, teachers and student report need for this <i>Possible Open Airways program starting at Roseland in the fall/04.</i>					
b. Asthma awareness and lung health ed to all students	Teachers and admin feel unnecessary					
c. Ed staff on asthma basics, mgmt., and emergency response annually	Admin suggest addition of protocol in teacher manual, posting small poster, and adding to teacher emergency boxes					
Module 4: Healthy School Environment						
d. Ensure good indoor air quality by reducing or eliminating asthma triggers	Admin will likely only support simple, expense-free interventions					
e. Integrated pest mgmt. techniques are used to control pests	Teachers express concern over pesticide use					
Module 5: Physical Education and Activity Opportunities for Students w/Asthma						
a. Full participation in physical activities for students w/asthma who are well is encouraged	Incident at another school (not Roseland Dist.) reported where p.e. teacher forced child to participate, child had asthma attack and 911 was called.					
b. Students w/asthma have access to medications before, during and after activity	Access to meds kept at the office. Students report embarrassment and office staff being “troubled” and difficulty finding meds. see 2 c. above					
c. Health information on physical activity for students w/asthma is collected annually	No					
d. Modified activities are provided, as indicated by AAA (or other), are provided	Focus group report students are allowed to walk or take it easy when they report having asthma Teachers/admin report kids using asthma as an excuse not to participate in p.e.					



4

AFSI Roseland School District, Sonoma County						
Based in part on the six strategies for addressing asthma within a coordinated School Health Program (CDC)						
Elements for each module	Needs Assessment finding	support	impact	cost	time	Priority 0 – 5 (20 points total)
Module 6: Family and Community Efforts to Better Manage Asthma Symptoms and Reduce School Absences among Students w/asthma						
a. Written parental permission for school health staff and primary care providers to share student health information through the use of medical release form	Medication forms are a priority but release forms are not typically signed					
b. Family members are provided education on asthma	No Families report that this would be very useful, especially for Hispanic community					
c. Local community programs are worked with to coordinate school and community asthma mgmt and ed services	AFSI project is an example Open Airways may begin as well					

◆ **Action Step 3: Create 5-Year Plan**

Creating and working through a long-term plan for sustainable change is the foundation of the Asthma-Friendly Schools Initiative. A five-year plan charts a course for the overall coalition, the schools and community organizations to move forward in a well-constructed manner complete with opportunities for measuring progress and modifying approaches as needed. This planning reflects the essence of the program ultimately designed to keep students with asthma healthy and ready to learn.

To Create a 5-Year AFSI Plan:

- Schedule and determine participants for planning session(s)
- Prepare for and convene planning session (s) for brainstorming and priority-setting
- Draft AFSI 5-Year Plan
- Share draft plan with key stakeholders, target audiences, and high-level decision-makers
- Review and adopt AFSI Five-Year Plan
- Distribute and publicize plan

Schedule and determine participants for planning session(s)

Creating your 5-Year AFSI Plan will involve very focused, analytical work to create specific goals, outcomes and measurement for the program, as well as a subsequent process of working with a large stakeholder group whom the coalition will need to support, enhance, and ultimately implement the plan.

LESSONS LEARNED!

Pilot sites found 5 years to be a manageable length of time for both coalitions and schools. It gives coalitions time to work through projects, and schools see that the community isn't expecting major immediate changes.

Remember to start with the 5-year plan as your roadmap!

First, identify a small work group of coalition members and any program champions already identified. This group will be responsible for working through the actual plan, based on the needs assessment results. Work with your school partners to be sure you have a committed school representative collaborating as part of this small work group.

Second, identify individual stakeholders who will form a larger group; the group may involve not only your full coalition but other key community representatives as well. These may include school administrators, parent leaders, potential funders and/or individuals who can assist with fundraising, representatives of nursing and medical organizations, state or municipal public health professionals, school nurse(s), health insurers, hospital administrators, pediatricians, etc.

Remember, the results of your needs assessment will become the cornerstone of your AFSI planning. It must clearly present data and priorities in a useable form. Distribute copies to participants prior to the meetings so that they understand your baseline data, as well as see the work your coalition has already undertaken and accomplished.

LESSONS LEARNED!

AFSI pilot sites stress the importance of parent involvement, as well as high-level school administrators, in the planning process. Be sure to recruit at least one school board member and administrative staff, as well as parent leaders. Depending on the individual(s), they could be part of the small work group or the large stakeholder group.

Remember, you are grooming program champions as well as tapping into individuals' experience and expertise!

SELF-CHECK!

Are you on the right track? Ask yourself:

- Do we have the right people at the table to determine priorities?
- Are there enough school decision makers involved to know the true time and resources needed to implement in the schools?
- Are we allowing enough time to work through all the needs assessment results?

Prepare for and convene planning session(s) for brainstorming and priority-setting

As you move forward, keep in mind that there are many ways to plan, and your plan will incorporate the views and experience of many individuals coming into the AFSI project from several different perspectives.

Regardless, the small work group must keep an eye on AFSI's student-focused purpose and work together toward 5-year goals that support the purpose!

Prior to the first meeting, distribute the needs assessment report and information about the goal and format of the sessions to all participants so that they are prepared. Include a list of defined planning terms, which must be used consistently.

The recommended terms are:

Asthma-Friendly Schools Initiative Purpose: To keep children with asthma healthy, in school, and ready to learn

Goals: A set of aims that set the AFSI project's long-range direction

SMART Objective: Specific levels of achievement, based on goals. 'SMART' stands for "specific, measurable, achievable, realistic and time-sensitive."

Activities: Actions that must occur to meet objectives and work toward long-term goals.

Outcomes: Measurable changes that ultimately affect students (i.e., in students' education, disease awareness, disease management, etc.)

Evaluation: The process of monitoring your progress in meeting objectives and achieving desired outcomes, which may involve modifying your plans as you move forward

If possible, recruit an experienced meeting facilitator who is prepared to work through brainstorming based on the AFSI planning grid (see below) and prioritization by the group. By the end of the planning session, the work group should have identified a range of goals.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Do we have everything ready for the participants to make the planning process run smoothly?
- Do we have an agreed-upon set of definitions?
- Do we have a facilitator that can keep the planning process moving?

Draft 5-Year AFSI Plan

Delegate the drafting of 5-Year AFSI Plan using planning session results to small group(s). A 5-Year AFSI plan should incorporate the following items per year:

- Goals, which should be believable, attainable within five years, and understood by your coalition and community stakeholders
- SMART Objectives
- Outcomes with results indicators (measures), including preliminary evaluation plan (of what, how and when to measure)

The 5-Year AFSI Plan will inform year-by-year activities-based planning and also lay the foundation for budget and fundraising. While some of the details will flow from annual activity plans, your work group should create overall staffing needs and projected activity expenses, existing resources, and potential funders. (See the American Lung Association Tip Sheet: Budget & Fund Planning at the back of this section.)

Your 5-Year AFSI plan should incorporate evaluation and measurement, which are integral to an outcomes-based program. Always undertake planning and evaluation simultaneously. Effective planning and evaluation will depend on identification of baseline data (via the needs assessment).

Your evaluation should examine:

- Efficacy: *Are we doing the right things?*
- Efficiency: *Are we doing things right?*
- Effectiveness: *Are we making a difference?* (See also, the American Lung Association Tip Sheet: Long-Term Policy Change, in the Reference Materials of this section.)

Many evaluation and measurement systems can work to track progress. Two sample documents are included in the reference materials at the end of this section: a logic model and a tailored AFSI planning grid (discussed below).

This can be a very involved process! The process, however, forces the work group to think through specific objectives to meet a specific goal, which will impact the AFSI purpose of keeping kids with asthma healthy and ready to learn. As you create your plan, constantly refer back to your needs assessment, which will direct where your efforts should focus.

LESSONS LEARNED!

Pilot sites say: Incorporate evaluation into your planning process!

Consider “evaluation” as a tool for measuring progress. It can chart accomplishments throughout AFSI implementation and informs you when and how to change your plan and/or approaches. The sample AFSI planning grid found at the end of this section may help demystify measurements and help you build them into your local plan.

Logic models are graphic depictions of the relationship between a program’s activities and its intended outcomes. They convert your raw information into a picture of the program, incorporating evaluation and measurement. Logic models also link program activities and outcomes and are increasingly becoming the recommended system for public health projects.

Think of the logic model as an “outcomes roadmap” that illustrates the underlying logic behind your program plan. Over time, the model will change according to your specific program experience and your evaluation.¹ National planning for AFSI was based in the CDC’s Logic Model; see the Asthma-Friendly Schools Initiative Implementation Evaluation Logic Model of Comprehensive Asthma Management Plan in the Reference Materials at the back of this section. This national logic model should be used for reference only and not replicated as a local tool). Also included is an American Lung Association Tip Sheet: Constructing a Simple Logic Model, a logic model PowerPoint template, and the Cleveland AFSI Logic Model.

A tailored AFSI Planning Grid, based on the logic model, is recommended for any coalition building a 5-Year AFSI Plan. This tool will support your planning for activities, outcomes, and evaluation and present the foundation for subsequent year-by-year task plans.

The sample grid and related tip sheet included in the Reference Materials at the back of this section identifies three SMART objectives and charts outcomes over three years; also included are indicators and sources for one year’s activities and tips for working through the grid. See the American Lung Association Tip Sheet: Using the AFSI Grid for Integrating Evaluation info 5-Year Planning and the American Lung Association AFSI Grid for Integrating Evaluation info 5-Year Planning.

LESSONS LEARNED!

Just as you may need professional expertise to analyze the needs assessment and/or create new data collection tools, you may need expert guidance to write outcomes and identify indicators. Network among coalition members to identify and recruit an experienced public health program planner who can participate actively in your planning.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Did we identify our goals, objectives, and outcomes?
- Do they align with our needs assessment results?
- Do we have evaluation measures built in to each goal and objective?
- Do we know what desired outcomes are? Do we know when and how we are going to measure them?

Share draft plan with key stakeholders, target audiences, and high-level decision makers

Bring the large stakeholder group together for presentation of the 5-Year AFSI Plan. You

¹ U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

may also want to plan separate presentations for school administrators in your targeted districts, potential funders, etc.

The purpose of these presentations is to:

- Educate key audiences
- Illustrate the depth of research and planning already undertaken
- Gather input for potential revisions or expansion of the plan
- Ensure stakeholders “buy-in” for AFSI implementation
- Spark interest of leaders among several audiences; consider the presentation part of your program promotion
- Identify leaders and potential “program champions”

LESSONS LEARNED!

Be very well prepared for your large stakeholder meeting! AFSI pilot sites urge coalitions to invest in preparing a prioritized, well-organized needs assessment report, clearly documented planning grids, and a clearly articulated plan that is based on the cornerstone of their AFSI project—the needs assessment results.

Before the meeting, plan exactly how you will demonstrate that your plan is well connected to your communities’ needs. If stakeholders do not see those connections, gaining their needed support may be nearly impossible.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Was the draft plan shared with all stakeholders?
- Is there a formal comment process?
- How will we incorporate questions/changes from the larger stakeholder group?

Review and adopt 5-Year AFSI Plan

Following the full coalition/stakeholder meeting(s), the AFSI Plan work group should modify the plan to reflect stakeholders’ input. Formalize and adopt the plan, using the process agreed upon by your coalition.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Does the plan reflect the needs assessment findings?
- Is the plan inclusive of the stakeholders and their comments?
- Is the plan easy to understand for people not involved in the AFSI planning process?

Distribute and publicize plan

Distribute copies of the full plan to your coalition. Coalition members also should have the AFSI planning grids, as well as a complete needs assessment report.

Consider producing one or two other abridged versions for other audiences, such as school administrators, potential funders, municipal or state education and health leaders, and media. These versions would include the needs assessment summary and an outlined plan related directly back to the needs assessment; you would not include the detailed planning grids.

Publicizing launch of your local AFSI project could be wrapped around a “problem-solution” angle, through which you can illustrate a community problem (qualified via a detailed needs assessment) and a solution (a long-term plan, including evaluation measures, focused on helping kids with asthma stay healthy and ready to learn). Publicity could target not only local consumer media, but outlets specific to public health, education, nursing, medicine, health insurers and healthcare providers.

SELF-CHECK!

Are you on the right track? Ask yourself:

- To whom should the plan be distributed?
- Does the plan demonstrate long-term goals to funders?
- Can the public and the community understand the goals?

REFERENCE MATERIALS

- ❖ American Lung Association Tip Sheet: Budget & Fund Planning
- ❖ American Lung Association Tip Sheet: Constructing a Simple Logic Model
- ❖ Asthma-Friendly Schools Initiative Implementation Evaluation Logic Model of Comprehensive Asthma Management Plan
- ❖ Logic model PowerPoint template
- ❖ Cleveland AFSI Logic Model (with graphic layout)
- ❖ American Lung Association Tip Sheet: Long-Term Policy Change
- ❖ American Lung Association Tip Sheet: Using the AFSI Grid for Integrating Evaluation into 5-Year Planning
- ❖ American Lung Association AFSI Grid for Integrating Evaluation into 5-Year Planning (includes template)



American Lung Association Tip Sheet: Budget & Fund Planning

Most, if not all, activities detailed in your Year 1 Workplan will require specific budget. Determining an overall funding plan will depend on a clearly articulated budget. The following walks you through the steps in establishing your Year 1 Workplan budget and a funding plan.

Establish the Budget¹

For each objective, detail:

1. **Cost/Expenditures:** These are the dollars required to produce, deliver and evaluate the activity. This will include costs related to staffing (salaries and benefits), facilities, equipment, supplies, promotion, evaluation, and overhead. Organize costs according to the following categories:
 - Operating: occur on an ongoing, regular basis and are spent to “operate” your activity
 - Direct: can be tied directly to the program or activity (salaries, supplies, etc.)
 - Fixed: set regardless of specific activities and how many people are involved (salaries, benefits, etc.)
 - Indirect: general overhead and administrative expenses, including research for needs assessments
 - Variable: vary according to how many people are reached (supplies)
2. **Revenue:** Income earned or generated through the activity. Include revenue earned through any of three categories:
 - Base resources: income provided by public and government funds and usually forms the basis of the an organization’s annual operating budget
 - Earned income: earned by charging a price for a product (registration fee), event (entry, sponsorship fee), or service (user fee)
 - Financial assistance: funds provided by external bodies through private, philanthropic or research agency grants that may be for specific purposes or programs and usually are not renewable without re-applying at each competition. Also include financial sponsorship when a sponsor donates funds for a product/activity in return for promotion of their name, logo, slogan, and the positive public relations that comes from being associated with the organization.
3. **Resource Mobilization:** This is the contributions of resources, other than monies, that enable a product to be delivered. These include:
 - Sponsorships: where a commercial entity donates equipment, supplies or services in return for promotion of their name, logo, slogan, etc. Local chapters of national organizations should research any national policy regarding corporate sponsorships so that local sponsorships do not present any conflicts of interest. The American Lung Association policy, for example, also works to protect the nationwide name of the American Lung Association. Specifically, the policy states: ...“in order to retain its credibility and authority, and to protect its integrity, the American Lung Association remains independent in its decision-making regarding research, programs, advocacy, awareness, fundraising, and all position statements. Furthermore, ALA avoids conflict of interest, or its appearance thereof. ...”²
 - Partnerships: where two or more agencies with similar mandates and interests combine and share their resources to offer a product
 - Fundraising activities: includes special events or sales of t-shirts or other tangible goods
 - In-kind or contra contributions: include funds saved through contributions by individuals, organizations, and governments

¹ Program Planning and Evaluation Guide for Lung Associations. American Lung Association, April 2000.

² American Lung Association Policy Manual, Fundraising Policy A11, Corporate Relations Policy. American Lung Association, 2004.

Create List of Potential Funders

As a coalition, brainstorm potential sources of funding, including partnerships among organizations, sponsorships, in-kind donations, grants, etc.

Keep in mind that coalition members may feel that they need to protect their individual relationships with funders. Focus on the benefits of community-wide coalition efforts and the potential of members' maximizing their contacts to achieve long-term AFSI goals. Remember, existing relationships can and should be leveraged to seek broader-based funding in addition to individual organizations' current sponsorships, grants, etc.

Understand Funders' Needs

Always take time to step back and understand what benefit a potential funder would realize by being involved in your AFSI efforts. If no coalition members have relationships with a potential funder, research the organization before considering an approach! Who are their key customer groups and/or constituents? What is their history of grant-making or sponsorships?

Consider what they may need to gain, from a business perspective, from a sponsorship, including:

- Promoting their products
- Gaining positive PR and increasing visibility
- Reaching your audiences with a specific message

When approaching potential funders, also keep in mind “selling points”—or how they would benefit from being involved in your coalition and AFSI. AFSI activities benefit sponsors because they:

- focus on a holistic, community-wide approach, which provides networking opportunities
- provide positive community/public relations opportunities for organizations and individuals
- involve a range of prominent local professionals and organizations
- can save public funds and maximize resources
- positively affect students' and school staff's health and well-being
- address two significant health issues that affect the entire community—asthma and air quality
- contribute to student's improved asthma control, which increases their school attendance and productivity

Prepare Your Strategy for Approaching Funders

First, since you always want to leverage existing relationships, identify and document the following for each potential funder:

- Every coalition member who has an existing relationship
- Name(s) of individuals whom they know, including members of board of directors/trustees
- Funding/sponsorship history (descriptive information, as well as details that members can research)
- History of approaches by members; include information about sponsorships/grants, etc. that were rejected and any known information about why

Second, based on the above information identify who has the best relationship or sponsorship history with a given potential funder.

Third, identify which strategy or series of strategies may be most appropriate for specific funder(s).

Finally, assign responsibility among members to create a plan for each strategy or set of strategies to be funded. This would include the identification of a lead person for specific introductory conversations, formal asks, and follow-up with specific funders.



American Lung Association Tip Sheet: Constructing a Simple Logic Model

Step 1: Develop a list of activities and intended outcomes. There are many ways to develop a list of activities and outcomes that you will incorporate into your model, and you may already have a comprehensive list. If you do not already have a comprehensive list, use any of the following methods:

- Review any information already documented and extract items that meet the definition of activity (something the program and its staff does) and of outcome (some change in someone or something, other than the program and its staff, that you hope will result from the activities).
- Work backward from outcomes. This is called “reverse logic” modeling and is helpful when a program is being initiated or is given responsibility for a new or large problem. Working backward by asking “how to” will help identify the factors, variables, and individuals that will be involved in producing change.
- Work forward from activities. This is called “forward logic” modeling and is helpful when activities are clear but the reasons for their being part of the program are not. Asking, “So then what happens?” may help in defining outcomes.

Step 2: Subdivide the lists to show the logical sequencing among activities and among outcomes. Logic models clarify the order in which activities and outcomes are expected to occur. Take the single column of activities (or outcomes) developed in Step 1 and distribute them across two or more columns to show the logical sequencing. The logical sequencing and the time sequence are not always the same. The logical sequence defines, “Before this activity (or outcome) can occur, this other one has to be in place.”

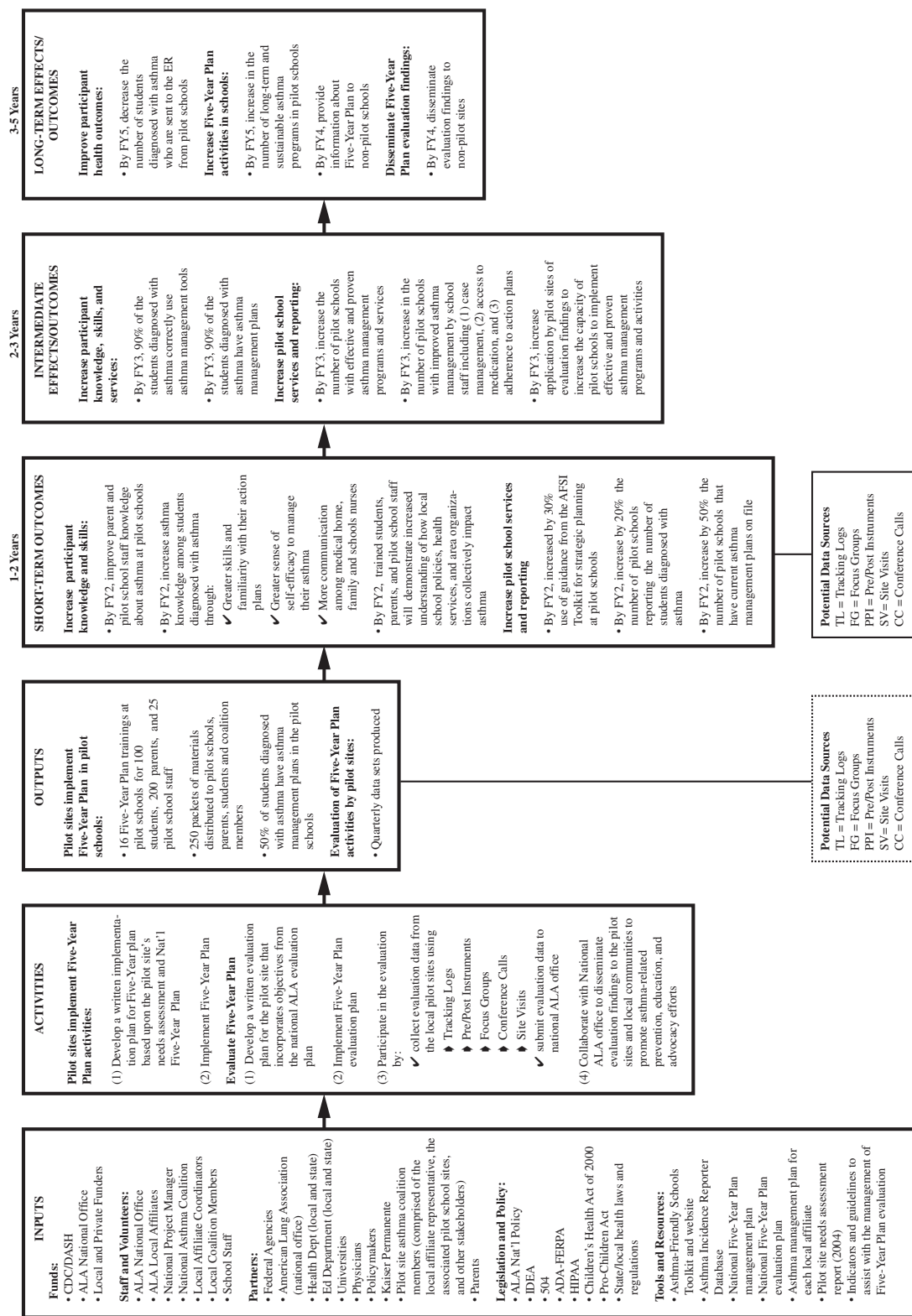
Step 3: Add any inputs and outputs. Depending on your plan, the four-column logic model adds all the clarity you need. If not, add columns for inputs and for outputs. The inputs are inserted to the left of the activities; the outputs (products of the activities) are inserted to the right of the activities but before the outcomes.

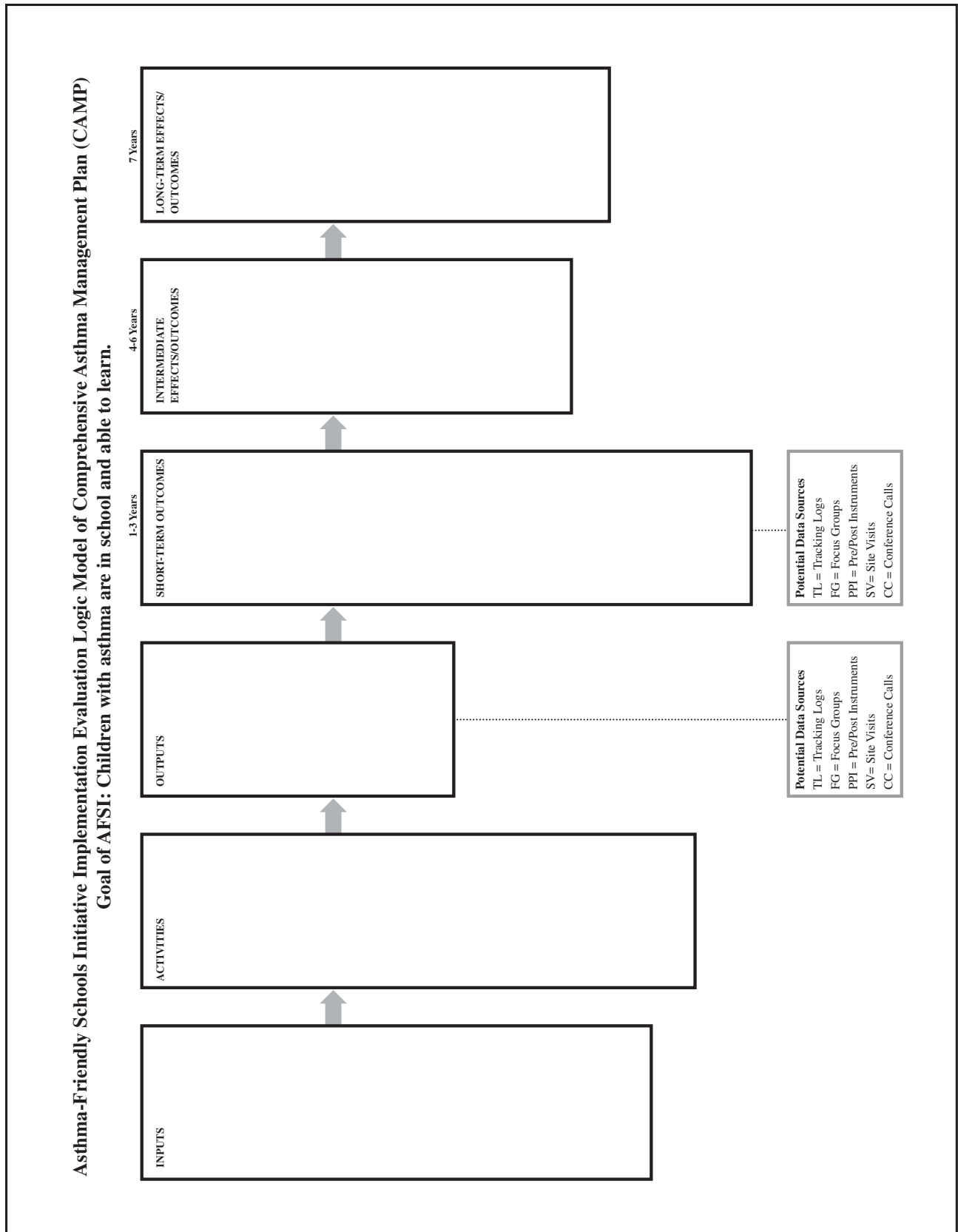
Step 4: Draw arrows to depict intended causal relationships. The multi-column table of inputs, activities, outputs, and outcomes that has been developed so far may contain enough detail, depending on the purposes for which the model will be used. When you use the model to set the stage for planning and evaluation discussions, the logic model will benefit from adding arrows that show the causal relationships among activities and outcomes. These arrows may depict a variety of relationships: from one activity to another, when the first activity exists mainly to feed later activities; from an activity to an outcome, where the activity is intended to produce a change in someone or something other than the program; from an early outcome to a later one, when the early outcome is necessary to achieve the more distal outcome.

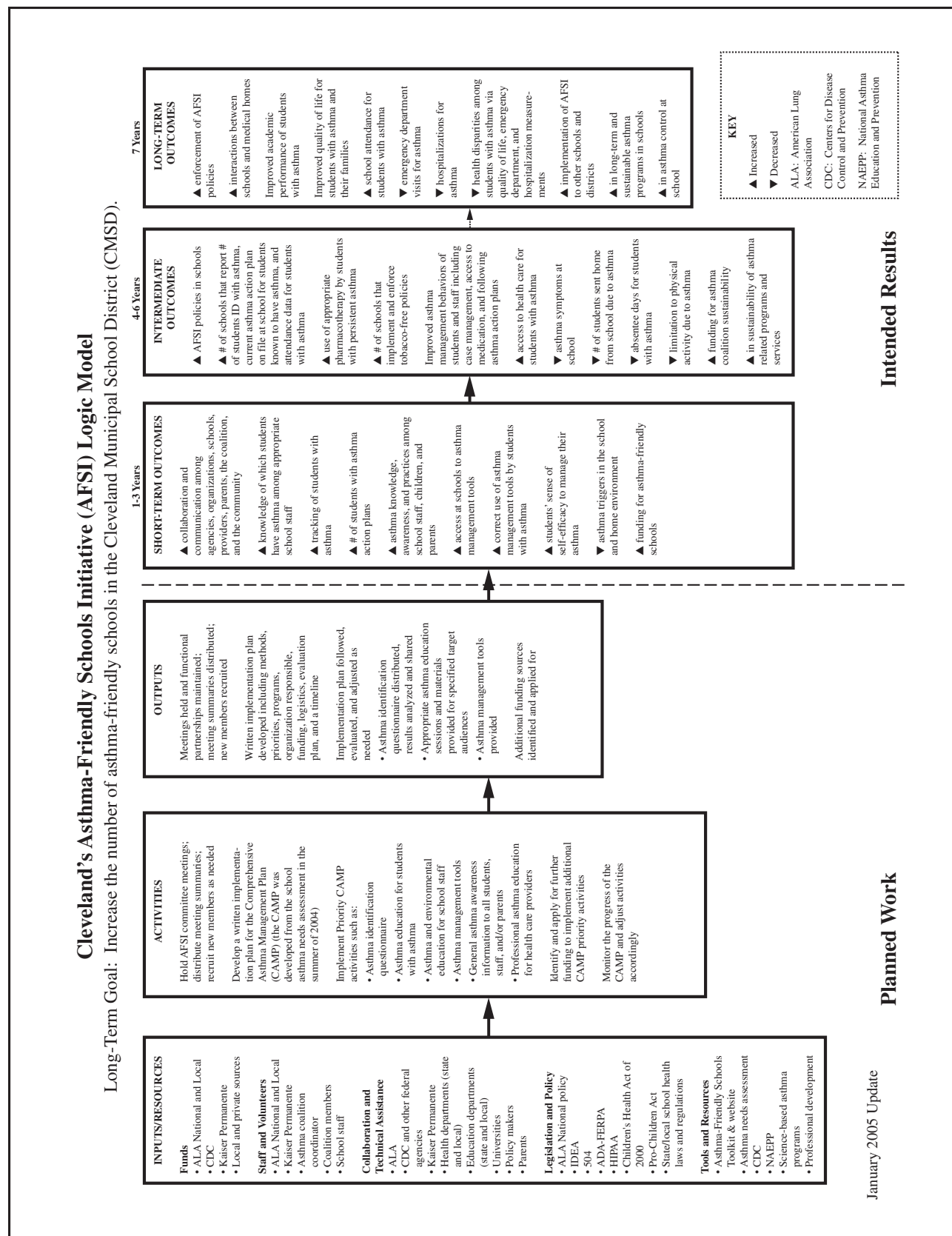
Step 5: Revise and clean up the logic model. A final version may take several tries. Be sure your “roadmap” will be intelligible to others!

Asthma-Friendly Schools Initiative Implementation Evaluation Logic Model of Comprehensive Asthma Management Plan

Asthma-Friendly Schools Initiative Implementation Evaluation Logic Model of Five-Year Plan (Local Pilot Sites) of the American Lung Association Goal of AFSI: Children with asthma are in school and able to learn.









American Lung Association Tip Sheet: Long-Term Policy Change

Creating or updating policies that impact asthma-friendly school elements are goals that can affect students with asthma permanently. Policies may be local or statewide and can involve any or all of the AFSI elements: environment, education, physical education and activity, and health services.

Policy work is particularly effective for coalitions who have a broad representation from the community and strong base of support. Changing policy is typically time-intensive but low in other costs, and the work will result in permanent changes, regardless of the coalition's future funding, for example.

How local and state regulations and policies are created and adopted vary greatly. To undertake policy work you must understand how the process takes place in your school district, city, or state. Each state is different, and opportunities to change policy vary.

The Sample AFSI Grid for Integrating Evaluation into Five-Year Planning included in this section incorporates a sample policy-related goal, for your reference.

Changing School Policies

The National Association of State Boards of Education offers a range of tips for working with schools, including these ideas when working toward policy change:

Responsibilities

- Responsibility for policy change is generally that of the state legislature and the state board of education.
- Local control is strong in every state, and local school boards and principals may object to interference by the state.
- Even when policy changes are made at the state level, implementing those policies may be a long, incremental process.
- Some changes may require interagency collaboration such as the departments of education and health.

Laying the Groundwork for Change

Enlist widespread support for your policy, which may be viewed as valuable depending on who proposes and supports it. Consider including the following constituencies who can create a groundswell of support:

- Health and social service providers
- Community groups
- Youth-serving community agencies
- Business leaders
- Private-sector employees (who can help determine internal corporate priorities for community action)

Engaging Policymakers

- Emphasize proposed solutions to serious problem
- Identify measurable, short-term benefits
- Stress consistencies with existing policies and programs
- Highlight the coordinated school health program model as an emerging trend
- Include students in the process (researching issues, presenting at hearings)
- Propose a pilot study if policy does not gain support

Several excellent resources on creating school asthma policies are available, including:

- *Action on Asthma* (American Lung Association)
- *How Schools Work & How to Work with Schools* (National Association of State Boards of Education)--
- *Fit, Healthy, and Ready to Learn—Part III: Policies on Asthma, School health Services, and Healthy Environments* (National Association of State Boards of Education)

Ordering information is included in the Resources section of this Toolkit.



American Lung Association Tip Sheet: Using the AFSI Sample Grid for Integrating Evaluation into 5-Year Planning

This grid was created specifically as a group planning tool for AFSI, based on the experiences of the pilot sites who tested the Toolkit and managed planning in their regions. It includes the elements that appear in a logic model but is expanded to define indicators of measurement and sources, allowing detailed evaluation steps to be integrated.

Working through this grid and using it as your long-term plan “roadmap” will ensure that evaluation becomes inherent to your long-term plan. Conducting ongoing evaluation and having the ability to present that information in a well-organized manner will be critical for funding, continued implementation in schools, and recruitment of additional schools or districts into your AFSI project.

The sample grid works through outcomes, indicators, and data sources for a set of Year One objectives to support one specific outcome. The sample also includes Year Three and Year Five outcomes to support the same objectives.

Determine standard definitions and use them consistently. The following definitions are used throughout this Toolkit and planning grid. Your AFSI coalition may modify its terms, but once you standardize your planning and evaluation vocabulary, use it consistently throughout your planning.

Asthma-Friendly Schools Initiative Purpose: To keep children with asthma healthy, in school, and ready to learn

Goals: A set of aims that set the AFSI project’s long-range direction

SMART Objective: Specific levels of achievement, based on goals. “SMART” stands for “specific, measurable, achievable, realistic and time-sensitive.”

Activities: Actions that must occur to meet objectives and work toward long-term goals.

Outcomes: Measurable changes that ultimately affect students (i.e., in students’ education, disease awareness, disease management, etc.)

Evaluation: The process of monitoring your progress in meeting objectives and achieving desired outcomes, which may involve modifying your plans as you move forward

Working through the Chart

Work through each element completely, **always defining the need based on results of your needs** assessment. Ultimately, your work group will create one grid for each prioritized need documented in your needs assessment. Refer to the sample grid to follow the detailed flow of specific information.

American Lung Association AFSI Grid for Integrating Evaluation into 5-Year Planning (includes template)



**American Lung Association Asthma-Friendly Schools Initiative
Sample Grid for Integrating Evaluation into 5-Year Planning**

Need: School staff feel unprepared to handle asthma emergencies properly					
Desired Long-Term Outcome: Children receive appropriate support and care in case of an asthma-related emergency.					
Goal: Establish a sustainable asthma education program for school staff that includes handling emergencies.					
SMART Objective	Year One Outcomes	Year One Indicators	Year One Data Sources	Year Three Outcomes	Year Five Outcomes
1. By 2007, 50% of targeted schools district personnel will participate in Asthma 101 in-service training.	90% of school staff that complete Asthma 101 demonstrate an increase in asthma knowledge	Increase of general knowledge around asthma Increase confidence in managing asthma emergencies	Pre/Post Test Interviews with key personnel at targeted schools Follow up survey of asthma 101 participants	Decrease in the number of 911 calls for asthma emergencies Decrease in the number of students sent home for asthma	Children receive appropriate support and care in 90% of asthma related emergencies
2. By 2008, the XYZ School District will adopt a policy for mandatory asthma education for all school staff.	Development of a model policy	Draft of model policy	Written Policy	Policy is adopted by school district	Policy is adopted by the State
3. By 2008, working in partnership with National Association of School Nurses (NASN) state chapter, 50% of school nurses will participate in the SNAMP asthma training.	Establish partnership with NASN state chapter	Formal Memorandum of Understanding (MOU) signed	MOU	Nurses demonstrate increase in knowledge on asthma and schools	80% of students with asthma receive appropriate medical care in school



American Lung Association Asthma-Friendly Schools Initiative
Sample Grid for Integrating Evaluation into 5-Year Planning

Need:						
Desired Long-Term Outcome:						
Goal:						
SMART Objective	Year One Outcomes	Year One Indicators	Year One Data Sources	Year Three Outcomes	Year Five Outcomes	

◆ Action Step 4: Create Year 1 Workplan

To Create a Year 1 Workplan

- Determine Year 1 activities
- Identify resources needed
- Assign responsibilities
- Set timeline
- Convene periodic meetings and evaluate progress
- Revisit 5-Year Plan and create Year 2 Workplan

The Year 1 workplan will be a task-specific, detailed action plan based exclusively on the objectives defined in your 5-Year Plan. Working through every step for each activity will set a clear roadmap for the individuals responsible for implementing the plan. A Sample Asthma-Friendly Schools Initiative Year 1 Workplan and Sample Year 1 AFSI Budget are included in the Reference Materials at the end of this section.

Determine Year 1 activities

What range of activities do you need to implement to achieve Year 1 objectives defined in your 5-Year Plan?

You must determine those activities as well as the outcomes with results indicators and methods for measuring progress towards achievement of each objective. Because of the level of detail involved, this is best accomplished by a small group of individuals who can bring the workplan back to larger group for adoption.

Once the coalition agrees to the activities and/or expands the list, you can move into assigning a timeline and responsibilities during that same meeting.

LESSONS LEARNED!

As you create your lists, generate a list of potential implementation challenges and solutions. Refer to highlighted items throughout this Toolkit and ask individuals to keep in mind their own experiences working with specific schools and/or other groups.

This can help you anticipate problems and plan your activities as efficiently as possible.

SELF-CHECK!

Are you on the right track? Ask yourself:

- What is the scope of each activity?
- How much are the schools willing to do in one year?
- How much can the coalition do in one year without overburdening its members?

Identify resources needed to complete year-one activities

Consider:

- Funding, including direct and indirect expenses (see the American Lung Association Tip Sheet: Budget & Fund Planning and American Lung Association Sample Year 1 Asthma-

Friendly Schools Initiative Budget included in the Reference Materials at the end of this section)

- Staffing—within active coalition members and/or their organizations. Be sure that individuals overseeing specific activities understand the specific tasks involved and the quantity and types of staff and/or volunteers required to complete those tasks.
- Educational materials
- Incentives
- Professional expertise, such as researchers, guest speakers, trainers, etc. These individuals may already be involved in the project, or someone must be focused on recruiting them.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Did we identify all the specific resources needed for each activity?
- Is our estimation of resources needed accurate?
- Will the activities place an undo burden on the schools or any one member of the coalition?

Assign responsibilities

Each activity or series of related activities must be assigned to an individual and/or an organization. Those individuals will become responsible for implementing the assigned strategies.

Assigning responsibility creates an atmosphere of accountability in which all individuals are contributing toward specific objectives and overall goals of your asthma-friendly schools efforts. As your coalition meets to track and discuss progress, individuals (or organizations) will be required to report their specific work and progress. If a particular strategy is not moving forward as quickly or efficiently as needed, you will be able to track who has been able to follow through on assigned responsibilities, and who may not be contributing as needed to accomplish activities and meet objectives.

Coalition members should focus on assignments that leverage individual's strengths, experience, and available resources. Assign each activity to an individual or organization with the capability of completing that task!

SELF-CHECK!

Are you on the right track? Ask yourself:

- Is any one member of the coalition burdened with the majority of the work?
- Is any one member of the coalition garnering more resources than others?
- Are the members willing and able to accept the responsibilities they are assigned?

Set timeline for completion of activities

LESSONS LEARNED!

Pilot sites recommend you keep in mind that the school's calendar is critical! Quickly get to know:

- state testing calendar and schools' prep times
- professional conference dates
- opportunities for early planning with school nurses or other school personnel

Creating a specific timeline of completion of individual activities will help keep your work focused. Timelines for objectives may span several months or two to three years, according to your five-year plan, but activities may be as short-term as a couple of months. Keep in mind that a school's processes may be slower than anticipated, so allow plenty of time for communication within school systems and for decision-making by schools!

Several variables should be considered when creating timelines for activities, including:

- school schedules (annual calendar; standardized testing; weekly opportunities)
- school nurse staffing
- professional organizations' schedules (conferences, board meetings, etc.)
- introductions & relationship-building time
- funders' fiscal year schedules
- school boards/committees' planning process
- coalition members' responsibilities beyond AFSI

Remember: The more specific a timeline is, the more focused individuals can be to complete their implementation on time or to alert the coalition if something is running behind schedule and modify the timeline accordingly.

Be sure to incorporate periodic meetings, which could serve as deadlines/benchmarks to keep work on track.

SELF-CHECK!

Are you on the right track? Ask yourself:

- Is the schedule realistic?
- Is the school on board with the timeline?
- Can we complete all activities (including evaluation) in the allotted time?

Convene periodic meetings and evaluate progress throughout year

Periodic meetings will serve several functions, including:

- Review progress and adjust activities and timelines as needed
- Evaluate outcomes and indicators and document achievement
- Address challenges, brainstorm possible solutions, and identify other resources
- Share information about individuals' work with stakeholders that can impact other activities and individuals' work

- Monitor staffing and/or volunteer issues
- Monitor budget issues
- Motivate individuals to keep their specific activities on track so that they have progress to report!

SELF-CHECK!

Are you on the right track? Ask yourself:

- Are we on task and timeline for our current activities?
- What do we need to adjust to complete all activities as planned?
- What is working so far and what is not?

Revisit Five-Year Plan and create a Year 2 Workplan

Toward the end of Year 1, meet to assess the year's progress toward achieving desired long-term outcomes as defined in your Five-Year Plan. Include a formal review of evaluation results.

Assess relevant outcomes against the 5-Year Plan, document them, and make adjustments to the long-term plan as necessary. Adjustments may impact activities, outcomes, budget issues, etc.

Finally, craft a Year 2 workplan, working back through the process presented for Year 1.

SELF-CHECK!

Are you on the right track? Ask yourself:

- What particular successes does evaluation confirm?
- What was not successful?
- What activities do we need to continue?
- What activities should we add?
- What activities should we stop?

REFERENCE MATERIALS

- ❖ Sample AFSI Year 1 Workplan
- ❖ Sample Year 1 AFSI Budget
- ❖ American Lung Association Tip Sheet: Budget & Fund Planning

Sample Asthma-Friendly Schools Initiative (AFSI) Year I Workplan

Month	Activity	Responsible	Deadline	Completed	Details/Notes
Nov	Secure written agreement with school		11/15/04	In Progress	Delay at school
	Create project evaluation team		12/1/04	■	
	Finalize Yr I workplan		1/05	■	
	Create a general project fact sheet for staff, principals, parents		11/15/04	■	
	Schedule a meeting with the principals and nurses		11/15/04	■	
	Meet with principals, school nurses, family liaisons:		11/22/04	■	Discuss incentive money, needs assessment results, administering survey, Open Airways For Schools (OAS), Tools for Schools (TFS), staff agenda, staff professional day (February), bookmobile, report card pick up week (week of Jan 31), school parent organization (SPO) meetings, May asthma awareness month activities, central bulletin board, school asthma advisory council
	Identify building maintenance person in each school		12/1/04	■	
	Develop an AFSI Participant Log		12/31/04	■	
	Continuously address management & support systems		Ongoing	In Progress	
Dec	Send consent form home with fact sheet letter		11/23/04	■	
	Survey grades 3,4, and 5 in both schools		12/15/04	■	
	Analyze data and provide a summary report		1/14/05	In Progress	
	Enter students with asthma into AFSI Participant Log and track thereafter		2/1/05	In Progress	
	Meet with building maintenance individuals		12/20/04	■	
	Plan Tools for Schools (TFS) with custodians		12/31/04	■	
	Gather school asthma policy information		Ongoing	■	
	Speak with HMO regarding consulting physician		1/05		
	Send principal letter for specific dates		12/30/04	■	Assembly date, staff meeting
Jan	Share survey results & begin planning Open Airways (OAS)		1/30/05	■	
	Provide staff education sessions		2/15/05	In Progress	
	Implement TFS		3/05		
	Create/distribute asthma awareness newsletter #1		1/15/05	■	
	Meet with school asthma advisory council		2/05		

Sample AFSI Year I Workplan (cont.)

Month	Activity	Responsible	Deadline	Completed	Details/Notes
Feb	Plan May asthma awareness month activities		Ongoing		
	Plan Asthma Educator Institute (AEI)		Ongoing		
	Continued OAS		Ongoing		
	Continued Tools for Schools		Ongoing		
Mar	Continued planning May activities and AEI		Ongoing		Proficiency and Achievement tests weeks of March 7 and 14
	Continued Tools for Schools		Ongoing		
	No OAS due to proficiency testing				
Apr	Continue to plan May asthma awareness month activities		Ongoing		
	Implement OAS		Ongoing		
	Continued Tools for Schools		Ongoing		
	Meet with school asthma advisory council		4/28/05		
	Create/Distribute asthma awareness newsletter #2		4/15/05		
May	General Asthma Awareness Month Activities for all students, staff, and families		5/31/05		Poster contest, banners, bulletin boards, school assembly (asthma and athletics approach) (prizes: billboard, movie passes, sports tickets)
	Continued Open Airways for Schools		Ongoing		
	Continued Tools for Schools		Ongoing		
	Parent group sessions and potential home visits		Ongoing		
Jun	Asthma Educator Institute offered		6/30/05		
	Evaluate implementation activities	Evaluation team	6/30/05		
	Determine September – December activities	Committee	7/15/05		
	Create a sustainability plan to continue AFSI activities	Committee/lead	7/15/05		
Jul	Share evaluation results with schools	Committee/lead	7/30/05		
	Secure money to continue AFSI efforts	Committee/lead	Ongoing		
	Determine September – December activities	Committee/lead			
Aug	Determine September – December activities	Committee/lead	8/15/05		
	Secure money to continue AFSI efforts	Committee/lead	Ongoing		
Sept–Dec	Specific school activities will be determined after June evaluation. Will at least include general asthma awareness presentations and possible home asthma visits	Committee			



Sample AFSI Year I Budget

	Amount Requested from funder	Existing Support from XYZ Foundation	In-Kind Support from Coalition	Total Project Budget
Personnel/Benefits	4,000.00	69,156.00	*3,000.00	76,156.00
Travel	500.00	500.00		1,000.00
Equipment		2,000.00		2,000.00
Office Supplies	50.00	450.00		500.00
Educational Materials	500.00	14,285.00		14,785.00
Meeting Expense	150.00	400.00		550.00
Postage	50.00	350.00		400.00
Printing/photocopying	300.00	4,700.00		5,070.00
Professional Education	1635.00	5,320.00		6,955.00
Environmental Education	1635.00			1,635.00
Incentives	300.00			
Contractual		24,557.00	**6,000.00	30,557.00
Overhead	880.00	19,086.00		19,966.00
Total	10,000.00	140,804.00	9,000.00	159,804.00

Budget Narrative:

Personnel/Benefits: Includes salary and benefits for .3 FTE. Existing funding support from XYZ Foundation will cover 1.55 FTE's from January through August.

Travel: Existing XYZ Foundation funding support will cover staff travel January through August. Requested funding will cover local travel September through December plus Coordinator's additional costs to attend national ALA conference.

Equipment: Existing XYZ Foundation funding support will cover one computer workstation.

Office Supplies: Existing XYZ Foundation funding support will cover general office supplies January through August. Requested funds will cover September through December.

Educational Materials: Existing XYZ Foundation funding support will provide peak flow meters, spacers, and educational materials (curriculum, handouts, etc.)

Meeting Expense: Existing XYZ Foundation funding support will cover project meeting expenses January through August. Requested funds will cover September through December.

Postage: Existing XYZ Foundation funding support will cover postage expenses for miscellaneous correspondence, newsletters, and asthma resource directories. Requested funds will cover September through December.

Printing/Photocopying: Existing XYZ Foundation funding support will cover printing (asthma resource directory, 2 newsletters) and photocopying. Requested funds will cover September through December.

Professional Education: Existing XYZ Foundation funding support will cover a two day asthma educator course for 40 people.

Environmental Education: Includes providing low-cost materials to schools and families to reduce asthma triggers.

Contractual: Includes cost for project evaluation by university staff [insert details of contractors].

Overhead: Existing XYZ Foundation funding support covers rent, utilities, phone, audit, equipment maintenance, computer support, administrative oversight, and accounting expenses January through December. Requested funds will cover September through December.



American Lung Association Tip Sheet: Budget & Fund Planning

Most, if not all, activities detailed in your Year 1 Workplan will require specific budget. Determining an overall funding plan will depend on a clearly articulated budget. The following walks you through the steps in establishing your Year 1 Workplan budget and a funding plan.

Establish the Budget¹

For each objective, detail:

1. **Cost/Expenditures:** These are the dollars required to produce, deliver and evaluate the activity. This will include costs related to staffing (salaries and benefits), facilities, equipment, supplies, promotion, evaluation, and overhead. Organize costs according to the following categories:
 - Operating: occur on an ongoing, regular basis and are spent to “operate” your activity
 - Direct: can be tied directly to the program or activity (salaries, supplies, etc.)
 - Fixed: set regardless of specific activities and how many people are involved (salaries, benefits, etc.)
 - Indirect: general overhead and administrative expenses, including research for needs assessments
 - Variable: vary according to how many people are reached (supplies)
2. **Revenue:** Income earned or generated through the activity. Include revenue earned through any of three categories:
 - Base resources: income provided by public and government funds and usually forms the basis of the an organization’s annual operating budget
 - Earned income: earned by charging a price for a product (registration fee), event (entry, sponsorship fee), or service (user fee)
 - Financial assistance: funds provided by external bodies through private, philanthropic or research agency grants that may be for specific purposes or programs and usually are not renewable without re-applying at each competition. Also include financial sponsorship when a sponsor donates funds for a product/activity in return for promotion of their name, logo, slogan, and the positive public relations that comes from being associated with the organization.
3. **Resource Mobilization:** This is the contributions of resources, other than monies, that enable a product to be delivered. These include:
 - Sponsorships: where a commercial entity donates equipment, supplies or services in return for promotion of their name, logo, slogan, etc. Local chapters of national organizations should research any national policy regarding corporate sponsorships so that local sponsorships do not present any conflicts of interest. The American Lung Association policy, for example, also works to protect the nationwide name of the American Lung Association. Specifically, the policy states: ...“in order to retain its credibility and authority, and to protect its integrity, the American Lung Association remains independent in its decision-making regarding research, programs, advocacy, awareness, fundraising, and all position statements. Furthermore, ALA avoids conflict of interest, or its appearance thereof. ...”²
 - Partnerships: where two or more agencies with similar mandates and interests combine and share their resources to offer a product
 - Fundraising activities: includes special events or sales of t-shirts or other tangible goods
 - In-kind or contra contributions: include funds saved through contributions by individuals, organizations, and governments

¹ Program Planning and Evaluation Guide for Lung Associations. American Lung Association, April 2000.

² American Lung Association Policy Manual, Fundraising Policy A11, Corporate Relations Policy. American Lung Association, 2004.

Create List of Potential Funders

As a coalition, brainstorm potential sources of funding, including partnerships among organizations, sponsorships, in-kind donations, grants, etc.

Keep in mind that coalition members may feel that they need to protect their individual relationships with funders. Focus on the benefits of community-wide coalition efforts and the potential of members' maximizing their contacts to achieve long-term AFSI goals. Remember, existing relationships can and should be leveraged to seek broader-based funding in addition to individual organizations' current sponsorships, grants, etc.

Understand Funders' Needs

Always take time to step back and understand what benefit a potential funder would realize by being involved in your AFSI efforts. If no coalition members have relationships with a potential funder, research the organization before considering an approach! Who are their key customer groups and/or constituents? What is their history of grant-making or sponsorships?

Consider what they may need to gain, from a business perspective, from a sponsorship, including:

- Promoting their products
- Gaining positive PR and increasing visibility
- Reaching your audiences with a specific message

When approaching potential funders, also keep in mind “selling points”—or how they would benefit from being involved in your coalition and AFSI. AFSI activities benefit sponsors because they:

- focus on a holistic, community-wide approach, which provides networking opportunities
- provide positive community/public relations opportunities for organizations and individuals
- involve a range of prominent local professionals and organizations
- can save public funds and maximize resources
- positively affect students' and school staff's health and well-being
- address two significant health issues that affect the entire community—asthma and air quality
- contribute to student's improved asthma control, which increases their school attendance and productivity

Prepare Your Strategy for Approaching Funders

First, since you always want to leverage existing relationships, identify and document the following for each potential funder:

- Every coalition member who has an existing relationship
- Name(s) of individuals whom they know, including members of board of directors/trustees
- Funding/sponsorship history (descriptive information, as well as details that members can research)
- History of approaches by members; include information about sponsorships/grants, etc. that were rejected and any known information about why

Second, based on the above information identify who has the best relationship or sponsorship history with a given potential funder.

Third, identify which strategy or series of strategies may be most appropriate for specific funder(s).

Finally, assign responsibility among members to create a plan for each strategy or set of strategies to be funded. This would include the identification of a lead person for specific introductory conversations, formal asks, and follow-up with specific funders.

Maximizing School Health Services

ABOUT SCHOOL HEALTH SERVICES

School health services should provide students with asthma with an efficient and supportive school environment that helps them manage their own asthma, helps prevent asthma emergencies, and is prepared to respond to asthma emergencies. This section provides background information and specific, proven components for achieving your AFSI objectives related to school health services.

Many of the components presented to support health services objectives are policy-based. Remember, policy changes are strategies that can make a long-lasting impact on students with asthma, the overall student body, and staff.

Some of the activities presented may take several years to implement and should be plotted as multi-year activities in your workplan. Do not let multi-year activities intimidate your AFSI team! Plan carefully to work deliberately through activities.

SCHOOL HEALTH SERVICES COMPONENTS

Each of the following recommended components is presented in a separate hand-out, most with specific reference materials to support your activities. Components are listed in order based on those that are most feasible for a community organization to achieve. All components listed are important, however; depending on the individuals and organizations involved in your coalition, some may be more feasible than others.

- ◆ Identify and track all students with asthma
- ◆ Use an Asthma Action Plan for all students with asthma
- ◆ Assure immediate access to medications as prescribed
- ◆ Use standard emergency protocols
- ◆ Provide special services for students who are absent more than students without asthma.
- ◆ Facilitate linkages with the medical home and referrals to medical provider
- ◆ Provide a full-time RN all day, every day
- ◆ Assure access to a consulting physician/healthcare provider

◆ **Recommended Component:** **Identify and Track All Students with Asthma**

Providing efficient health services to students with asthma depends first on the school's knowing who has asthma. This component should be the cornerstone of your AFSI efforts, as it will provide the baseline information needed to measure your progress.

Focus attention on identifying those students whose physicians have diagnosed them with asthma—particularly those that require medication (most children with asthma). From there, the school can put its efforts toward tracking those students and being prepared to support them. Tracking students with asthma helps ensure the safety of those students, as the administration can then communicate specific information with school faculty and staff, who will be aware of the students' asthma and be prepared to respond to asthma emergencies.

Note that while there are several types of programs to identify undiagnosed children with symptoms of asthma, CDC and NHLBI/NAEPP do not recommend conducting mass school-based asthma screening (with spirometry) or mass case detection (with symptom questionnaires) in most schools. These programs can be very costly, and research does not indicate that they make a difference for the students who are identified. They do not meet the World Health Organization or American Academy of Pediatrics criteria for appropriate school screening programs.¹

Identifying and Tracking All Students with Asthma Checklist

- Include necessary items on school health inquiry forms
- Compile lists of all students with asthma
- Share non-confidential asthma-related school data

► **Assure that school health inquiry forms include necessary items.** This will ensure that parents and providers are submitting the necessary information about a student's health, so the identification and characterization of asthma is not missed by the school.

Questions should gather:

- previous asthma diagnosis, diagnosis of reactive airways disease, or diagnosis of repeated episodes of bronchitis, bronchiolitis, and/or pneumonia
- prescribed medications for asthma,
- high absenteeism for breathing problems.

► **Compile lists of all students in a school with asthma.** This will enable tracking of the number of students with asthma and their level of severity, as well as asthma intervention received in school, including case management and specific asthma education. Be sure to use appropriate software for storing and accessing compiled data and for tracking. This toolkit provides a free asthma tracking database, the Asthma Incidence Reporter (AIR), based on the asthma tracking forms available at the end of this section. Nurses using AIR will be able to capture a picture of asthma in the school over a specific time span (i.e., school year). See the American Lung Association Tip Sheet: Using the AIR Database, included with this hand-out.

Using Microsoft Access, AIR is designed for school nurses to track students with asthma in their schools. Each record includes space for events (asthma episode, ER visit, physician visit, etc.). The nurse can add any events that he/she would like to track. AIR includes three automatic reports: individual student report with details on an individual student's asthma; a case management report with all students' names, grade, and number of absences for each; and a comprehensive school asthma report. Additional reports can be customized with any commercial analysis software or by anyone with database experience.

This free database is available for download online (www.lungusa.org/afsi).

¹ Boss LP, Wheeler LSM, Williams PV, Bartholomew LK, Taggart VS, Redd SC. Population-based screening or case detection for asthma: Are we ready? *Journal of Asthma* 2002.

- **Share non-confidential asthma-related school data.** Feeding data into district-wide, state-wide and other broad public health tracking systems will help lay the foundation for increased, proportionate funding and administration of community- or state-wide asthma efforts. (See the Asthma Checklist for School Nurses, Asthma History Form, and Management of an Acute Asthma Episode in the School from the American Lung Association of Washington's Asthma Management in Educational Settings, included with this hand-out.)

ACTION STEPS

Identifying & Tracking Students with Asthma

1. School nurse (or other school staff) receives health intake forms.
2. School nurse (or other school staff) creates a tracking form for each student with asthma.
3. School nurse (or other school staff) sends a medication self-carry request and a school medication form home to the parent.
4. Parent/guardian brings the medicine(s), a written asthma action plan, and the completed medication self-carry request or a school medication form to the nurse (or other school staff).
5. School nurse (or other school staff) notes each of the student's visits to the nurse to take medication throughout the school year.
6. School nurse (or other school staff) notifies parent when student requires quick relief medication. With parental permission, school nurse (or other school staff) notifies the student's asthma care provider.
7. Principal's office notifies school nurse (or other school staff) of any student with asthma who is absent throughout the year.
8. School nurse (or other school staff) tracks absenteeism to ensure whether or not student's absenteeism warrants case management.
9. School nurse (or other school staff) generates a year-end asthma report for the principal that includes:
 - total number of children in the school with asthma
 - total number of times children came to the health room for medication
 - maximum number of visits by one child
 - total number of days absent for kids with asthma
 - maximum days missed by one child

REFERENCE MATERIALS

- ❖ American Lung Association Tip Sheet: Using the AIR Database
- ❖ Asthma Checklist for School Nurses
- ❖ Asthma History Form
- ❖ Management of an Acute Asthma Episode in the School



American Lung Association Tip Sheet: Using the Asthma Incidence Reporter (AIR) Asthma-Friendly Schools Initiative Database

Purpose

The AIR database is designed to assist schools in tracking students with a diagnosis of asthma.

Important Installation Note:

When installing AIR, an encryption key is created that scrambles all student specific information unless accessed with the password created during installation. It is recommended that only the school nurse or those with permission to access student medical information have access to the password. The AIR database is provided for school use and no data is reported back to the American Lung Association.

Data Tracked

The AIR database has several screens and tracks multiple types of information including:

- Biography – student information such as name, grade, date entering and leaving school, etc.
- Details – asthma specific information on each student including health and asthma education history
- Severity Assessment – contains the history of the students most recent asthma severity assessment (and any assessments that have been entered in the past)
- Events – contain any asthma related events for that student including days absent, nurse room visits, use of inhalers (events can be added by each school as needed)
- Reports – allows the creation of three instant reports for printing and sharing

Reports Included in AIR

The AIR database includes three reports for sharing the asthma data. The database is created so that all information can be exported to an analysis tool and further analyzed if desired.

- Individual Student Report – generates a report on one individual student over the course of the desired time range (ex. one school year) including graphing events such as days absent and Emergency Department visits.
- Case Management Detection Report – creates a report for the school nurse that allows quick identification of students with high days absent. Includes student name, grade, and the number of days missed.
- School Summary Report – generates a report on all students included in the database over the course of the desired time range including graphing events such as days absent and Emergency Department visits.



ASTHMA CHECKLIST FOR SCHOOL NURSES

NOTE: Any child who needs medications delivered at school or who self-administers medications at school must have an Oral Medication Order Form.

I. Planning for Care before School Begins

- School nurse is notified that student has asthma.
- School nurse sends an asthma history form home for parents to provide additional information about the student's asthma.
- School nurse calls or meets with the student and family.
- Discuss parent/student expectations of asthma care while at school.
- Discuss details of asthma management plan obtained from primary health care provider and accommodation needs at school.
- Determine equipment and supplies needs for school including a 3-day disaster supply.
- Discuss plans for communication with parent and primary health care provider.
- Discuss role of health services and personnel involved.
- Obtain Oral Medication Order form if needed for delivery of medications at school.
- Obtain parent request for care and other legal documents as needed.
- If needed, have parents sign an Exchange of Medical Information form.

II. Assigning Level of Care

- Considering the severity of the student's asthma and the student's needs at school, determine level of nursing care needs and assign a level based on the "Staff Model for the Delivery of School Health Services." The following depicts usual nursing level assignments for students with asthma: (Appendix J)

Level B	Medically Fragile
Level C	Medically Complex
Level D	Health Concerns

Level B (Medically Fragile)-Individual Health Plan/Section 504 Plan

- With the parent, and student if appropriate, develop the Individual Health Plan/Section 504 Plan and School Asthma Emergency Plan. This planning may include others who will provide care to the student. Issues to be addressed include:
 - a. Management of routine medications
 - b. Management of an acute asthma attack
 - c. Monitoring peak flow measurements
 - d. Participation in activities (physical education, recess)
 - e. Field trips
 - f. Transportation
 - g. Obtain Oral Medication Order form
- Review school day schedule and assess level of independence.
- If needed, clarify specifics of treatment by talking with the primary health care provider.
- Notification and education of school personnel working with the student, e.g., secretary, lunchroom and playground personnel, principal, transportation, coaches.
- Training of personnel who will give medications or supervise activities.
- Providing classroom education as needed.
- Monitor staff and student needs and update as needed.
- Annual review of IHP/Section 504 plan or revise as needed.

Level C (Medically Complex)—Planning for Care

- Obtain the Oral Medication Order Form signed by the primary health care provider.
- Assure medications are pharmacy labeled with student's name, primary health care provider, type of medication, dose, delivery methods, and any special instructions.
- Develop a School Asthma Emergency Plan with the parent and student, if appropriate. Distribute to all school personnel who interact with the student.
- Obtain Exchange of Medical Information form if needed.
- Renew medications, order annually or as needed.

Level D (Health Concerns)—Monitoring

- Assure health concern of asthma is recorded in health files.
- Assess health status as needed to assure student's maximum participation in school educational and physical activities.
- As needed, review of student's asthma and possible treatment needs.

III. Self-Administration of Oral Medications

Asthma is a condition that requires immediate treatment when an asthma attack occurs. For this reason many school districts allow self-administration of asthma medications; however, some school districts do not allow any medications to be self-administered. District policy should be reviewed before self-administration is considered.

- Assess student's readiness for self-administration of oral medications or peak flow monitoring.
 - Student is capable of identifying individual medications.
 - Student is knowledgeable of purpose of individual medications.
 - Student is able to identify/associate specific symptom occurrence and need for medication administration.
 - Student is capable/knowledgeable of medication dosage.
 - Student is knowledgeable about method of medication administration.
 - Student is able to state side effects/adverse reactions to this medication.
 - Student is knowledgeable of how to access assistance for self if needed in an emergency.
 - Student is able to identify safety issues: no sharing of medications with others; need for safe storage of medication; consistent placement of medication.
- Obtain an Oral Medication Order form indicating permission from the primary health care provider and parent for the student to self-administer oral medications.
- Develop a plan for oral medication administration with the student, parent and other school personnel as needed.
- Develop a School Asthma Emergency Plan.

IV. Promoting Independence in the Student's Self-Management

As the student grows and develops, responsibility in assessing and making asthma management decisions should progress. School nurses can assist in promoting this independence within the school setting in various ways.

- **Assess and promote:**
 - Knowledge and understanding of asthma
 - Use of the metered dose inhaler
 - Recognition of asthma symptoms
 - Avoidance of asthma triggers
 - Planning for self-care
- **Assess asthma control in relation to:**
 - Absenteeism rate
 - Participation in activities, particularly physical education, recess
 - School performance

- **Assess social/emotional growth related to student's asthma and self-care:**
 - Feeling that he/she is different from other students
 - Avoids taking medications; toughs it out during an attack
 - Reluctance to go to office for medications
 - Notifying school personnel about medication need or use if self-administering
 - Safety issues, e.g., not sharing medications with other students
- **Promote self-esteem:**
 - Assist student in providing information about asthma to others
 - Positive feedback for good decisions
 - Increasing independence in plan of care



ASTHMA HISTORY FORM

Student's Name: _____ Date of Birth: _____
 History Taken by: _____ Date: _____
 Parent/Guardian Name: _____
 Home Phone: () _____ Work Phone: () _____
 Alternate Contact: _____ Phone: () _____
 Primary Health Care Provider: _____ Phone: () _____
 Address: _____

When was this student's asthma first diagnosed? _____
 How many times has this student been seen in the emergency room for asthma in the past year? _____
 How many times has this student been hospitalized for asthma in the past year? _____
 Has this student ever been admitted to an intensive care unit for asthma? _____
 When? _____

How would you rate the severity of this student's asthma?
 (not severe) 1 2 3 4 5 6 7 8 9 10 (severe)

How many days would you estimate this student missed last year because of asthma? _____

What triggers this student's asthma?

- ☐ exercise ☐ respiratory infection ☐ strong odors or fumes ☐ stress
- ☐ cigarette smoke ☐ wood smoke ☐ pollen
- ☐ animals (specify): _____
- ☐ foods (specify): _____
- ☐ carpets ☐ indoor dust ☐ outdoor dust
- ☐ chalk dust ☐ temperature changes ☐ molds
- ☐ other: _____

What does this student do at home to relieve asthma symptoms (check all that apply)?

- ☐ breathing exercises ☐ rest/relaxation ☐ drinks liquids
- ☐ takes medications (see below) ☐ uses herbal remedies (see below)
- ☐ other (please describe): _____

ASTHMA HISTORY FORM

What medications does this student take for asthma (every day and as needed):

Medication Name	Amount	Delivery Method (nebulizer, inhaler, etc.)	How Often
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

What herbal remedies, if any, does this student take for asthma? _____

Does this student use any of the following aids for managing asthma?

- ☐ peak flow meter (personal best if known _____)
☐ holding chamber ☐ spacer ☐ holding chamber w/mask
☐ other: _____

Please check special needs related to your child's asthma:

- ☐ physical education class ☐ recess ☐ animals in classroom
☐ avoidance of certain foods ☐ field trips ☐ access to water
☐ transportation to and from school ☐ other
☐ observation of side effects from medications

If you checked any of the above boxes, please describe needs:

Has this student had asthma education? ☐ yes ☐ no
 Would you like information about asthma education for: ☐ student ☐ self

Parent Signature: _____ Date: _____

Nurse Signature: _____ Date: _____



MANAGEMENT OF AN ACUTE ASTHMA EPISODE IN THE SCHOOL

Adapted from the Asthma and Allergy Foundation of America (AAFA), Washington State Chapter, with permission

Asthma is the leading cause of absenteeism in school-aged children. A school-based asthma management program should allow children with asthma or allergies to participate in all school learning and recreational activities with few restrictions. An effective program will ultimately help to minimize school absences.

WHAT TO LOOK FOR	WHAT TO LISTEN FOR
<ul style="list-style-type: none"> <input type="checkbox"/> Anxious look <input type="checkbox"/> Stooped body posture <input type="checkbox"/> Diaphoresis <input type="checkbox"/> Dyspnea <input type="checkbox"/> Rapid respirations (greater than 25-30 at rest) <input type="checkbox"/> Retractions <input type="checkbox"/> Nasal flaring <input type="checkbox"/> Depressed sternal notch <input type="checkbox"/> Nausea/vomiting <input type="checkbox"/> Fatigue <input type="checkbox"/> Decreased peak flow value 	<ul style="list-style-type: none"> <input type="checkbox"/> Complaints of chest tightness <input type="checkbox"/> Coughing <input type="checkbox"/> Irregular breathing <input type="checkbox"/> Abnormal breathe sound: <ul style="list-style-type: none"> • Decreased or absent breath sounds • Wheezing • Rales • Rhonchi <input type="checkbox"/> Prolonged expiration <input type="checkbox"/> Rapid heart rate
WHAT TO DO IN AN ASTHMA CRISIS AT SCHOOL	SEEK IMMEDIATE EMERGENCY CARE IF STUDENT:
<ul style="list-style-type: none"> <input type="checkbox"/> If possible, review the student's Asthma Action Plan for Personal Best, current medications and emergency medications. <input type="checkbox"/> Have student sit upright and check breathing with peak flow meter—if possible. <input type="checkbox"/> Administer prescribed medication by inhaler (medication should be inhaled slowly and fully). OR <input type="checkbox"/> Administer medication by nebulizer if prescribed. <input type="checkbox"/> Reassure student and attempt to keep him/her calm and breathing slowly and deeply. <input type="checkbox"/> Student should respond to treatment within 15-20 minutes. Recheck with peak flow meter. <input type="checkbox"/> If NO change or breathing becomes significantly worse, contact parent immediately and call for emergency help. 	<ul style="list-style-type: none"> <input type="checkbox"/> Coughs constantly <input type="checkbox"/> Is unable to speak in complete sentences without taking a breath <input type="checkbox"/> Has lips, nails, mucous membranes that are gray or blue <input type="checkbox"/> Demonstrates severe retractions and/or nasal flaring <input type="checkbox"/> Is vomiting persistently <input type="checkbox"/> Has 50% reduced peak flow reading <input type="checkbox"/> Has pulse greater than 120/minute <input type="checkbox"/> Has respirations greater than 30/minute <input type="checkbox"/> Is severely restless <input type="checkbox"/> Shows no improvement after 15 minutes

AMES: Asthma Management in Educational Settings

American Lung Association of Washington-02/01

◆ **Recommended Component:** **Use an Asthma Action Plan for All Students with Asthma**

The NHLBI/NAEPP recommends that written action plans be created as part of an overall effort to educate patients in self-management. These should include peak flow monitoring for patients with moderate or severe persistent asthma.² (See Peak Flow Meter Technique Checklist for Nurses and Sample MDI Technique Checklist for Nurses included with this hand-out.) All students with asthma should have an Asthma Action Plan on record with the school.

An Asthma Action Plan is a document with all pertinent information about a student's asthma, including triggers, medications, modified activity plan, and specific emergency protocol based on peak flow, as well as emergency contact information (parent/guardian, physician, hospital). An Asthma Action Plan is completed by the student's physician or other healthcare provider and should be updated at least annually, or when any significant changes in the student's asthma management occur. (See the Asthma Action Plan, sample letter to parents/guardians, and sample flyer to parents/guardians included with this hand-out.)

To assess each student's Asthma Action Plan, schools can use the simple "Is The Asthma Action Plan Working?" tool developed by the National Heart, Lung and Blood Institute, included with this hand-out. This tool will help nurses assess if a student's asthma is under control and then refer students who may need appropriate controller medications and/or modifications to their asthma treatment plans.

Using Asthma Action Plans Checklist

- Educate administration about accepting different forms
- Define minimal amount of information to be included on forms
- Include parental permission for release of information
- Inform appropriate staff of Asthma Action Plans
- Establish policies & procedures for field trips

There are several principles to consider when using Asthma Action Plans:

- ▶ **District administration should be educated about the need to accept different Asthma Action Plan forms.** All forms, however, should be based on NHLBI/NAEPP guidelines. A sample Asthma Action Plan is included with this hand-out, and forms are available through "Super Web sites" listed within the Resources section of the AFSI Toolkit. Use forms with language and reading levels appropriate for your community.
- ▶ **District policy should define a minimal acceptable amount of information on Asthma Action Plans and other health management plans.** These should include triggers, peak flow meter norms, medications and administration protocols, medication self-administration when appropriate, emergency instructions, severity classification, and physical activity recommendations (pre-medication, stretching, activity modifications, etc.).
- ▶ **Asthma Action Plans/Nursing Care Plans and other health management plans may include parental permission for release of information (ROI).** Including ROI directly on the form can provide information for parents on whom the plan will be shared with. Specific staff roles should be listed, such as school nurses, principal, student's class-

² NAEPP Expert Panel Report: *Guidelines for the Diagnosis and Management of Asthma—Update; on Selected Topics 2002*. National Institutes of Health, National Heart, Lung and Blood Institute. NIG Publication No. 02-5075. June 2002 (Updates the NAEPP Expert Panel Report 2 (NIH Publication No. 97-4051)).

room teachers, including physical education and art. ROI should also be requested to send information to and receive information from the student's primary care provider and/or asthma care provider. Be aware that the primary provider may require the family to sign an additional ROI for them to keep on record before speaking with the school about the student. Also see information about HIIPA and FERPA laws in the Master Planning section of the AFSI Toolkit (page 20).

- **Schools should inform appropriate staff of Asthma Action Plans/Nursing Care Plans, and/or other health management plans.** In schools with full-time nursing or health staff, Asthma Action Plans and other health management documents/plans are usually kept in the health room. All staff should be taught appropriate actions. Asthma Action Plans should be sent with staff when the student leaves the school for field trips or other programs. With parent/guardian permission, Asthma Action Plans should be distributed to school principals and front office staff, classroom teachers, substitute teachers, staff of transportation companies, playground supervisors and physical education/athletic department staff. (A complete table describing the range of health management plans, Health-Related Plans For Asthma Management, is included with this hand-out.)

Also consider creating/using an existing “emergency response” poster for staff’s reference during a student’s asthma episode. These could be posted in all classrooms and other rooms throughout the school. (See the Sample Emergency Response Poster included with this hand-out.)

LESSONS LEARNED!

AFSI pilot sites determined that very few Asthma Action Plans were on file in schools. Sites offered medical provider and parent education about the need for Asthma Action Plans. These sites determined that very few Asthma Action Plans were on file in the schools at the start of the project. At the end of the year, however, one school administrator indicated that there had been a 30 percent increase in the number of Asthma Action Plans on file.

- **Establish policy/procedures for field trips.** Be sure a faculty/staff member who has the student(s)’ Asthma Action Plan(s), is designated to administer medications, if needed, and to work with students with asthma to avoid triggers whenever possible during a field trip. Policies and procedures should detail the staff response to a potential asthma emergency, communications among staff and/or chaperones, and communication to a student’s parent/guardian. These policies must comply with state Nurse Practice Acts. Planning ahead will help ensure that trips are safer and fun for all. See the Sample Field Trip Policy included with this hand-out.

REFERENCE MATERIALS

- ❖ Sample MDI Technique Checklist for Nurses
- ❖ Sample Peak Flow Meter Technique Checklist for Nurses
- ❖ American Lung Association Asthma Action Plan
- ❖ Sample Letter to Parents/Guardians
- ❖ Sample Flyer to Parents/Guardians
- ❖ Is The Asthma Action Plan Working?
- ❖ Health-Related Plans for Asthma Management
- ❖ Sample Emergency Response Poster
- ❖ American Lung Association Tip Sheet: Sample Field Trip Policy



Metered-dose Inhaler Technique Checklist for School Nurses

Student's Name: _____ School Year: _____

Key Steps in MDI Technique	X = Good Technique ? = Needs Improvement				
	-	-	-	-	-
Date of Evaluation					
1. Remove cap, hold upright, shake inhaler.					
2. Breathe out.					
3. Actuate (press) inhaler once at the start of inhalation.					
4. Inhale slowly, take 3-5 seconds.					
5. Hold breath for count of 10.					
6. Wait 1 minute before repeating 2nd puff.					
Initials of evaluator					

SOURCE: Anne Arundel County (MD) School Health Services School-Based Asthma Management Program



Peak Flow Meter Technique Checklist for Nurses

Student's Name: _____ School Year: _____

Key Steps in Peak Flow Meter Technique	X = Good Technique ? = Needs Improvement				
	Date of Evaluation	-	-	-	-
1. Move the indicator to '0'.					
2. Breathe out, complete exhalation.					
3. Take as deep a breath as possible.					
4. Close lips around the mouthpiece.					
5. Blow out hard and fast. No coughing or spitting!					
6. Write down the number.					
7. Repeat 2 times. Record the highest number on log.					
Initials of evaluator					

SOURCE: Anne Arundel County (MD) School Health Services School-Based Asthma Management Program



Asthma Action Plan

General Information:

☐ Name _____
☐ Emergency contact _____ Phone numbers _____
☐ Physician/Healthcare Provider _____ Phone numbers _____
☐ Physician Signature _____ Date _____

Severity Classification	Triggers	Exercise
<input type="radio"/> Mild Intermittent <input type="radio"/> Moderate Persistent <input type="radio"/> Mild Persistent <input type="radio"/> Severe Persistent	<input type="radio"/> Colds <input type="radio"/> Smoke <input type="radio"/> Weather <input type="radio"/> Exercise <input type="radio"/> Dust <input type="radio"/> Air pollution <input type="radio"/> Animals <input type="radio"/> Food <input type="radio"/> Other _____	1. Pre-medication (how much and when) _____ 2. Exercise modifications _____

Green Zone: Doing Well

Peak Flow Meter Personal Best = _____

Symptoms

- ☐ Breathing is good
- ☐ No cough or wheeze
- ☐ Can work and play
- ☐ Sleeps all night

Control Medications

Medicine	How Much To Take	When To Take It
_____	_____	_____
_____	_____	_____
_____	_____	_____

Peak Flow Meter

More than 80% of personal best or _____

Yellow Zone: Getting Worse

Contact Physician if using quick relief more than 2 times per week.

Symptoms

- ☐ Some problems breathing
- ☐ Cough, wheeze or chest tight
- ☐ Problems working or playing
- ☐ Wake at night

Continue control medicines and add:

Medicine	How Much To Take	When To Take It
_____	_____	_____
_____	_____	_____
_____	_____	_____

Peak Flow Meter

Between 50% to 80% of personal best or _____ to _____

IF your symptoms (and peak flow, if used) return to Green Zone after 1 hour of the quick relief treatment, THEN

- ☐ Take quick-relief medication every 4 hours for 1 to 2 days
- ☐ Change your long-term control medicines by _____
- ☐ Contact your physician for follow-up care

IF your symptoms (and peak flow, if used) DO NOT return to the GREEN ZONE after 1 hour of the quick relief treatment, THEN

- ☐ Take quick-relief treatment again
- ☐ Change your long-term control medicines by _____
- ☐ Call your physician/healthcare provider within _____ hours of modifying your medication routine

Red Zone: Medical Alert

Ambulance/Emergency Phone Number: _____

Symptoms

- ☐ Lots of problems breathing
- ☐ Cannot work or play
- ☐ Getting worse instead of better
- ☐ Medicine is not helping

Continue control medicines and add:

Medicine	How Much To Take	When To Take It
_____	_____	_____
_____	_____	_____
_____	_____	_____

Peak Flow Meter

Between 0% to 50% of personal best or _____ to _____

Go to the hospital or call for an ambulance if

- ☐ Still in the red zone after 15 minutes
- ☐ If you have not been able to reach your physician/healthcare provider for help
- ☐ _____

Call an ambulance immediately if the following danger signs are present

- ☐ Trouble walking/talking due to shortness of breath
- ☐ Lips or fingernails are blue



Dear _____:

The school team at _____ school is looking forward to an excellent year for your child, _____. In order to provide the best possible school asthma management for your child, we request your assistance with the following:

Please

1. Obtain an asthma management plan—a physician's/healthcare provider's statement of your child's treatment goals, medication, and peak flow plan, and environmental risk reduction measures. Please include guidelines for managing symptoms during special school or off-site events (recess, gym, outdoor play, field trips, parties, art class, etc.). You may use the attached Asthma Action Plan.
2. Meet with the school nurse and school administrator—before school entry and as needed—to explain your child's condition, medication, devices, and environmental triggers.
3. Submit the Medication Administration form for any medication that is administered in school. Please properly label your child's medications and personally bring them to school.
4. Meet with teachers to set up expectations for maintaining communication and continuity during absences.
5. Prepare your child. Discuss and rehearse the medication plan, how to handle symptoms, triggers, food restrictions, and school policies.
6. Keep the school staff up to date on any changes in your child's asthma action plan.
7. Keep your physician up to date on appropriateness of school services and supports.
8. Participate in advisory committees to support and improve comprehensive school health services and programs.

Thank you for working with us to assist your child.

Sincerely,

Principal _____

School Nurse _____



**DOES YOUR CHILD HAVE EVERYTHING WE
NEED TO MAKE THIS A SAFE,
HEALTHY SCHOOL YEAR?**

It's a new year!

*That means we need to work together to keep our
students with asthma safe at school...*

- **Be sure to give the school updated asthma information.**
- **Talk to us about medications.**
- **Bring an Asthma Action Plan to school.**

**Questions? Call (school nurse) _____
at (phone) _____**

THANK YOU!

Is The Asthma Action Plan Working?

IS THE ASTHMA ACTION PLAN WORKING? A Tool for School Nurse Assessment

Assessment for: _____ Completed by: _____ Date: _____
(Student) (Nurse or Parent)

This tool assists the school nurse in assessing if students are achieving good control of their asthma. Its use is particularly indicated for students receiving intensive case management services at school.

With good asthma management, students should:

- Be free from asthma symptoms or have only minor symptoms:
 - no coughing or wheezing
 - no difficulty breathing or chest-tightness
 - no wakening at night due to asthma symptoms.
- Be able to go to school every day, unhampered by asthma.
- Be able to participate fully in regular school and daycare activities, including play, sports, and exercise.
- Have no bothersome side effects from medications.
- Have no emergency room or hospital visits.
- Have no missed class time for asthma-related interventions or missed class time is minimized.

Signs that a student's asthma is not under good control:

Indicate by checking the appropriate box whether any of the signs or symptoms listed below have been observed or reported by parents or children within the past 6 months. If any boxes are marked, this suggests difficulty with following the treatment plan or need for a change in treatment or intervention (e.g., different or additional medications, better identification or avoidance of triggers).

- ☐ Asthma symptoms more than twice a week that require quick-relief medicine (short-acting beta2-agonists, e.g. albuterol):
- ☐ Symptoms get worse even with quick relief meds
- ☐ Waking up at night because of coughing or wheezing
- ☐ Frequent or irregular heartbeat, headache, upset stomach, irritability, feeling shaky or dizzy
- ☐ Missing school or classroom time because of asthma symptoms
- ☐ Having to stop and rest at PE, recess, or during activities at home because of symptoms
- ☐ Symptoms require unscheduled visit to doctor, emergency room, or hospitalization
- ☐ 911 call required

If "yes" to any of the above, use the following questions to more specifically ascertain areas where intervention may be needed.

Probes	Responsible Person/site	Yes	No	N/A
Medications:				
• Are appropriate forms completed and on file for permitting medication administration at school?	By School staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Self-carry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Has a daily long-term-control medication(s) (controller*) been prescribed?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is controller medication available to use as ordered?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is the student taking the controller medication(s) as ordered?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Has a quick-relief (short-acting B2-agonist) medication been prescribed		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is quick-relief medication easily accessible?	Home	<input type="checkbox"/>	<input type="checkbox"/>	
	Personal inhaler(s) at school health office	<input type="checkbox"/>	<input type="checkbox"/>	
	Self-carry	<input type="checkbox"/>	<input type="checkbox"/>	
• Is the student using quick-relief medication(s) as ordered...				
○ Before exercise?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
○ Immediately when symptoms occur?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medication Administration:				
• Does the student use correct technique when taking medication?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Does the person administering the medication use correct technique?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Is The Asthma Action Plan Working? (cont.)

Probes	Responsible Person/site	Yes	No	N/A
Medications:				
• Can the student identify his/her early warning signs and symptoms that indicate onset of an asthma episode and need for quick-relief medicine?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Can the student identify his/her asthma signs and symptoms that indicate the need for help or medical attention?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Can the student correctly use a peak flow meter or asthma diary for tracking symptoms?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are the student's asthma signs and symptoms monitored using a Peak Flow, verbal report or diary?				
○ Daily?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
○ For response to quick-relief medication?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
○ During physical activity?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trigger Awareness:				
• Have triggers been identified?		<input type="checkbox"/>	<input type="checkbox"/>	
• Can student name his/her asthma triggers?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Can parent/caregivers list their child's asthma triggers?		<input type="checkbox"/>	<input type="checkbox"/>	
• Are teachers, including physical educators, aware of this student's asthma triggers?		<input type="checkbox"/>	<input type="checkbox"/>	
Trigger Avoidance:				
• Are triggers removed or adequately avoided or managed?	Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Long-term-control medications (controllers) include inhaled corticosteroids (ICS), leukotriene receptor antagonists (LTRA), or combination medicine (long-acting B2-agonists and ICS), cromolyn, or theophylline.

School nurses provide appropriate asthma education and health behavior intervention to students, parents, and school personnel when signs and symptoms of uncontrolled asthma and other areas of concern are identified. If there is an indication for a change in asthma medications or treatment regimen, refer the student and family to their primary care provider or asthma care specialist or help families to find such services as soon as possible.



Health-Related Plans For Asthma Management

School nurses and other staff may keep a range of written plans for each student known to have asthma, as well as emergency plans for students in respiratory distress (either students with no known asthma diagnosis, or students whose Asthma Action Plans do not include emergency plans). For students with asthma, health-related plans may include standing medical orders, education plans, and basic information about a student's asthma.

While the Asthma Action Plan may be the basic document, schools may keep other student-specific documents, some of which are required by federal law. As the following table illustrates, the names and purposes of the plans vary; some provide medical and/or education directives, while others may also serve as a communications tool among the school, parent, and healthcare provider.

Health and Educational Plans for Students with Asthma Comparison Chart¹

Asthma Action Plan	Individualized Emergency Plan	Individualized Nursing Care Plans (Health Care Plans)	Individualized Education Plan (IEP)	504 Plans
Purpose: <ul style="list-style-type: none"> To provide specific instructions about self-care and management of asthma 	Purpose: <ul style="list-style-type: none"> To provide specific instructions to school staff about management of asthma episodes or attacks in individuals Shared with school staff as appropriate 	Purpose: <ul style="list-style-type: none"> Individual Nursing/Health Care Plan that identifies interventions for care of student with health conditions or impairments and includes education about the child's health condition and the knowledge and skills needed for self-care. Should include an Individual Emergency Plan, shared as appropriate with school staff. Kept by school nurse in student's health file; occasionally shared with teachers assisting with meeting goals of student's plan. 	Purpose: <ul style="list-style-type: none"> Used by school team to identify appropriate interventions to support students' educational performance. Federally mandated for students eligible to receive services under the Individuals with Disabilities Education Act (IDEA). 	Purpose: <ul style="list-style-type: none"> Used by school team to ensure federally mandated modifications or services are provided to students with physical or mental conditions that substantially limit their ability to participate in public education programs and activities. Developed in response to significant impairment to major life functions that can occur while a student is at school (e.g., breathing difficulties associated with asthma). Incorporates asthma care-related modifications and services in Nursing Care Plan (Health Care Plan).
Target: <ul style="list-style-type: none"> All students with asthma, especially those with persistent asthma. 	Target: <ul style="list-style-type: none"> All students with asthma, especially those most at risk for acute episodes or attacks (e.g., those in poor control, those with significant morbidity, those with persistent asthma). 	Target: <ul style="list-style-type: none"> All students with asthma, especially those most at risk for acute episodes or attacks (e.g., those in poor control, those with significant morbidity, those with persistent asthma). 	Target: <ul style="list-style-type: none"> Students qualifying for special education services because of a chronic illness so through the categories of "other health impaired." For special education students aged 3-21 years. 	Target: <ul style="list-style-type: none"> For general education students experiencing significant impairment to major life functions that can occur while the student is at school (e.g., breathing difficulties associated with asthma).
Responsible Party: <ul style="list-style-type: none"> Developed by health care providers in collaboration with the student and parent(s) and provided to school nurse or designee with parental permission. Can be developed by school nurses based on parent input and signed prescribed medication administration forms and sent to the health care provider for review and signature. If appropriately completed and signed, can serve as medical orders for medications, treatment and care, depending on local policy and state law. 	Responsible Party: <ul style="list-style-type: none"> Developed by school nurse using information from student's health care provider and parents to address actions for managing acute asthma episodes. School nurse distributes plan or information to appropriate school personnel. 	Responsible Party: <ul style="list-style-type: none"> Developed by school nurse using information from student's health care provider, child, and parents, to address actions for managing acute asthma episodes. Uses nursing process: assessment, planning, intervention, outcomes, evaluation. 	Responsible Party: <ul style="list-style-type: none"> Multidisciplinary team in collaboration with parents. Health component of the IEP is developed by the school nurse. 	Responsible Party: <ul style="list-style-type: none"> 504 coordinator or liaison and team as designated by school or district.
Other: <ul style="list-style-type: none"> Used in developing Emergency Action Plans 	Other: <ul style="list-style-type: none"> Based on student's Asthma Action Plan or on the Emergency Action component of the Nursing/Health Care Plan (developed from either the Asthma Action Plan or, if not available, form the School-Wide Respiratory Distress Protocol). 		Other: <ul style="list-style-type: none"> Nursing Care Plans (Health Care Plans) may be attached as the health component of the IEP (location in which the HCP is kept noted on the IEP). 	

School-Wide Emergency Plans and Protocols

Purpose: To address specific actions to be taken for any student of staff in respiratory distress, including those with asthma; for school-wide distribution.

Target: All students and staff.

Responsible party: School nurse and school physician consultant.

1. National Association of School Nurses, School Nurse Asthma Management Program, pg. 0222

5 Steps to Follow for an Asthma Episode in the School Setting

If student has excessive coughing, wheezing, shortness of breath, or chest tightness:



Help to an upright position; speak calmly and reassuringly



Follow individualized action/emergency plan for use of quick-relief inhaler



If quick-relief inhaler or action/emergency plan not available, send to health office accompanied by peer or with staff member



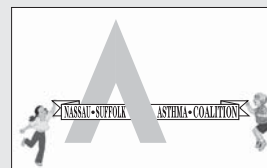
Get emergency help from school nurse or designated emergency staff if student has any of these:

- Inhaler not helping
- Breathing hard & fast
- Nostrils open wide
- Can't walk or talk well

**Call
911**

If not breathing, unconscious, lips are blue, struggling to breathe (hunched over or ribs show), or other signs of distress

Notify parent or guardian.



Contact (631) 231-5864 X12



American Lung Association Tip Sheet: Sample Field Trip Medication Policy

School Nurse should be advised by teacher as soon as a field trip is approved in order that the Nurse may make arrangements for proper dispensing of medication.

School Nurse will prepare a pack of students' medications, spacers and peak flow meters for each teacher. A teacher will carry his/her students' emergency medication with accompanying doctor's orders during the field trip.

A Registered Nurse will accompany field trips, if after consultation with the Principal, the medical/medication requirements of that students cannot be met by delegation.

A student may carry **emergency** medication on his/her person if the student's physician and the school nurse have authorized self-carry, and if the parent/guardian has indicated on the Parent/Guardian Authorization for Prescription Medication Administration form that the student has been fully instructed and is capable of self-administration, if needed.

It is recommended that all students who require emergency medication to be administered by the School Nurse ride on the same bus.

◆ **Recommended Component:** **Assure Immediate Access to Medications as Prescribed**

Students must have immediate access to all medications as approved by healthcare providers and parents, regardless of the availability of the school nurse. This includes self-carry and self-administration of medication as appropriate. Access to “quick-relief” or “rescue” medications is critical, as these will immediately open the airways during an asthma episode. The longer it takes to administer quick-relief medications, the worse the episode may become. Assuring immediate access to medications will help prevent asthma emergencies by allowing students to manage their asthma as their physicians prescribe.

Many states have recently passed new legislation to allow students with asthma to carry and self-administer inhalers and other medications. In some districts, legislation is not actually required to make this exception. For information on asthma legislation, see the American Lung Association’s Action on Asthma. (See the Resources section for more information.)

“Immediate access” means that students have immediate access at any time because time can be life-saving in an asthma emergency. If self-carry/self-administration is not the school policy, the school is responsible for having a plan that assures true immediate access. For example, medications cannot necessarily be locked in the school nurse’s desk, with only the nurse and a few staff members’ having access to the medications. Such a situation could result in a lack of access to the medication in an emergency, should those few individuals not be in the school at the time.

LESSONS LEARNED!

Consider a focus on ensuring that access to medication was in compliance with current policies, laws, and best practice guidelines, which was successful for AFSI pilot sites. Sites found that working with the school’s front office was particularly helpful to improving students’ access to medications.

A Sample School Medication Policy, Sample Self-Carry/Self-Administration Form, and a Sample Self-Carry/Self-Administration Contract between a Student and School are included with this hand-out.

Assuring Access to Medication Checklist

- Review laws & policies annually and update school policies
- Assure that self-carry is appropriate for each individual student
- Assure that adequate supplies of medication are in school
- Assure adequate staffing
- Assure access to peak flow meters

A policy ensuring students’ immediate access to medications as prescribed should include the following:

- **Annual review of state laws, local laws, and school policies regarding medication administration and update policies as needed.** The school health team’s review could be done more often if feasible. In so doing, be certain that school policies are consistent with federal laws, such as Section 504 and review state laws as well as local laws and policies regarding self-carry and self-administration of asthma medications.

Keep in mind that you may encounter situations where laws and/or policies are in place but are not put into practice. Talk to your school(s) to find out what they need to implement specific policies, and work with your coalition to give schools the help they need! Coalition members can update policies, educate staff and parents about policy issues, and offer other support to the school.

- ▶ **Assurance that self-carry is appropriate for each individual student.** Even if state law or local policies permit self-carry/self-administration, it may not be appropriate for all students, and school implementation of those laws/policies must be managed carefully. The National Heart, Lung and Blood Institute has developed specific guidance on this issue; the complete document, “When Should Students with Asthma or Allergies Carry and Self-Administer Emergency Medications at School?”, is included with this hand-out.
- ▶ **Assurance that adequate supplies of medication are in school.** Establish a plan, which may include:
 - having Albuterol metered-dose inhalers available in the school emergency kits for students who have signed forms for Albuterol, for use when medication is lost or otherwise unavailable
 - having more than one supply of prescribed medication in the school per student, so that it is readily accessible (for example, a student may carry one inhaler while one is kept by the school nurse, or one is kept by the school nurse and another by the physical education teacher)
 - encouraging parents to send mostly-used inhalers (with 10-20 puffs remaining) to school to be used as spare inhalers, when they refill prescriptions and get new inhalers
 - having a system to notify parents well in advance of when an inhaler kept at school is anticipated to be empty
- ▶ **Adequate staff training.** Unlicensed support personnel administering and/or monitoring medications must be trained to understand the use and appropriate administration of the range of medications. They should receive monthly supervision from a school nurse.
- ▶ **Assurance of access to peak flow meters.** Families should be encouraged to send in a second peak flow meter for each student. Ideally, students should use the same type at home and at school. Many health insurers will pay for a second peak flow meter (“a durable medical good”) whenever the prescriber notes that it is “medically necessary.” Peak flow meters may be especially useful in schools because they add one more measure to the assessment of a student in respiratory distress and can alert staff to an emergency situation.

REFERENCE MATERIALS

- ❖ Sample School Medication Policy
(Including Self-Carry/Self-Administration of Asthma Medication)
- ❖ Sample Self-Carry/Self-Administration Form
- ❖ Sample Self-Carry/Self-Administration Contract Between Student and School
- ❖ When Should Students with Asthma or Allergies Carry and Self-Administer Emergency Medications at School?



Medication Policy

If a student requires medication during the school day, the following criteria **must** be met:

1. All medication (prescription and non-prescription) must be accompanied by written instruction from the Medical Doctor, Doctor of Osteopathy, Dentist, Physician Assistant, or Nurse Practitioner. The pharmacy label can fulfill this written requirement for prescription drugs only.
2. The request for administration of prescription or non-prescription medication must be accompanied by parent/guardian written authorization. This permission form may be obtained at the school health office.
3. All prescription medication is to be in its original labeled pharmacy container. Medication must be accompanied by a health professional's written request for administration, which includes:
 - a. name of student
 - b. name of medication
 - c. name of qualified healthcare professional
 - d. dosage and route of administration
 - e. dated
 - f. time or indication of administration
4. When an adult other than the parent/guardian delivers medication to the school:
 - a. The container should be placed in a sealed envelope with the student's name.
 - b. It should be delivered to the health office upon the student's arrival at school.
 - c. The parent or guardian assumes full responsibility for any medication sent to school.
5. Students are generally not permitted to carry medication while at school. Exceptions are inhaler medications or medications for life-threatening conditions, provided the necessary requirements are met.
6. Students are permitted to carry asthma inhaler medication in school if the following requirements are met:
 - a. A written statement from the physician that provides the name of the drug, dose, times when the medication is to be taken, and the reason the medicine is to be taken.
 - b. The health care provider shall indicate via written statement that the child is qualified and able to self-administer the medication.
 - c. A school district parental permission form for inhalers is completed. Parents and students must sign the waiver on the permission form, relieving the district and its personnel of any responsibility for the benefits or consequences of the medication and that the school bears no responsibility for ensuring that the medication is taken.
 - d. The school district reserves the right to withdraw permission at any time if the student is unable to demonstrate responsible behavior in carrying and/or taking this medication.



Authorization for Administration of Inhaled Asthma Medication

(Use a separate authorization form for each medication)

School: _____

Student's Name: (First/MI/Last) _____

Sex: (please circle) Female Male

Birthdate: ____/____/____

FOR COMPLETION BY PHYSICIAN, NURSE PRACTITIONER, OR PHYSICIAN'S ASSISTANT:

Physician's Name: _____

Telephone Number: _____ Fax Number: _____

Emergency Contact Number: _____

Diagnosis: _____

Name of Medicine: _____

Form: _____ Dose: _____

Is the child knowledgeable about his/her asthma medication?

☐ Yes ☐ No

Has the child demonstrated the proper technique in administering medication?

☐ Yes ☐ No

Medicine is administered daily. Time: _____

☐ Yes ☐ No

Medicine is administered when needed. Indications: _____

If needed, how soon can administration of medicine be repeated? _____

The medication cannot be repeated more than _____

Side effects: _____

Comments: _____

() I have instructed _____ in the proper way to use his/her inhaled asthma medications. It is my professional opinion that he/she should be allowed to carry and use this inhaled medication by him/herself.

() It is my professional opinion that _____ should not be allowed to carry and use this inhaled medication by him/herself.

Physician Signature/Date: _____

FOR COMPLETION BY PATIENT

Mother's Name: _____

Father's Name: _____

Mother's Work Telephone: _____ Father's Work Telephone: _____

Home Telephone: _____ Emergency Number: _____

Is the child authorized to carry and self-administer inhaled asthma medication? ☐ Yes ☐ No

As the parent of the above named student, I ask that assistance be provided to my child in taking the medicine(s) indicated above at school by authorized staff. If self-medicating is allowed or if no authorized staff member is available, I ask that my child be permitted to self-medicate as authorized by myself and my physician. Authorization is hereby granted to release this information to appropriate school personnel and classroom teachers.

Parent/Guardian Signature and Date: _____



Self-Administration of Inhaler Medication Student Agreement

Name: _____ Grade: _____

Inhaled Medication: _____ Date: _____

I agree to:

- Follow my prescribing health professional's medication orders.
- Use correct medication administration technique.
- Make a note of when I use medication at school.
- Not allow anyone else to use my medication under any circumstances.
- Keep a supply of my medication with me in school and on field trips.
- Notify the school nurse or school health paraprofessional if the following occurs:
 - My symptoms continue or get worse after taking the medication.
 - My symptoms reoccur within 2-3 hours after taking the medication.
 - I think I might be experiencing side effects from my medication.
 - Other _____
- I understand that permission for self-administration of medication may be discontinued if I am unable to follow the safeguards established above.

Signature of Student

Date

- ☐ Verbalizes Dose _____
- ☐ Verbalizes Asthma Episode Symptoms
- ☐ Demonstrates Proper Technique
 - removes cap and shake if applicable
 - attaches spacer if applicable
 - breathes out slowly
 - presses down inhaler to release medication
 - breathes in slowly
 - holds breath for 10 seconds
 - repeats as directed.
- ☐ Verbalizes Safe Use of Inhaler

The student has demonstrated knowledge about and proper use of his/her inhaler.

Signature of Nurse

Date

When Should Students with Asthma or Allergies Carry and Self-Administer Emergency Medications at School?

When Should Students With Asthma or Allergies Carry and Self-Administer Emergency Medications at School?

Guidance for Healthcare Providers Who Prescribe Emergency Medications

Physicians and others authorized to prescribe medications, working together with parents and school nurses, should consider the list of factors below in determining when to entrust and encourage a student with diagnosed asthma and/or anaphylaxis to carry and self-administer prescribed emergency medications at school.

Most students can better manage their asthma or allergies and can more safely respond to symptoms if they carry and self-administer their life-saving medications at school. **Each student should have a personal asthma/allergy management plan on file at school that addresses carrying and self-administering emergency medications.** If carrying medications is not initially deemed appropriate for a student, then his/her asthma/allergy management plan should include action steps for developing the necessary skills or behaviors that would lead to this goal. All schools need to abide by state laws and policies related to permitting students to carry and self-administer asthma inhalers and epinephrine auto-injectors.

Healthcare providers should assess student, family, school, and community factors in determining when a student should carry and self-administer life saving medications. **Healthcare providers should communicate their recommendation to the parent/guardian and the school, and maintain communication with the school,** especially the school nurse. Assessment of the factors below help to establish a profile that guides the decision; however, responses will not generate a “score” that clearly differentiates students who would be successful.

Student factors:

- Desire to carry and self-administer
- Appropriate age, maturity, or developmental level
- Ability to identify signs and symptoms of asthma and/or anaphylaxis
- Knowledge of proper medication use in response to signs/symptoms
- Ability to use correct technique in administering medication
- Knowledge about medication side effects and what to report
- Willingness to comply with school’s rules about use of medicine at school, for example:
 - Keeping one’s bronchodilator inhaler and/or auto-injectable epinephrine with him/her at all times;
 - Notifying a responsible adult (e.g., teacher, nurse, coach, playground assistant) during the day when a bronchodilator inhaler is used and immediately when auto-injectable epinephrine is used;
 - Not sharing medication with other students or leaving it unattended;
 - Not using bronchodilator inhaler or auto-injectable epinephrine for any other use than what is intended;
- Responsible carrying and self-administering medicine at school in the past (e.g., while attending a previous school or during an after-school program).

NOTE: Although past asthma history is not a sure predictor of future asthma episodes, those children with a history of asthma symptoms and episodes might benefit the most from carrying and self-administering emergency medications at school. It may be useful to consider the following.

- Frequency and location of past sudden onsets
- Presence of triggers at school
- Frequency of past hospitalizations or emergency department visits due to asthma

When Should Students with Asthma or Allergies Carry and Self-Administer Emergency Medications at School? (cont.)

Parent/guardian factors:

- Desire for the student to self-carry and self-administer
- Awareness of school medication policies and parental responsibilities
- Commitment to making sure the student has the needed medication with them, medications are refilled when needed, back-up medications are provided, and medication use at school is monitored through collaborative effort between the parent/guardian and the school team

School and community factors:

In making the assessment of when a student should carry and self-administer emergency medicines, it can be useful to factor in available school resources and adherence to policies aimed at providing students with a safe environment for taking medicines. Such factors include:

- Presence of a full-time school nurse or health assistant in the school all day every day
- Availability of trained staff to administer medications to students who do not self-carry and to those who do (in case student loses or is unable to properly take his/her medication); to monitor administration of medications by students who do self-carry
- Provision for safe storage and easy, immediate access to students' medications for both those who do not self-carry and for access to back-up medicine for those who do
- Close proximity of stored medicine in relationship to student's classroom and playing fields
- Availability of medication and trained staff for off-campus activities
- Communication systems in school (intercom, walkie-talkie, cell phones, pagers) to contact appropriate staff in case of a medical emergency
- Past history of appropriately dealing with asthma and/or anaphylaxis episodes by school staff
- Provision of opportunities for asthma and anaphylaxis basic training for school staff (including after-school coaches and bus drivers)

NOTE: The goal is for all students to eventually carry and self-administer their medications. However, on one hand, if a school has adequate resources and adheres to policies that promote safe and appropriate administration of life-saving medications by staff, there may be less relative benefit for younger, less mature students in this school to carry and self-administer their medication. On the other hand, if sufficient resources and supportive policies are NOT in place at school, it may be prudent to assign greater weight to student and family factors in determining when a student should self-carry.



This guidance sheet was developed as a partnership activity facilitated by the NAEPP, coordinated by the NHLBI of the NIH/DHHS
March 2005

◆ **Recommended Component:** **Use Standard Emergency Protocols**

Standardized protocols are used both for undiagnosed students who develop respiratory distress unexpectedly, and those with asthma who do not have their own Asthma Action Plans (see NAEPP's Suggested Emergency Protocol for Students with Asthma Symptoms in the reference materials included at the end of this section).

To create these protocols, consider:

- ▶ **Identify, adapt and adopt protocols for respiratory emergencies.** Several such protocols are available from state departments of education or health as well as professional organizations such as the American Red Cross.
- ▶ **Provide CPR and first aid training for all school staff.** The training should also include respiratory components such as recognizing and responding to a serious asthma episode.

LESSONS LEARNED!

AFSI can change staff's response to a potential asthma emergency. An asthma champion in a school that was part of an AFSI pilot site subsequently escorted a student who was having difficulty breathing in physical education class to the main office; the student was then sent to the hospital for care. How and why did it happen? The asthma champion recognized that AFSI had changed her understanding of and behavior about asthma that resulted in the student's receiving appropriate attention and medical care.

Also consider creating/using an existing "emergency response" poster for staff's reference during a student's asthma episode. These could be posted in all classrooms and other rooms throughout the school. (See the sample poster included with this hand-out.)

REFERENCE MATERIALS

- ❖ Sample Emergency Response Poster
- ❖ NAEPP's Suggested Emergency Protocol for Students With Asthma Symptoms

5 Steps to Follow for an Asthma Episode in the School Setting

If student has excessive coughing, wheezing, shortness of breath, or chest tightness:



Help to an upright position; speak calmly and reassuringly



Follow individualized action/emergency plan for use of quick-relief inhaler



If quick-relief inhaler or action/emergency plan not available, send to health office accompanied by peer or with staff member



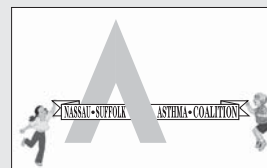
Get emergency help from school nurse or designated emergency staff if student has any of these:

- Inhaler not helping
- Breathing hard & fast
- Nostrils open wide
- Can't walk or talk well

**Call
911**

If not breathing, unconscious, lips are blue, struggling to breathe (hunched over or ribs show), or other signs of distress

Notify parent or guardian.



Contact (631) 231-5864 X12



Asthma Emergency Protocol for Children with Asthma Who Do Not Have Their Own Emergency Plan

ASTHMA (or Respiratory Distress) Standard Protocol for Students without a Personal Asthma Action Plan

POSSIBLE OBSERVATIONS/SYMPTOMS

(May include one or more of the following.)

- Coughing, wheezing, noisy breathing, or whistling in the chest
- Difficult breathing, tightness in chest, shortness of breath, or chest pain
- Self reporting/complaints of discomfort when breathing
- Breathing hard and fast
- Nasal flaring (front part of nose opens wide to get in more air)
- Can only speak in short sentences or not able to speak
- Blueness around the lips or fingernails

ACTIONS

1. **Quickly evaluate the child. Call 911 and immediately administer quick-relief medication if in severe distress! (For example: unable to speak, lips blue or peak flow < 50% of predicted best).** Administer oxygen, if available, and patient is in respiratory distress.
2. Restrict physical activity and allow student to rest. Encourage student to breathe slowly and relax.
3. Place the student in an area where he/she can be closely observed. Never send a student to the health room alone.
4. Check and record:
 - a. Peak flow meter reading. (If personal best is unknown, use prediction chart.)
CALL 911 if peak flow is less than 50% of personal or predicted best.
 - b. Respirations and pulse (Normal rates listed on back. Report to MD or EMS)
5. **Administer quick-relief medication. Medication must be ordered by a personal physician order or a standing order signed by a school physician or public health physician.**
Administer albuterol from school supply, if available and student does not have a personal albuterol inhaler. Use a spacer and disposable mouthpiece.
6. Contact parents (even if situation does not appear severe).
7. Reassess student after 10-15 minutes. Check for ease of breathing, peak flow, pulse, and respirations.
8. If student is improving, keep the student in the health room under supervision until breathing returns to normal.
9. **If student is not improving contact student's physician or call 911.**
10. With parental permission, provide report of health room encounter to student's physician.
11. Obtain a personal asthma action plan for this student from the student's family or physician.

Normal Breathing and Pulse Rates by Age (from EPR-2)

Age	Breathing Rate	Pulse Rate
< 2 months	<60/minute	<160/minute
2-12 months	<50/minute	<120/minute
1-5 years	<40/minute	<110/minute
6-8 years	<30/minute	<110/minute
9-15 years	<30/minute	<100/minute
16-18 years	<20/minute	<90/minute

◆ **Recommended Component:** **Provide Special Services for Students Most Affected by Asthma at School**

Students with severe asthma may require additional school health services support. Students include those whose asthma is already identified as severe, as well as those students with asthma who are absent more than students without asthma, based on students with asthma having, on average, four or five more absent days per year than students without asthma.³ Schools should seek to identify and intervene with students who are experiencing significant morbidity. These students can be identified by a school nurse or other school personnel based on number of health room visits, school absences, 911 calls, times sent home because of asthma, or discussions with teachers.

Some may require Individualized Health Plans (IHPs), or if they are absent more than 10 days in a year, they may need intervention such as case management.

Individualized Health Plans

A school's ability to provide and manage an Individualized Health Care Plan for students with asthma depends on school faculty and staff training, as well as a clear communications system among staff. For those schools with full-time nurses, nurses will be responsible for creating various documents and perhaps be at the center of a student's asthma management in school. The goal of staff asthma education is for all staff to be well-informed about various aspects of asthma and asthma management, so they can support a student with asthma and work from an established plan.

Providing Individualized Health Plan Checklist

- Advocate for mandatory staff asthma education
- Create and implement an asthma communication system

To help prepare a school, follow these steps, based on federal statutes:

- **Advocate for a mandatory staff asthma education component, and/or work with districts individually to create that component.** These components would enable school faculty and staff to read and understand an NAEPP-based Asthma Action Plan and understand other related forms and directives, including (see table of plans pg. 127):
 - Emergency Care Plan, which is usually part of the Asthma Action Plan and prescribes a specific directive for how staff should respond to an asthma emergency.
 - Individualized Education Plan (IEP)⁴, which addresses a student's "special needs," including asthma, and ensures a plan for that child's education. IEPs may not be required for all students with asthma. IEPs are required only for students who qualify for special education services because of their asthma's impact on their ability to learn.
 - Individualized Health Care Plan (IHCP),⁵ which is generally written by the school

³ R. Lakhani, L.Y. Wang, et al. Literature Review of Asthma-Related School Absences. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Division of Adolescent and School Health. Presented to, DASH-APRHB Quarterly Meeting, January 6, 2004.

⁴ See the Getting Started section of this guide for more information about these requirements under Section 504 and IDEA.

⁵ The Role of the School Nurse. National Association of School Nurses, 1999.

nurse and ensures a personalized plan and includes the Asthma Action Plan and a physical activity plan. IHCPs may not be required for all students. (See the Asthma Individual Health Plan from the American Lung Association of Washington's Asthma Management in Educational Settings, included with this hand-out.)

► **Create and implement an asthma communication system.** Encourage use of good communication tools among school health services, the healthcare provider and all school personnel. Elements of such a system may include:

- Determining appropriate distribution for Asthma Action Plans based on nursing and health coverage
- Distributing Asthma Action Plans (by school nurse) to all appropriate faculty and staff, as noted above (dependent upon parent/guardian permission and/or “need-to-know” status)
- Providing special emphasis with physical education teachers and coaches to understand physical activity modifications and pre-medication requirements for each student with asthma
- Including each student's photo on an Asthma Action Plan, for quick identification during an asthma emergency by a new or substitute teacher
- Distributing Emergency Care Plan for school to all staff

(See Sample Communications Flow Chart included with this hand-out.)

Intensive Case Management

Students with asthma who have high absenteeism may require one-on-one work through school-based case management. Specific targets should be determined locally, but if a student with asthma misses 10 or more days of school, that child's asthma may be uncontrolled. A case manager would be responsible for working with the student's family to ensure proper medical care and for working within the school to provide specific, required support for that student. (See the Sample Case Management Form included with this hand-out.)

Providing Intensive Case Management Checklist

- Define components
- Establish system of identifying students needing case management
- Determine if student has existing case manager
- Identify school case manager
- Establish system for case management for students with suspected asthma

When establishing case management, follow these steps:

► **Define components of case management.** Components include assessments of asthma severity and current treatment, school-based interventions (counseling, peak flow logs, communication with parents and physician, etc.) and asthma-related events occurring at school. Additionally, identify a range of resources available in the school and community to support case management.

► **Establish a system of identifying students needing case management.** Those students would be identified via excessive absenteeism, frequent health room visits for asthma treatment and other markers of need for case management. Although excessive absenteeism may not necessarily be the result of asthma-related illness, students with

asthma do tend to miss more school days than those without asthma. It is important to make sure they are not missing school for any reason, including asthma episodes.

► **Determine if student has a case manager whom the school should contact.**

Asthma clinics, managed care organizations, and various healthy child programs provide case management. With parental permission, a student's case manager with such an organization should be kept informed about absenteeism or other school issues.

► **Identify a school case manager.** This would be someone on the school staff who would provide case management when deemed necessary for a student. This individual could be a school nurse, social worker, or other counselor. Depending upon the needs of each student, the appropriate case manager may differ and may change over time.

► **Establish a system for case management for students with suspected asthma.**

Those students that are excessively absent or are frequent visitors to the school health office due to respiratory problems may need referral to a physician or community health professional. Having an established system of referral will make finding a medical home for these children easier.

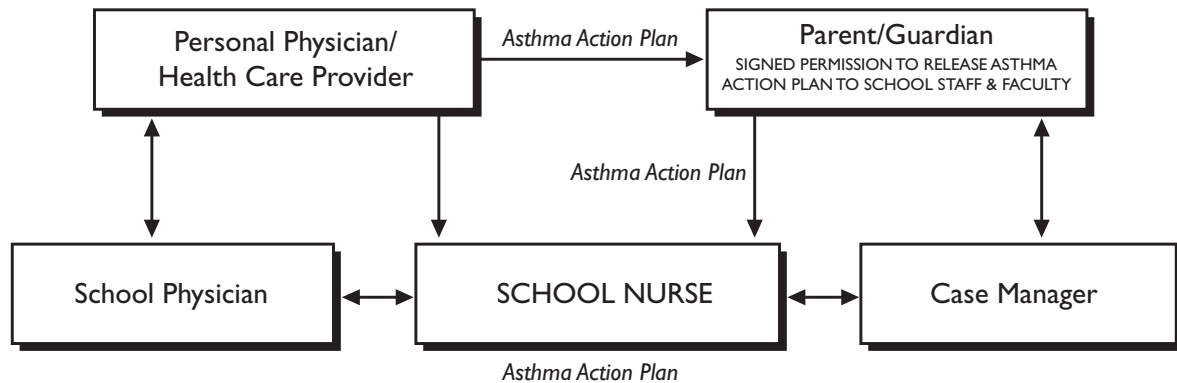
REFERENCE MATERIALS

- ❖ Asthma Individual Health Plan
- ❖ Sample Communications Flow Chart
- ❖ Sample Case Management Form

Asthma Individual Health Plan

<u>Asthma Individual Health Plan</u>		Section 504 Plan <input type="checkbox"/>	
Equipment and supplies provided by parent	<input type="checkbox"/> Nebulizer for delivery of medications <input type="checkbox"/> Peak Flow Meter for monitoring <input type="checkbox"/> Spacer or holding chamber <input type="checkbox"/> Other _____	Disaster Supplies <input type="checkbox"/> Medications for 3 days	
STUDENT HEALTH EDUCATION (Complete as applicable)			
Topics	Taught (date)	Demonstrated Mastery (date)	
Triggers			
Prevention Strategies			
Acute Signs/Symptoms			
Medications			
• Purpose			
• Method of Administration			
• Dosage			
• Frequency			
• Effectiveness			
• Side Effects			
Other (i.e., adaptation to illness; smoking cessation class referral)			
	With Parent	With Student	
Review of Emergency Care Plan			
STUDENT OUTCOMES			
1. Student will participate in school activities with modifications as needed. Modifications: _____ _____			
2. Student will demonstrate/describe checked items under "Health Education."			
3. Other: _____			
Plan reviewed with parent:		Copy sent home:	
_____	_____	_____	_____
(Parent's signature)	(date)	(School nurse's signature)	(date)
Reviewed and/or updated:			
_____	_____	_____	_____
(Parent's signature)	(date)	(School nurse's signature)	(date)
New staff trained:	Date:	New staff trained:	Date:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Illustration I



Classroom teachers

(Note: Consider Asthma Action Plan "desk file" in each classroom)

Substitute teachers

(Note: Consider photo of child on plan for ID)

Playground supervisors

(Note: Consider photo of child on plan for ID)

Physical education teachers/other athletic staff

(Note: Should include modified exercise plans, information about premedication/reminder to ask student, specific information about extended warm-ups/cool-downs)

Transportation company/bus drivers

(Note: Consider photo of child on plan for ID)

Asthma Case Management Form

School District: _____

ANNUAL INTENSIVE CASE MANAGEMENT SUMMARY FOR NURSES/CASE MANAGERS

ID# _____ School Year: _____ School: _____ Race (circle): Asian Black Hispanic White Other

Name: Last _____ First: _____ MI: _____ Grade: _____

Male ☐ Female ☐ Date of Birth ____/____/____ Care Provider _____Allergist/Pulmonologist: _____ Date of Asthma Action Plan: _____ ☐ None

____/____/____ Assessment Date	SEVERITY Severity established by: <input type="checkbox"/> Doctor <input type="checkbox"/> School Nurse <input type="checkbox"/> Not established Severity is: <input type="checkbox"/> Mild Intermittent <input type="checkbox"/> Mild Persistent <input type="checkbox"/> Moderate Persistent <input type="checkbox"/> Severe Persistent Exercise Induced? <input type="checkbox"/> Yes <input type="checkbox"/> No Allergy Testing done: <input type="checkbox"/> Yes <input type="checkbox"/> No Known Allergies/Sensitivities: _____ CURRENT TREATMENT Control Med at home or school (e.g., inhaled steroid, leukotriene modifier, cromolyn) <input type="checkbox"/> Yes <input type="checkbox"/> No Quick relief Rx (e.g., Albuterol) <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Self-carry <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Peak Flow <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Spacer <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Nebulizer <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Flu/Pneumo Vaccine <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None <input type="checkbox"/> Don't know Receiving Allergy Shots <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> Do Not Know Enrolled in a special asthma program through health insurance? <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> Do Not Know
--------------------------------------	---

____/____/____ Assessment Date	SEVERITY Severity established by: <input type="checkbox"/> Doctor <input type="checkbox"/> School Nurse <input type="checkbox"/> Not established Severity is: <input type="checkbox"/> Mild Intermittent <input type="checkbox"/> Mild Persistent <input type="checkbox"/> Moderate Persistent <input type="checkbox"/> Severe Persistent Exercise Induced? <input type="checkbox"/> Yes <input type="checkbox"/> No Allergy Testing done: <input type="checkbox"/> Yes <input type="checkbox"/> No Known Allergies/Sensitivities: _____ CURRENT TREATMENT Control Med at home or school (e.g., inhaled steroid, leukotriene modifier, cromolyn) <input type="checkbox"/> Yes <input type="checkbox"/> No Quick relief Rx (e.g., Albuterol) <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Self-carry <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Peak Flow <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Spacer <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Nebulizer <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None Flu/Pneumo Vaccine <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> None <input type="checkbox"/> Don't know Receiving Allergy Shots <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> Do Not Know Enrolled in a special asthma program through health insurance? <input type="checkbox"/> At School <input type="checkbox"/> At Home <input type="checkbox"/> Do Not Know
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Asthma Related School Events (summary of all per school year)

- See worksheet on other side
- Date this form completed _____

Visits to health room for preventive/education: _____

ED visits for asthma (if known): _____

Visits to health room for asthma symptoms: _____

911 calls for asthma: _____

Days sent home due to asthma: _____

Hospitalizations for asthma (if known): _____

Total days absent: _____

Days absent known to be due to asthma: _____

School Nurse: _____

INTERVENTION DONE THROUGH SCHOOL Permission to interact with Dr.: <input type="checkbox"/> No <input type="checkbox"/> Yes Date _____ Sent letter/called doctor? <input type="checkbox"/> No <input type="checkbox"/> Yes Date _____ Teach inhaler/spacer technique? <input type="checkbox"/> No <input type="checkbox"/> Yes Teach peak flow technique? <input type="checkbox"/> No <input type="checkbox"/> Yes Parent counseling 1:1? <input type="checkbox"/> No <input type="checkbox"/> Yes Student health counseling 1:1? <input type="checkbox"/> No <input type="checkbox"/> Yes Peak flow logs? <input type="checkbox"/> No <input type="checkbox"/> Yes Asthma education for classmates? <input type="checkbox"/> No <input type="checkbox"/> Yes Open Airways for Schools received? <input type="checkbox"/> No <input type="checkbox"/> Yes Date _____ Parent or student support group? <input type="checkbox"/> No <input type="checkbox"/> Yes Emergency protocol on file? <input type="checkbox"/> No <input type="checkbox"/> Yes Emergency protocol shared with staff? <input type="checkbox"/> No <input type="checkbox"/> Yes P.E. teacher education? <input type="checkbox"/> No <input type="checkbox"/> Yes Staff education/counseling? <input type="checkbox"/> No (# of staff _____) <input type="checkbox"/> Yes Trigger identification at school? <input type="checkbox"/> No <input type="checkbox"/> Yes Trigger modification at school? <input type="checkbox"/> No <input type="checkbox"/> Yes Trigger identification at home? <input type="checkbox"/> No <input type="checkbox"/> Yes Trigger modification at home? <input type="checkbox"/> No <input type="checkbox"/> Yes Home visit relating to asthma? <input type="checkbox"/> No <input type="checkbox"/> Yes Date _____ Referral to asthma camp? <input type="checkbox"/> No <input type="checkbox"/> Yes Receiving allergy shots? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Do not know Enrolled in special asthma program through health insurance? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Do not know
--

This side is a Worksheet

(for convenience of nurses)

School Year: _____ Student Name: _____

Health Appraisal	Date	July/ Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Communication with doctor												
Open airways for schools received												
Home visits by school for asthma												
Health room visits for asthma												
Days sent home for asthma												
Total days absent												
Days absent due to asthma												
911 calls for asthma												
ED visits for asthma												
Hospitalization for asthma												

Individual education	Date	Return Demo by Student	Personal Best Peak Flow
Peak flow instruction/review			Date:
Inhaler instruction/review			Date:
Spacer instruction/review			
Trigger identification (e.g., tobacco, pesticides, animals, or birds, dust, cleaning products, solvents, bus/car exhaust, perfumes, molds, cockroach particles, other):		Other Information/Comments	
Personal trigger modifications			
Referred for influenza/pneumococcal/vaccines			
Received influenza/pneumococcal/vaccines			
Support group			

Original form from Anne Arundel County (Maryland) School Health Services; modified by School Health USA of UCSD Community Pediatrics; 2002

◆ **Recommended Component:** ***Facilitate Linkages with the Medical Home and Referrals to Medical Provider***

Whenever they identify an unmet need, schools are responsible for referring and helping to manage a student with substantial problems/issues due to his or her asthma. As schools increase asthma awareness and education among students, staff, and parents, they bear the follow-up responsibility of providing students and parents with the support to effectively manage the student's asthma. A key component that is missing in many school-based asthma programs is ensuring appropriate and ongoing medical care. Self-management education has been shown to improve self-management skills and self-efficacy, but it cannot substantially reduce morbidity without appropriate medical care and pharmacotherapy. When school personnel identify an undiagnosed student who may have asthma, they should facilitate appropriate referrals to medical providers. This management may include links between the student and a variety of community resources, including the student's "medical home."

Sample letters to healthcare providers are included with this hand-out (Sample Letter to Physician/Healthcare Provider Before School Year, and Sample Letter to Physician/Healthcare Provider When Student's Asthma Affects School Performance).

Linkages with the Medical Home

Providing Linkages with the Medical Home Checklist

- Determine if all students with asthma have a medical home
- Refer students and families to providers and/or state child health insurance
- Work with insurance companies and determine local asthma case management resources
- Help find emergency services for students without medical home

The "medical home" is the student or family's primary care provider or institution. It may be a personal physician, nurse practitioner, or community clinic. In effect, the school may become the community resource or referral "center" for students with asthma who may not have a source for primary care. If this role is provided by another community resource (Health or Human Services Department), school staff may refer students to that resource.

According to the American Academy of Pediatrics, the medical home provides "accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective [care]...delivered or directed by...physicians who provide primary care and help to manage and facilitate...all aspects of pediatric care." The family and child should know the providers and be able to develop a trusting relationship with them.⁶

Children who have a medical home have a continuity of care rather than seeing different doctors during each emergency department (ED) visit. This continuity of care and an established physician-patient relationship results in long-term asthma management based on ongoing needs and changes in the child's asthma.

Creating linkages within the community and with the medical home begins with a communications function. The schools become a pivotal point of communications, ensuring that they

⁶ "The Medical Home." American Academy of Pediatrics policy statement. *Pediatrics*. 110 (1), July 2002, pp 184-186.

are speaking with the parents, primary healthcare provider, as well as any EDs or urgent care centers, to ensure that everyone involved in the student's asthma management is updated on treatment and symptoms.

LESSONS LEARNED!

One AFSI pilot site successfully tackled this issue by instituting a collaboration among the coalition, an insurance company and medical providers. The group works to increase the number of local providers who accept the State Children's Health Insurance Program (SCHIP) insurance used by many low-income students, and initiated a referral system to a local asthma clinic.

Depending on individuals and organizations involved in your coalition, your AFSI project may be able to tackle some of these complex challenges. If you have the resources, including professionals tied into state child health insurance programs, consider the following activities to assist schools in facilitating linkages with the medical home:

- ▶ **Determine if all students with asthma have medical homes.** Link school nurses with medical providers and clinics, to set up a communication system to track students with asthma.
- ▶ **Refer students and families to primary care providers and/or state child health insurance programs as needed.** Facilitate the referral process with schools or with a case manager who can provide referrals. Identify any barriers and collaborate to overcome them.
- ▶ **Work with insurance companies and determine local asthma case management resources.** They can help refer patients to community resources and work with the schools to track students' asthma management.
- ▶ **Help find emergency services for those students without a medical home.** Identify state and community resources and work with the school nurse or case manager to provide specific information to students and families.

Referrals to Medical Providers

Ideally, the school nurse will be aware of students who may have asthma, based on absenteeism, nurse visits for respiratory problems, or reports of teachers or coaches. Referral and follow-up are critical elements of an asthma-friendly schools program. The mechanism for referral should be an outgrowth of the school's knowledge of and networking among various community resources, including healthcare providers, hospitals and health insurers.

REFERENCE MATERIALS

- ❖ Sample Letter to Physician/Healthcare Provider Before School Year
- ❖ Sample Letter to Physician/Healthcare Provider When Student's Asthma Affects School Performance

**Sample Letter to Physician/Healthcare Provider of Students with Asthma;
To be sent before school year begins to gather basic asthma management information.**



Dear Dr. _____,

The school team at _____ School is looking forward to an excellent year for your patient, _____.

Our School Asthma Management Program will provide:

Health Services:

The school nurse, _____ will usually be in on: _____.

The health assistant, _____ will be available at other times.

Asthma education will be offered to all students grades _____.

An asthma in-service was/will be provided to all school staff by the school nurse.

We are using IAQ Tools for Schools to promote a healthy environment.

In order to provide the best possible school asthma management for your patient, we request your assistance with the following:

1. Please complete the attached asthma management plan or provide comparable information on another form.
2. Please complete the attached medication administration form for any medications that may need to be administered in school. Students may self-carry and administer their quick relief medications if you and the parents indicate approval on the form.
3. Please let us know if your patient has additional needs.
4. Please help us support families by connecting parents with one another, referring them to support groups and other community resources.
5. Let us know if you need additional copies of information on educational rights and responsibilities (IDEA, Section 504 of the Rehabilitation Act of 1973) in asthma education programs and materials for your patients.

We look forward to working with you and the American Lung Association of _____ as we join together to support students with asthma. Thank you for your help.

Sincerely,

Principal

School Nurse

Sample Letter to Physician/Healthcare Provider When Student's Asthma Affects School Performance.



Date _____

Dear _____, [name of provider]

We are writing about your patient, _____ Date of Birth _____.

The family was asked to schedule an appointment with you. *Parents have provided permission for us to exchange information* (attached or shown below).

The following information is being provided for your information and records.

- ☐ Missed _____ days in _____ period of time, possibly due to asthma.
- ☐ Is not complying with asthma medication at school or the treatment plan you have provided.
- ☐ Is not participating in P.E. because of symptoms related to asthma.
- ☐ Visits school health office frequently because of symptoms related to asthma .
- ☐ Has required emergency management of asthma (e.g., 911, ER referral).
- ☐ Our history and observations reveal that this student's asthma severity has changed (see chart).

	Days w/Symptoms	Nights w/symptoms	Peak Flow % Normal	PEF variability
Severe Persistent	Continual	Frequent	< 60%	> 30%
Moderate Persistent	Daily	> 4 per month	60% to 80%	> 30%
Mild Persistent	> 2 per week	3 to 4 per month	> 80%	20 to 30%
Mild Intermittent	< 2 per week	< 2 per month	> 80%	< 20%

Please help with the following, either before or after the patient's next appointment:

- ☐ Please reassess this child and his/her current medical regimen (See symptoms/severity above).
- ☐ Please send us or update the child's "Asthma Action Plan" (form attached).
- ☐ Please prescribe a Peak Flow Meter. This will allow us to better assist with management at school.
- ☐ Please prescribe a "spacer." This student's technique with MDI was observed and is not adequate.
- ☐ Requires an additional MDI _____ (medication name) at school for optimal availability/safety.
- ☐ Other _____

Please reach us if there are questions or concerns. Thank you!

Sincerely,

District Medical Consultant/Healthcare Consultant
(Printed and signature)

School Nurse
(Printed and signature)

School: _____ Ph: (____) _____ Fax: (____) _____

Best days/time: _____

I permit my child's doctor (named above) to communicate with school staff regarding my child's asthma.

Parent's Signature _____ Date _____

◆ **Recommended Component:**
Provide a Full-Time Registered School Nurse All Day, Every Day, for Each School

Both the American Academy of Pediatrics (AAP) and the National Association of School Nurses (NASN) have specific recommendations about the need for school nurses.

NASN recommends the following ratios of nurse to student⁷:

- one school health nurse to no more than 750 students in the general school population
- one school health nurse to no more than 225 students in the mainstreamed population
- one school health nurse to no more than 125 students in the severely chronically ill or developmentally disabled population in the medically fragile population, a ratio based on individual needs

While AAP does not make specific staffing ratios, the Academy does recommend that schools use school nurses, rather than paraprofessionals, to deliver day-to-day nursing services and health counseling to children in schools.

School nurse staffing allocation varies greatly among individual districts. Staffing decisions are made by policy makers, including district administrators and school boards, and can be influenced by local and state leaders in education, school health and medicine. To work toward each school's having a full-time registered school nurse, consider the following steps.

School Nurse Staffing Checklist

- Convince decision-makers about the need for full-time nursing
- Develop a health advisory council at the district level
- Develop support structures for school nurses
- Explore school-based health centers
- Identify advocacy and legislative opportunities

► **Convince decision-makers about the need for a full-time school nurse.**

- *Educate and demonstrate to key decision-makers the need for and role of school nurses.* Collect and provide specific data, including statistics related to asthma and other chronic conditions in school settings; and school absenteeism rates of students with asthma and other chronic conditions obtained from school health teams at district and school levels. See the sample Position Description: School Nurse included with this hand-out.
- *Educate decision-makers about nurses' clinical, health education, and health promotion skills.* The vast range of school nurses' skills include clinical asthma management, in addition to collaboration with community health providers, health education and health promotion. The school nurse coordinates school health programs, including the following:⁸
 - Health Services: coordinating programs and providing nursing care
 - Health Education: teaching students, staff, parents
 - Healthy Environment: identifying health and safety concerns in the school environment

⁷ *National Association of School Nurses Position Statement: Caseload Assignments.* National Association of School Nurses (NASN). Revised June 1995.

⁸ *The Role of the School Nurse.* National Association of School Nurses, 1999.

- Nutritional Service: supporting a healthy food service program
 - Physical Education/Activity: promoting healthy activity and practices
 - Counseling/Mental Health: providing counseling, assessing needs, intervening with and referring students
 - Parent/Community Involvement: promoting community involvement in the school community
 - Staff Wellness: providing health education and counseling for school staff
- *Explain the school nurse's role in the development and management of Nursing Care Plans, Emergency Action Protocol for Students in Respiratory Distress, Individualized Education Plan, Individualized Family Service Plan and Section 504 plans. Nurses also can play a key role in district risk management and other legal issues.*

► **Develop a health advisory council at the district level.** The council serves as a community “steering committee” for school health services. The council is responsible for assessing school health service needs, facilitating implementation, and providing ongoing evaluation and modifications. The health advisory committee often serves as a resource for the Board of Education on health issues for the schools. It should consist of health professionals, school personnel, students, parents, and representatives of community-based organizations and the department of health. Some states have mandated school health advisory councils. Be sure to check your state guidelines and laws to find out what requirements exist and leverage them to maximize health services! (See the School Health Advisory Council: Charge and Operational Guidelines included with this hand-out.)

► **Develop support structures for school nurses.** Nurses are unable to meet the range and quantity of student and staff needs without appropriate support structures. School nurses, administrators and other stakeholders can develop a coordinated support structure for health services.

CDC has created a Coordinated School Health Program (CSHP) model designed to create a strong CSHP infrastructure that can deliver long-term health benefits for children and their families. The CSHP model includes eight components: school environment, health education, physical education, nutrition services, school health services, school counseling, psychological and social services, health promotion for staff, and family and community involvement.

Structural support also should include school health teams at both the district and school levels. The team would be responsible for a range of issues affecting school health, which should reflect the components of CDC's CSHP (above). Membership would be based on the priority areas and could include classroom and physical education teachers, parents, food service staff, community health agency representatives, social workers, psychologists, and community-based social services providers.

► **Explore school-based health centers.** School-based health centers (or clinics) (SBHCs) are a growing trend. These centers deliver primary preventive and early intervention services and are located in the school or on school property. The National Assembly on School-Based Health Care (NASBHC) works to nurture interdisciplinary school-based healthcare. Districts can access NASBHC's Web site (www.nasbhc.org) for specific tools for developing and supporting SBHCs, in the areas of advocacy, public policy, technical assistance, training, evaluation, and quality.

- **Identify advocacy opportunities.** Some opportunities for advocacy and policy action may include:
- advocate for implementation of the coordinated school health model, health advisory committees, and School Based Health Centers
 - including health services in “school report cards,” which are issued by some school districts as state-of-the-school documents/updates for parents and the community
 - working with PTA and local non-profit organizations to raise awareness
 - reviewing current legislation, policies and procedures that may support improved school health services
 - creating policy that works to maximize school health services, as detailed in this section

REFERENCE MATERIALS

- ❖ Position Description: School Nurse
- ❖ School Health Advisory Councils: Charge and Operational Guidelines



POSITION DESCRIPTION: ***School Nurse***

Education & Professional Qualifications

- Registered nurse (RN) licensed by the state board of nursing
- Accountable to practice within current state laws, rules and regulations, as well as Professional Standards of School Nursing Practice (National Association of School Nurses)
- School Nurse Certification through the National Board of Certification of School Nurses
- Expertise in several areas, including: pediatric, public health and mental health nursing; education and health laws impacting children; teaching strategies for student and staff health education

Primary Responsibilities

To support student learning by implementing strategies that promote student and staff health and safety, by providing the following services:¹⁰

- Illness, injury assessments and interventions
- Identification, assessment, planning, intervention and evaluation of student health concerns
- Health assessments/participation in Individualized Education Plan development
- Pediatric nursing procedures: ventilators, gastrostomy feedings, tracheostomy care, catheterization
- Screening for health factors impacting student education
- Activities and education to promote health and prevent teen pregnancy, sexually transmitted diseases, tobacco use, and alcohol and substance abuse
- Chronic disease management and education
- Individualized Nursing Care Plans and services for students with disabilities and/or health conditions that interfere with learning
- Medication administration
- Assessment and interventions for students with mental health needs
- Crisis team participation
- Health curriculum recommendations
- Guidelines for school district health policies, goals, and objectives
- School/community/health care provider liaison

¹⁰The Role of the School Nurse. National Association of School Nurses, 1999



SCHOOL HEALTH ADVISORY COUNCILS* **(Charge and operational guidelines)**

School health advisory councils can play a major role in assisting school districts to develop effective school health programs. The council members serve as resource consultants to the district, providing medical and dental expertise from the private sector and input from representatives of public community health agencies. Each school district should establish a health advisory council to assist in developing objective policies in accordance with community needs.

RATIONALE:

- Council members will become knowledgeable about school health activities, issues, and concerns and become community advocates for children.
- Schools will benefit from the medical, dental, and nursing expertise.
- School board members and administrators will have support and advice when dealing with controversial health issues.
- School health nurses will have established sources of reference for problems as they occur.
- Community healthcare providers will have a designated contact within the school environment.

PURPOSE:

1. To review available health status indicators in the school community population.
2. To identify available community health resources.
3. To promote cooperation between school district personnel and community health resources.
4. To provide a forum for discussion of health related issues.
5. To review and endorse objective health policies and practices.
6. To provide medical backup for standing orders and/or home remedy procedures.
7. To review and endorse a comprehensive health education program that meets the long-term needs for optimal growth and development of children.

MEMBERSHIP:

Membership should include:

SCHOOL DISTRICT MEMBERS:

- School health nurses
- School administrative staff
- School board member
- School psychologist
- School social worker
- School teacher
- Other (e.g., custodians, food service workers, etc.)

COMMUNITY MEMBERS:

- School consulting physician
- Practicing physicians including but not limited to:
 - Pediatrician
 - Orthopedic Specialist
 - Ophthalmologist
 - Obstetrician
 - Family Practitioner
- Community Health Providers
 - Respiratory Therapist
 - Nurse Practitioners
 - Physician's Assistants
- Dentist
- Social Services representatives
- Local public health representative(s)
- Parent representative
- Others (audiologists, speech pathologists, etc.)

* American Academy of Pediatricians, School Health Resources for Pediatricians.
<http://www.schoolhealth.org/schcoun.html>. Reprinted with permission.

◆ **Recommended Component:** ***Assure Access to a Consulting Physician/Healthcare Provider for Each School***

A school's consulting physician/healthcare provider serves several roles to help manage a school's health services, including helping school nurses communicate with students' own physicians (or other healthcare providers), establishing and reviewing protocols and pre-prescribing standing medications. Generally, there is a single consulting physician assisting an entire school district.

Physicians can play many roles within a school district. Depending on the district, the school physician may play a role in any or all of the components of a coordinated school health program. In addition, the school physician may act as a liaison to community providers and sit on the school health advisory council.

Having a physician consultant need not be an expensive endeavor. Small districts often contract with physicians for only a few hours each year. A consulting school physician who has training and experience in child, adolescent, or school health can work with school nurses and others on the health team to guide district health policy, interact with the medical community, and/or assume specific clinical responsibilities. In addition, they can assist districts communicate more efficiently with students' physicians/healthcare providers on complex health problems. Although consulting school physicians should be board certified in pediatrics, adolescent medicine, and/or family medicine, in rural areas, a general practitioner or a county public health physician can provide many components of the school physician role. See the sample Position Description: Consulting Physician included with this hand-out.

Assuring Access to a Healthcare Provider Checklist

- Educate decision-makers about need for consulting physician
- Solicit community support
- Identify funding sources

To initiate a system incorporating a consulting physician, consider the following steps.

- ▶ **Educate decision-makers about the need for a consulting physician.** A school district should specify the physician's/healthcare provider's role in a written agreement. Depending on resources and need, physicians/healthcare providers can be assigned to a school district for as little as a few hours per year to as much as full-time.
- ▶ **Solicit community support.** Work with individuals and organizations who can help you initiate a consulting physician/healthcare provider program, including the department of public health, medical schools and public health programs within local universities, state leaders of the American Academy of Pediatrics (AAP) and the American Academy of Family Physicians, as well as local healthcare providers.
- ▶ **Identify Funding Sources.** A consulting physician/healthcare provider may be a volunteer or someone who works on a very limited-hours or full-time contract basis, depending on each school's or district's needs. Work with community leaders (listed above) to help identify funding sources, such as foundations, managed-care organizations, etc.

REFERENCE MATERIALS

❖ Position Description: Consulting Physician



POSITION DESCRIPTION:
Consulting Physician/Community Healthcare Provider

What are the responsibilities of consulting physicians, or school-contracted doctors, to improve school health services?

1. Assist in the development of school or district health programs.
2. Develop health and safety policies.
3. Provide health education to school staff.
4. Consult on health education programs and curricula.
5. Form linkages between schools and physicians/clinics in their neighborhoods.
6. Assist with health-oriented grant applications.
7. Advocate on behalf of schools and districts.
8. Communicate with students' own physicians when there are medical issues that the school must address.
9. Act as on-call consultants to school nurses.
10. Help to inform physicians/community health providers in the community about:
 - school health policies
 - school health needs
 - the school health environment
11. Help to evaluate and assess school health programs.

Notes:

- a. Consulting physicians do not take on students as their own patients!
- b. For asthma, some physicians in the community are more likely to modify their diagnosis or management after having discussed the case with a fellow physician (a school physician/community healthcare provider who is knowledgeable about asthma) than they are after having spoken to a non-health professional or even a school nurse. It is not the school physician's role to diagnose, assess the clinical status or treat students directly (unless there is a school-based clinic). The school physician can update school nurses and other school staff on asthma management issues. The school physician can assist the nurses with identifying regular protocols and forms as well as emergency procedures related to asthma.

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 selfadminister 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, Scheendorp, 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

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



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, Scheendorp, 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).

◆ **Recommended Component: Educate All Students**

All students—those with asthma and those without asthma—should be educated about asthma. Students with asthma are responsible, to varying degrees depending on age and maturity, for their own asthma management. Students without asthma should be aware of how the chronic disease affects classmates and teammates. They could be individuals with undiagnosed asthma; they could potentially be involved in schoolmates' asthma emergencies; and they can become involved in school-wide asthma and air quality awareness efforts. (See Sample Letter to Parents about Asthma Education, included with this hand-out.)

Educate Students Checklist

- Teach students with asthma critical concepts and skills to manage their disease
- Reach all students

► **Teach students with asthma critical concepts and skills to manage their disease**

- *Identify appropriate existing programs per age group and review goals or learner outcomes when selecting programs.* Again, what are the critical skills and concepts per age group? Select programs based on the audiences' needs, as well as the availability of proven interventions. Suggested programs include:

- ◆ American Lung Association's Open Airways For Schools for elementary school
- ◆ NHLBI's Asthma Awareness Curriculum for the Elementary Classroom
- ◆ Asthma & Allergy Foundation of America's Power Breathing for middle and high school
- ◆ Starbright Asthma CD-ROM Game: Quest for the Code (for children and families)

(See the Resources section of this Toolkit for ordering information.)

- *Identify alternatives for program delivery and staffing.* Offering inventive methods of program delivery that do not infringe on school resources and classroom time can help administrators remove critical barriers to establishing and maintaining asthma education. Student asthma education can be offered both during the school day as well as an option for after-school programs, for example. Some creative options include:

- ◆ creating local partnerships with volunteer agencies such as the YMCA and AmeriCorps, which could be brokered or managed by the local Lung Association or the community asthma coalition
- ◆ integrating asthma education into the current curriculum such as science or health classes (Note: This may be addressed in district- or state-specific asthma education policies.)
- ◆ recruiting volunteer health professionals or college or graduate students studying public health, nursing, medicine or respiratory therapy
- ◆ offering additional stipends for school nurses or other school staff
- ◆ adding videos and books about asthma to the school media collection
- ◆ offering lunch time, recess, or in-school "field trip" programs

► **Reach All Students**

- *Assess current policies.* Is lung health and/or asthma education required at any educational level within the state and/or district? Determine if there are opportunities to

advocate for change at the district and/or state level and work within coalition and the American Lung Association to advance these advocacy issues.

- *Assess opportunities for implementation.* Can asthma and air quality education be integrated into a school district's existing curriculum? This would perhaps be the most effective way to ensure that asthma and air quality education programs are implemented, rather than proposing an additional education program for a district to implement.
- *Determine learner outcomes.* Take time to understand what, if any, general asthma education or awareness efforts have taken place within the district(s) you are targeting. Base your program efforts on specific learner outcomes. What key facts about asthma do you want students to know and understand? Are there asthma management skills, or asthma emergency response skills, that all students should learn? See the American Lung Association Tip Sheet: Sample Learner Outcomes, included with this hand-out. Also refer to NAEPP's suggested learner outcomes published in *Asthma Awareness for the Elementary Classroom* (www.nhlbi.nih.gov/health/prof/lung/asthma/school/k3obj.htm).
- *Identify appropriate existing programs per age group.* Review goals or learner outcomes when selecting programs. Again, what are the critical skills and concepts per age group? Select programs based on the audience's needs, as well as the availability of proven interventions. Suggested programs are:
 - ◆ American College of Chest Physicians, The Chest Foundation, and *Merck's Educational Guide on Lung Health for Elementary School Children*
 - ◆ NHLBI/NAEPP's *Asthma Awareness Curriculum for the Elementary Classroom*
 - ◆ Minnesota Department of Health's *Asthma Education: An Integrated Approach (Ideas for Elementary Classroom)*
- *Involve students in planning and implementation.* Students' involvement will be critical in their taking on the issue and deepening their understanding. Some ideas for students' involvement, particularly in middle and high schools, include:
 - ◆ *Recruit and involve school athletes with asthma.* These students are visible within the school community and may help heighten awareness by their very involvement.
 - ◆ *Tap into service-learning requirements.* Involvement in asthma awareness education can be used as a service-learning opportunity, such as:
 - peer education
 - middle/high school students' reaching younger students with asthma information and support
 - serving on an asthma curriculum development team
 - serving on a school health council
 - developing outreach programs and school-based campaigns, illustrating program/promotional materials, etc.
 - organizing/becoming involved in asthma advocacy issues/efforts within the school and/or district
 - becoming involved in the school's IAQ management team as a student representative
 - working with the school's IAQ management team to investigate potential environmental hazards via modules (see the Resources section for programs and ordering information)

- ♦ *Create an incentive program for kids' involvement.* Work with students to identify school-based and non school-based incentives.

REFERENCE MATERIALS

- ❖ Sample Letter to Parents Announcing Asthma Education
- ❖ American Lung Association Tip Sheet: Sample Learner Outcomes



Dear Parents:

The _____ (district name) will begin an asthma education program to reach everyone throughout our schools during the coming school year. While this is required under a new policy, it is part of our school's ongoing efforts to provide a safe educational environment for all students, faculty, and staff.

Asthma is a chronic illness that is a growing problem in America. In a classroom of 30 students, two are likely to have asthma.¹ Asthma can be life-threatening; it causes breathing problems called asthma "attacks" or "episodes" that range from mild to serious.

_____ (district name) is providing asthma education that will help minimize asthma episodes among students. We are also working to prepare all students and staff to respond to asthma emergencies, should they occur.

The new education program will include the following:

Staff education—All staff will learn the basics of asthma, managing asthma, and responding to asthma episodes.

Student education—All students will learn the basics of asthma, how it can affect their schoolmates, how to recognize signs of an asthma episode, and how/when to seek help. All students diagnosed with asthma will participate in focused asthma education programs. Elementary students will participate in the American Lung Association's *Open Airways For Schools*; middle and high school students will participate in the Asthma & Allergy Foundation's *Power Breathing*. Parents of these students will receive further information about these specific programs.

Parent education—The _____ (name) PTA will present the American Lung Association's Asthma 101 during its next monthly meeting. Our faculty and staff will talk to you individually and as a group throughout the year, to highlight asthma management issues as needed.

Thank you for your support of our asthma education program throughout the school district. Please contact us if you have any specific questions.

Sincerely,

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



American Lung Association Tip Sheet: Sample Learner Outcomes

When selecting asthma education programs, pay close attention to goals and learner outcomes. Review the program's critical skills and concepts per age group. Ideally, you would want to select programs based on the audience's needs, as well as the availability of proven interventions.

The National Asthma Education & Prevention Program details specific learner outcomes for its elementary school curricula. You may want to compare other programs' content against this type of learner outcomes, which may help your coalition assess which program(s) to use.

Learner Outcomes, Grades K-3

Learner outcomes define the educational goals of your program. NAEPP's Asthma Awareness Curriculum for the Elementary Classroom,¹ for example, defines the following objectives, or learner outcomes, for Grades K-3:

By the end of Lesson One, students will be able to:

1. Describe asthma as something that makes breathing hard for children with asthma
2. Explain that asthma can be controlled so that children can live active lives
3. Describe asthma as something that cannot be passed from one person to another like a cold
4. Identify two things that can make asthma worse, such as cigarette smoke, furry or feathered pets, colds, playing hard

By the end of Lesson Two, students will be able to:

1. State that people with asthma can stay healthy most of the time if they do these things: stay away from things such as cigarette smoke or furry pets that make their asthma worse, go to the doctor, and take medicine
2. Identify two things classmates can do to help a person who has asthma such as including him or her in activities, not teasing him/her, staying calm in an emergency, getting help if needed, and helping the student stay away from things that make his or her asthma worse

Learner Outcomes, Grades 4-6

Learner outcomes define the educational goals of your program. NAEPP's Asthma Awareness Curriculum for the Elementary Classroom,² for example, defines the following objectives, or learner outcomes, for Grades 4-6:

By the end of Lesson One, students will be able to:

1. Define asthma as a condition that causes difficulty with breathing
2. Explain that asthma can be controlled to allow children to be active and healthy
3. Describe asthma as a condition that affects the airways in the lungs
4. Explain that asthma cannot be caught like a cold or infection
5. Describe the airways in the lungs as the part of the respiratory system affected by asthma
6. Describe four signs and symptoms of an asthma episode such as coughing, wheezing, and shortness of breath, and chest tightness or chest pain

7. List four things that can make asthma worse such as exercise, cigarette or other tobacco smoke, pollens, animals, colds, flu, and cold air

By the end of Lesson Two, students will be able to:

1. State that asthma can be controlled when someone with asthma avoids the things that can make his/her asthma worse
2. Describe children with asthma as active, healthy people who can run, play, and go to school
3. Identify the things classmates can do to help a child who has asthma such as not tease, include the child with asthma in activities, remind the child to take his/her medicine, stay calm in case of an emergency, get help if needed
4. State that children who think they or a friend might have asthma can seek help from the people they live with, the school nurse, a doctor or teacher

¹ *Asthma Awareness for the Elementary Classroom*. National Heart, Lung and Blood Institute/National Asthma Education and Prevention Program. NIH Publication No. 93-2894. September 1993. <http://www.nhlbi.nih.gov/health/prof/lung/asthma/school/k3obj.htm>. Accessed September 19, 2002.

² *Asthma Awareness for the Elementary Classroom*. National Heart, Lung and Blood Institute/National Asthma Education and Prevention Program. NIH Publication No. 93-2894. September 1993. <http://www.nhlbi.nih.gov/health/prof/lung/asthma/school/47k3obj.htm>. Accessed September 19, 2002.

◆ **Recommended Component:** **Educate Parents of All Students**

The need to educate parents rests on two principles. First, it will raise their level of understanding of asthma, whether they are parents of a student with asthma, a family member of someone perhaps with undiagnosed asthma or a parent not currently affected by asthma.

Second, education throughout the school community will build support for a local asthma-friendly schools initiative, as more individuals—both decision-makers and the “general public” of the school community—realize the depth of the problem and its affect on virtually everyone within the schools. Additionally, parent education will provide another opportunity to reinforce the link among parents, schools, and providers to support the child with asthma.

Educate Parents of All Students Checklist

- Tap into existing opportunities for parent interaction
- Understand needs
- Plan materials/messages to reflect identified needs
- Create partnerships to increase your reach

► **Tap into existing opportunities for parent interaction.** Involving parents will be a challenge. Approach parents “where they are” by taking advantage of existing school-based meetings and other opportunities for intervention with parents. Work with school contacts to tap into the following:

- incorporating asthma education and other asthma management issues as a topic in parent/teacher conferences
- adding an asthma overview and/or specific asthma education information to a PTA/PTO meeting or newsletter
- discussing exercise-induced asthma and other exercise-related issues during athletic department or team parents’ meetings

Additionally, look for avenues to announce the beginning of, and milestones during, an asthma initiative within a given school or school district, such as:

- sending letters to parents to explain the work underway, how it will impact students directly, and how parents can become involved
- placing articles in school, district, or PTA newsletters

As always, be sure to focus messages on how the program or initiative will benefit parents and students specifically. Also provide an avenue for parents to request more information about asthma in general or the initiative specifically. See the Letter to Parents about Asthma Education, included with this hand-out.

LESSONS LEARNED!

Special events for parents are time-intensive to plan and manage and are not often well-attended, warn AFSI pilot sites! Even in sites where parents requested an asthma education event via a needs assessment, the education events were sparsely attended.

- **Understand needs.** If this is your first asthma awareness effort for parents of students of a particular age (elementary, middle, or high school), be sure you take time to understand the needs of that group of parents. Consider meeting with PTA leaders to assess needs and general level of asthma awareness, or create a parent focus group. Include a range of parents in a focus group, reflecting those with and without children with asthma, socioeconomic and cultural diversity, and those who are and are not already involved in school-sponsored activities.
- **Plan materials/messages to reflect identified needs.** When selecting programs and focusing on messages, consider your learner outcomes. What critical skills and/or concepts do you want parents to learn? Be sure to focus presentations, communications, and programs on those critical elements. Draw upon existing materials and programs (listed in the Resources section of this Toolkit). Also research resources for parent education through the National Education Association Web site and the Robert Wood Johnson Foundation Allies Against Asthma.

Consider using existing short fact sheets and flyers as handouts for parents. These include:

- American Lung Association facts sheets available at www.lungusa.org such as:
 - ◆ Asthma & Children
 - ◆ Home Control of Asthma & Allergies
 - ◆ Indoor Air Quality
 - ◆ Air Quality Index (AQI)
 - ◆ Asthma Medications Chart
 - ◆ Peak Flow Chart
 - ◆ Peak Flow Meters
- National Institute of Environmental Health Sciences patient flyers. Topics include:
 - ◆ Asthma & Allergy Prevention: Dust Mites
(<http://www.niehs.nih.gov/airborne/prevent/mites.html>)
 - ◆ Asthma & Allergy Prevention: Pets & Animals
(<http://www.niehs.nih.gov/airborne/prevent/pets.html>)
 - ◆ Asthma & Allergy Prevention: Cockroaches
(<http://www.niehs.nih.gov/airborne/prevent/roach.html>)
 - ◆ Asthma & Allergy Prevention: Mold Spores
(<http://www.niehs.nih.gov/airborne/prevent/mold.html>)
 - ◆ Asthma & Allergy Prevention: Cigarette Smoke
(<http://www.niehs.nih.gov/airborne/prevent/smoke.html>)

- **Create partnerships to increase your reach.** Combine efforts with existing organizations and informal groups to expand your efforts. Consider involving:
 - community-based organizations that already provide school-based programs that also may link to asthma
 - community-based programs through which home environmentalists conduct home assessments to identify and mitigate triggers (for example, American Lung Association's *Master Home Environmentalist Program*)
 - local/state school nurse organizations, such as the state affiliate of the NASN
 - local/state chapter of Society of Public Health Educators
 - PTA/PTO chapters
 - parent leaders, who may already be involved in other health education or community-focused projects at their children's schools

- local United States Department of Agriculture (USDA) Cooperative Extension Service staff (visit <http://www.reeusda.gov/1700/newcsrees.htm> for local contacts)

REFERENCE MATERIALS

- ❖ Sample Letter to Parents Announcing Asthma Education



Dear Parents:

The _____ (district name) will begin an asthma education program to reach everyone throughout our schools during the coming school year. While this is required under a new policy, it is part of our school's ongoing efforts to provide a safe educational environment for all students, faculty, and staff.

Asthma is a chronic illness that is a growing problem in America. In a classroom of 30 students, two are likely to have asthma.¹ Asthma can be life-threatening; it causes breathing problems called asthma "attacks" or "episodes" that range from mild to serious.

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The new education program will include the following:

Staff education—All staff will learn the basics of asthma, managing asthma, and responding to asthma episodes.

Student education—All students will learn the basics of asthma, how it can affect their schoolmates, how to recognize signs of an asthma episode, and how/when to seek help. All students diagnosed with asthma will participate in focused asthma education programs. Elementary students will participate in the American Lung Association's *Open Airways For Schools*; middle and high school students will participate in the Asthma & Allergy Foundation's *Power Breathing*. Parents of these students will receive further information about these specific programs.

Parent education—The _____ (name) PTA will present the American Lung Association's Asthma 101 during its next monthly meeting. Our faculty and staff will talk to you individually and as a group throughout the year, to highlight asthma management issues as needed.

Thank you for your support of our asthma education program throughout the school district. Please contact us if you have any specific questions.

Sincerely,

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

Providing a Healthy School Environment

This section provides background information and specific, proven activities for providing a healthy school environment to support objectives defined in your Asthma-Friendly Schools Initiative (AFSI) plan. Some should be plotted as multi-year activities, but do not let multi-year activities intimidate your team! Plan carefully to work deliberately through activities.

ABOUT SCHOOL ENVIRONMENTS & AIR QUALITY

Both indoor and outdoor pollutants can be asthma triggers for students and/or school staff. Environmental factors also can lead to other short-term and long-term health effects. Several aspects of school buildings themselves make them uniquely susceptible to indoor air quality (IAQ) problems. Additionally, secondhand smoke must be eliminated from the school property, school vehicles, and at school-sponsored functions away from school property and facilities if the school system is effectively going to remove this asthma trigger. Both ozone air pollution (smog) and particle pollution can be powerful triggers for students with asthma. Schools must be prepared to manage students' exposure on high outdoor air pollution days.

Indoor Air Quality (IAQ)

Indoor air pollutants affect everyone's health; furthermore, IAQ is linked to asthma, as many indoor air pollutants are triggers for people with asthma. Managing IAQ must be a critical component in any asthma-friendly schools effort. The Environmental Protection Agency's (EPA) IAQ Tools for Schools can provide the cornerstone of this implementation strategy (see the American Lung Association Fact Sheet: EPA's Easy-To-Use School Environmental Management Tools included with this hand-out).

Keep in mind that many of the school personnel who must adopt IAQ policies and procedures may be virtually unaware of IAQ issues in general, and the link between IAQ and asthma, in particular. Be prepared to present the issues clearly and provide backup documentation if requested. Several aspects of school buildings make them uniquely susceptible to IAQ problems. These include:

- A typical classroom has four times as many occupants as office buildings for the same amount of floor space.
- School systems may not allocate sufficient funds for proper maintenance and renovation.
- Schools include a large variety of potential pollutant sources, including classroom pets, laboratory chemicals, and art supplies. Gyms, locker rooms, and libraries may be sources of dust and mold as well.

Poor environmental conditions, including unhealthy air quality, are widespread. A 2000 report issued by the U.S. Department of Education¹ found that:

- Forty-three percent of the schools surveyed reported that at least one of six environmental factors was in unsatisfactory condition and approximately two-thirds of those schools had more than one environmental condition in unsatisfactory condition. Ventilation was the environmental condition most likely to be perceived as unsatisfactory (26 percent of schools). About a fifth of schools reported they were unsatisfied with heating, indoor air quality, acoustics or noise control, and the physical security of buildings, and 12 percent were unsatisfied with lighting conditions.
- Schools in rural areas and small towns were more likely than schools in urban fringe areas and large towns to report that at least one of their environmental conditions was unsatisfactory (47 percent compared with 37 percent). Schools with the highest concentration of poverty were more likely to report at least one unsatisfactory environmental condition than were schools with the lowest concentration of poverty (55 percent compared with 38 percent).

Outdoor Air Quality

Particle pollution and ozone air pollution (smog) are triggers for some people with asthma. Both pollutants are also dangerous for people without asthma.

Fine particles in the air are made up of a variety of microscopic substances: acid aerosols such as sulfates and nitrates, organic chemicals, metals, and carbon soot. Fine particles can cause serious health effects at relatively low concentrations and are especially hazardous for people with lung diseases including asthma. They are easily inhaled deep into the lungs where they can remain embedded for long periods of time. Hundreds of community health studies have linked daily increases in fine particle pollution to reduced lung function, greater use of asthma medications, and increased rates of school absenteeism, emergency room visits, hospital admissions, and premature death. EPA's publication *Particle Pollution and Your Health* provides an overview of the health effects of particle pollution; it is available online at www.epa.gov/airnow.

Ozone exposure results in several possible short-term and long-term health problems, including: respiratory irritation, reduction in lung function, exacerbation of asthma, respiratory infections and inflammation and damage to lung tissue. Elevated ozone levels are clearly correlated with increased numbers of hospital admissions and visits to emergency departments. EPA's publication *Smog: Who Does it Hurt?* provides an overview of the health effects of ozone; it is available online at www.epa.gov/airnow.

HEALTHY SCHOOL ENVIRONMENT COMPONENTS

The following recommended components to achieve a healthy school environment are detailed in hand-outs, including reference materials.

- ◆ Proactively maintain healthy indoor air quality
- ◆ Assure tobacco-free buildings and grounds
- ◆ Provide smoking cessation services for students and staff

¹ U.S. Department of Education, National Center for Education Statistics. Condition of America's Public School Facilities: 1999. NCES 2000-032.. 2000. p. v.

- ◆ Use Integrated Pest Management (IPM) techniques to control pests
- ◆ Manage students' exposure on high outdoor air pollution days

A Reminder About Policies

Several of the components involve policy change. Remember, policy changes are strategies that can make a long-lasting impact on students with asthma, the overall student body, and staff. Establishing policies is only the first step; schools also need to determine how to enforce them.

◆ **Recommended Components:** ***Proactively Maintain Healthy Indoor Air Quality***

This component involves four distinct activity areas:

- Assuring healthy indoor air quality
- Assuring tobacco-free buildings and grounds
- Providing smoking cessation services for students and staff
- Using IPM techniques to control pests

ASSURING HEALTHY INDOOR AIR

This broad category of work includes policy-based activities as well as specific program-based activities and maintenance issues.

Assuring Healthy Indoor Air Checklist

- Raise awareness about federal regulations
- Establish district-wide IAQ policies
- Establish emergency management plans for IAQ issues and external hazards
- Establish policy/procedures for field trips
- Treat school buses as indoor environments.
- Purchase asthma-friendly products.
- Complete a school self-assessment
- Adopt and use an IAQ management program

- **Raise awareness among school personnel, students, parents, and communities about federal regulations.** Federal statutes such as Section 504 and the Individuals with Disabilities Education Act of 1997 (IDEA) lay the legal groundwork for schools to provide a healthy environment that allows students with disabilities (including asthma) to fully participate in their educational program. These issues may include a wide range of actions on behalf of the district, such as removing a student's known asthma triggers from the classroom, to addressing building-wide ventilation and other air quality/maintenance issues. (See the American Lung Association Backgrounder: Policies & Legislative Issues Affecting Asthma in Schools in the Master Planning section of this Toolkit.)
- **Establish district-wide IAQ policies,** which would result in specific IAQ issues' being addressed as part of a school's annual routine. Policies could include: staff training and education; annual inspection; tracking and assessment of IAQ problems and mitigation; a

complaint procedure; adequate staffing for cleaning and maintenance and IAQ oversight; and coordinated implementation of EPA's IAQ Tools for Schools. Policies create a sustained IAQ program, which will have long-term positive impact on students with asthma and the general school population. Be aware that language regarding the policy may need to be included in union contracts; sample language is included with this hand-out.

Policies should consider three distinct IAQ issues:

- IAQ problems may already be present in the school and must be mitigated for the health and safety of all students and staff—particularly those with asthma. These may include flooring; a sample carpet/flooring school policy is included with this hand-out.
- IAQ problems must be averted as new buildings are constructed. While new schools are being constructed, school districts also may be dealing with IAQ issues related to the use of portable classrooms.

► **Establish emergency management plans that address IAQ issues and external hazards.** Plans should include hazards such as fires, chemical spills, and ambient particles. A Sample Emergency IAQ Management Plan is included with this handout; the plan details how to investigate a situation, what specific situations would require emergency action and what actions must take place within the facility.

► **Establish policy/procedures for field trips.** Be sure a faculty/staff member is designated to administer medications, if needed, and to work with students with asthma to avoid triggers whenever possible during a field trip (i.e., not participate in the petting zoo if the student's asthma is triggered by animal dander). Policies and procedures should detail the staff response to a potential asthma emergency, communications among staff and/or chaperones, and communication to a student's parent/guardian. Planning ahead will help ensure that trips are safer and fun for all. (See the Sample Field Trip Policy included with this hand-out.)

► **Treat school buses as indoor environments.** This involves four main issues:

- *Cleaning:* Buses must be cleaned regularly with environmentally friendly products when available.
- *No smoking at any time.*
- *Converting bus fleets to non-diesel fuel:* Diesel-fueled buses, which represent 60% of school buses,² present at least two key health issues:
 - ◆ Diesel-fueled exhaust is high in particulates, which are increasingly associated with lung diseases, including asthma, and are classified by the EPA as a probable human carcinogen. It is estimated that children who ride in a diesel school bus may be exposed to up to four times more toxic levels than someone traveling in a car directly in front of it.³
 - ◆ In less-affluent communities, buses that may be 20 years old or older have few or no emissions controls, so students riding those buses may be exposed to greater quantities of harmful emissions.
- *Anti-Idling policies,* which reduce exposure to diesel exhaust. These may include having drivers turn off buses as soon as they arrive at the school yard, limiting idling time of buses during early morning warm-up, and providing a space inside the school where drivers can wait. (See the State of New Hampshire Policy at the end of this section.)

² U.S. Department of Energy. EnergySmart Schools Web site. http://www.eren.doe.gov/energysmartschools/bus_health.html.

³ Natural Resources Defense Council. No Breathing in the Aisles: Diesel Exhaust Inside School Buses. February 2002.

- ▶ **Purchase asthma-friendly products.** Strong odors can cause problems for people with asthma. Examples of products that may contribute to IAQ problems and consequently affect individuals with asthma include: caulks, solvents, paints, adhesives, sealants, and cleaning agents. Maintenance supplies may emit air contaminants during use and storage. Products low in emissions are preferable; however, a product that is low in emissions is not necessarily better if it is more hazardous despite the lower emissions, if it has to be used more often, or at a higher strength. Schools should learn about maintenance supplies by reading labels and identifying precautions regarding effects on indoor air or ventilation rates and requirements. Staff should ask vendors and manufacturers to help select the safest products available that can accomplish the job effectively.
- ▶ **Complete a school self-assessment** with EPA's free HealthySEAT software (see the American Lung Association Fact Sheet: EPA's Easy-To-Use School Environmental Management Tools included with this hand-out).
- ▶ **Adopt and use an IAQ management program,** based on *IAQ Tools for Schools* and American Lung Association's evaluation tools for implementing *IAQ Tools for Schools*. To support implementation, link schools with established IAQ management programs with those who are new to having a coordinated program, or work with the EPA Regional office to link with schools having specific *IAQ Tools for Schools* implementation experience. Work to secure funding to implement and/or expand IAQ management programs, pulling from data related to federal and state laws related to chronic health conditions and/or IAQ issues, local asthma statistics, existing programs and resources, and cooperative community opportunities such as those presented through a local asthma coalition. See the Sample Union/Association Contract Language Supporting IAQ Plans and Sample Carpet/Flooring School Policy included at the end of this section.

LESSONS LEARNED!

Partnership between the facilities manager and the AFSI committee will be integral to a successful IAQ Tools for Schools program, based on the experiences of AFSI pilot sites. One site with such a partnership completed the program in the district's 102 school buildings in one year and was awarded the EPA Achievement Award!

REFERENCE MATERIALS

- ❖ American Lung Association Fact Sheet: EPA'S Easy-To-Use School Environmental Management Tools (HealthySEAT and IAQ Tools for Schools)
- ❖ Sample Emergency IAQ Management Plan
- ❖ American Lung Association Tip Sheet: Sample Field Trip Policy
- ❖ State of New Hampshire Bus Idling Policy/Fact Sheet
- ❖ Sample Union/Association Contract Language Supporting IAQ Plans
- ❖ Sample Carpet/Flooring School Policy



American Lung Association Fact Sheet: EPA'S Easy-To-Use School Environmental Management Tools

HealthySEAT

This free, self-audit software is a unique tool that helps school districts evaluate their school facilities for key environmental, safety and health issues. The Healthy School Environments Assessment Tool (also called the Healthy Schools Tool) can be downloaded on the Environmental Protection Agency (EPA) web site (www.epa.gov/schools) at no cost to school districts, states and others to help them establish and implement fully integrated and comprehensive self-assessments of each of their school facilities.

HealthySEAT features:

- **database file** to help school districts to manage all aspects of a self-assessment program, including:
 - a customized checklist and detailed guidebook containing detailed information and links on each topic
 - pre- and post- assessment letters and recommendation packages
 - setting priorities for correcting problems found
 - tracking the status of every issue for every school
 - district-wide status reports
- **comprehensive sample checklist** that can be used “as is” to conduct self-assessments of school facilities, or which can be fully customized by states and/or school districts to reflect state and local requirements, policies, and priorities
- **fully integrated source of all EPA school programs**, which encourages states, districts, and schools to participate in voluntary EPA programs to achieve a healthy learning environment as well as providing an effective compliance assistance tool for regulatory requirements
- **information on health, safety and injury prevention programs** of several federal agencies (Occupational Safety and Health Administration, National Institute for Occupational Safety and Health, Centers for Disease Control/Division of Adolescent and School Health, Department of Education, Consumer Product Safety Commission, and Department of Transportation)
- **support by an EPA web page** that issues updates and other useful information on a regular basis.

IAQ Tools for Schools

IAQ Tools for Schools is designed to give schools the information and skills they need to manage air quality in a low-cost, practical manner. It helps schools prevent potential problems and efficiently manage them should they occur.

Who uses it?

The *IAQ Tools for Schools* Action Kit is designed to be used by current school staff—not a separate IAQ specialist with specific technical knowledge. Program training and implementation materials are available for the American Lung Association and other community organizations who work with schools. Staff training resources present IAQ background information, including scientific references, detailed training workshops, promotional guides, and sample documents.

What costs are involved?

The *IAQ Tools for Schools* Action Kit is free for schools from the EPA. These free materials include hands-on materials schools will need to prevent and/or manage existing air quality problems. The kit includes easy-to-use checklists with a flexible, step-by-step guide; IAQ problem-solving wheel; facts on indoor air pollution sources, symptoms, and solutions; training videos; and sample documents.

How would schools benefit from this particular program?

IAQ Tools for Schools is based on proven, scientific methods for preventing, understanding and solving indoor air quality problems and can:

- save schools money by preventing IAQ problems from developing into expensive repairs
- help prevent bad publicity and tensions between schools, parents and the community
- decrease the potential for short- and long-term health problems for students and staff
- reduce student and teacher absenteeism and improve student learning environment

See the Resources section of this toolkit for ordering information about IAQ Tools for Schools and other IAQ program resources.



Sample Emergency IAQ Management Plan

For General Complaints (which may indicate an urgent IAQ situation):

- Document specific details of the complaint, including adverse health effects experienced.
- If someone is experiencing physical symptoms, conduct a thorough health evaluation.
- Visually inspect the facility for obvious problems, such as:
 - evidence of water damage (could suggest mold/mildew)
 - inadequate housekeeping
 - use or misuse of chemicals
 - ventilation system problems
- Refer to specific checklists within *IAQ Tools for Schools*

For emergencies:¹

Defined

In emergencies, time is limited to avert serious health problems or property damage, such as:

- obviously life-threatening situations, such as hazardous materials spills
- symptoms of carbon monoxide poisoning such as headaches, dizziness, drowsiness, nausea, and combustion odors
- widespread breathing difficulties such as shortness of breath, chest tightness, or respiratory irritation
- diagnosed Legionnaire's disease
- flooded/water-damaged carpet and other materials

Actions

In an emergency:

- Immediately seek medical or public health assistance (e.g., local or state health department).
- Evacuate affected area, if warranted.
- When appropriate, such as for carbon monoxide poisoning or chemical spills, ventilate the affected area with large amounts of outside air; use temporary fans if needed.
- In the case of flooded water-damaged carpet and other materials, dry the saturated material within 48 hours to avoid mold contamination.
- Inform building occupants and parents of minors of the problem and maintain clear communication.

¹ University of Minnesota environmental Health and Safety web site.
<http://www.desh.umn.edu/iaq/school>



American Lung Association Tip Sheet: Sample Field Trip Medication Policy

School Nurse should be advised by teacher as soon as a field trip is approved in order that the Nurse may make arrangements for proper dispensing of medication.

School Nurse will prepare a pack of students' medications, spacers and peak flow meters for each teacher. A teacher will carry his/her students' emergency medication with accompanying doctor's orders during the field trip.

A Registered Nurse will accompany field trips, if after consultation with the Principal, the medical/medication requirements of that students cannot be met by delegation.

A student may carry **emergency** medication on his/her person if the student's physician and the school nurse have authorized self-carry, and if the parent/guardian has indicated on the Parent/Guardian Authorization for Prescription Medication Administration form that the student has been fully instructed and is capable of self-administration, if needed.

It is recommended that all students who require emergency medication to be administered by the School Nurse ride on the same bus.

Reduce School Bus Idling Good for Drivers, Good for Students, Good for the Environment!

Diesel Exhaust and School Bus Idling

Diesel exhaust from idling school buses poses a health risk to both drivers and students. As idling buses wait for students at the schools, they emit exhaust fumes which concentrate at ground level and which can enter both the passenger compartments of the buses and school classrooms through ventilation systems. Numerous scientific studies indicate that exposure to diesel exhaust can cause lung damage, respiratory problems, premature death, and lung cancer. Although everyone can be affected by diesel exhaust, children are more susceptible to these health problems because their respiratory systems are not fully developed.

Benefits of Reducing School Bus Idling

- ✓ Helps protect the health of drivers and students from the harmful effects of diesel exhaust fumes.
- ✓ Reduces air pollutants that contribute to ozone smog, fine airborne particle formation, and global warming.
- ✓ Reduces fuel consumption and saves money. A typical diesel vehicle burns approximately one gallon of fuel for each hour it idles. If each bus reduces its idling time by 30 minutes per day, a company operating 16 buses could save over \$2,500 per school year in reduced fuel costs.
- ✓ Reduces wear and tear on the engine – saving on maintenance costs and increasing the life of the engine!



New Hampshire School Transportation Association and
New Hampshire Department of Environmental Services –
Working together to promote healthy breathing for everyone!

School Bus Drivers Can Make A Difference! Reduce School Bus Idling

Excessive exposure to diesel exhaust from school buses can pose a health risk for drivers and children. School bus drivers can make a significant impact on protecting the health of their passengers and their own health by limiting engine idling whenever practical. Here are some simple guidelines for school bus drivers to follow:

- All bus drivers should turn off engines when they reach the school or other destination, unless they will be leaving within a few minutes. **Please do not allow buses to idle while waiting for passengers.**
- During morning start-up, buses should idle no longer than necessary to bring them to proper operating temperature and to defrost all windows.

Certain exceptions to the policy may be made (consistent with state regulations) under the following conditions:

- It is necessary to run the engine in order to operate safety equipment.
- The outside temperature is between 32 degrees and -10 degrees, idling is allowed for up to 15 minutes.
- The outside temperature is below -10 degrees, idling is allowed with no time restrictions.
- You need to maintain a safe temperature for students with special needs.

CLEAN AIR DRIVER



School Bus Drivers – Doing Our Share for Clean Air!



Language Supporting District IAQ Plan

A District Indoor Air Quality (IAQ) plan will be developed as a subcommittee of the District Safety Committee. The subcommittee will be composed of five representatives appointed by the Association and five representatives appointed by the District. The subcommittee will be established by August 31, 1997 and will meet monthly beginning with the 1997-98 school year. Minutes of committee meetings will be shared with Association members. In the event meetings are scheduled during the school day, substitute coverage will be provided by the District. **Employees shall be compensated at the hourly rate for meetings held beyond the work day.**

When developed, the IAQ plan will be incorporated into the functions of building safety committees and will include:

1. Strategies and standards for facilitation, research, recommendation and implementation of procedures to identify and resolve IAQ concerns.
2. In-service training for safety committee members and district employees regarding IAQ.
3. Written procedures, timelines and support services for the collection of data, reporting of incidents and the communication and processing of information relevant to indoor air quality, which will be included as Appendix "N" of the negotiated agreement.
4. Procedures to ensure appropriate and timely communication to staff of district policy and procedures related to air quality.
5. Monitoring procedures for buildings to ensure compliance with District Safety Committee air quality plan.



Recommended District Policy for Carpeting in Schools

General

1. Recognize the potential problematic health implications of carpeting in schools, particularly in basements and on bare concrete, where moisture and mold are potential problems.
2. Consider carpeting those areas of schools where teachers and administrators are likely to bring in their own area-rugs, mats, and carpets (e.g., places where students sit on the floor; noisy areas where carpeting is needed to buffer the echo of sound.)

When carpeting areas of a school:

1. Clean old carpet before removal and clean the area thoroughly prior to installation of new carpet. (Otherwise the dust and dirt of the old carpet is emitted into the air system and collects onto the new carpet).
2. Assure that only approved carpets with specific properties be allowed into the school district. The following properties (and in this order of importance) are recommended: low pile density in loop carpet, low height, fluorocarbon coating of fibers, high denier per filament, and a fiber shape with a low surface area. These properties are associated with increased release and recovery of common allergens when vacuumed.
3. Area rugs and children's mats need to meet the same health standards as wall-to-wall carpeting in schools (#2 above).
4. For large renovation projects, request that the manufacturer specify the adhesive, offer a warranty for volatile organic compound (VOC) emissions, and test beyond federal standards for a total VOC emission level that is less than 100 mcg/m²/hour (measured after 24 hours).
5. Use new, available non-adhesive fastening systems. If adhesive is absolutely necessary, utilize solvent-free, low VOC products.
6. Pre-ventilate carpets elsewhere for several days, when there are VOCs present.
7. Maximize ventilation during installation and isolate the area from the rest of the school (including air circulation).
8. Clean the new carpet prior to opening area to students and staff. Use HEPA filtration vacuum (to remove any loose fibers and particles resulting from the installation process).
9. Keep students and staff away from the newly installed carpets as long as possible.
10. Keep carpet away from entrances where toxins track in from the outside and water sources.

General Maintenance of Carpets

1. Area-rugs and students' mats need to be included with wall-to-wall carpeting as part of the district's maintenance responsibilities.
2. Provide deep, extensive vacuuming at least every other day with High-Efficiency vacuums and HEPA-style filters in order to control contaminant levels in carpets.
3. Ensure adequate, continuous ventilation throughout the carpeted space.
4. Replace wet carpets, rather than try to dry them and preserve (because of mold and mildew residues that cannot be removed).
5. Provide steam-cleaning to carpets regularly.
6. Do not use the acaricide "Benzyl Benzoate" or denaturing agent "Tannic Acid" at this time.
7. Replace carpeting frequently.

◆ **Recommended Component:** **Assure Tobacco-Free Buildings and Grounds**

The Centers for Disease Control and Prevention (CDC) identifies that a “tobacco-free environment” exists if the state, district, or school has a policy prohibiting cigarette, cigar, and pipe smoking, and smokeless tobacco use by students, faculty, staff, and visitors. The policy prohibits tobacco use in school buildings, on school grounds, in school buses or other vehicles used to transport students, and at off-campus, school-sponsored events. These “Tobacco-free environment” policies exist in 24.5% of states, 45.5% of districts, and 44.6% of schools.⁴

Assure Tobacco-Free Buildings and Grounds Checklist

- Enact tobacco-free laws and regulations
- Adopt school board policies mandating tobacco-free schools
- Educate school personnel, students, parents and the community about tobacco-free policies
- Develop systems to enforce policies

The following activities ensure that school buildings and grounds, including bathrooms and buses, will be tobacco-free during school hours and all school activities. Because these activities are policy-based, they can make a long-lasting impact on students with asthma and the overall school community.

- **Enact tobacco-free laws and regulations** that will mandate by law that school buildings and grounds, as well as buses, are 100 percent tobacco-free. Regulations should include clear methods and responsibilities for enforcement. Such local and state laws would require all activities taking place on school properties be tobacco-free. The Federal Pro-Children Act of 1994 prohibits smoking in federally funded facilities (see the American Lung Association Tip Sheet: Policies & Legislative Issues Affecting Asthma in Schools in the Master Planning section of this Toolkit).

Current tobacco-free state legislation ranges from a complete ban of tobacco use by students, staff and faculty on school property and during on- and off-site school activities, to laws that prohibit use by students and limit staff/faculty smoking to designated areas with specific ventilation requirements. (Detailed information is available in American Lung Association’s State Legislated Actions on Tobacco Issues; see the Resources section for ordering information.)

- **Adopt school board policies mandating tobacco-free schools.** Board policies should include both implementation and enforcement issues. Implementation should include tobacco control education and cessation services for students, faculty, and staff. Also be sure to work with unions/associations to adopt contract language that supports the policy. See the State of West Virginia Tobacco-Free Schools Policy included with this hand-out. Also refer to the Sample Nonsmoking Policy and Sample Nonsmoking Announcement Memo in the IAQ Coordinator’s Guide of IAQ Tools for Schools.

⁴ Fact Sheet: Tobacco-Use Prevention. CDC’s School Health Policies and Programs Study (SHPPS) 2000 (accessed August 4, 2006, <http://www.cdc.gov/healthyyouth/shpps/factsheets/pdf/tobacco.pdf>)

What Should a School Policy on Tobacco Include?

The Centers for Disease Control & Prevention's *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction*⁵ recommends that a school policy on tobacco use must be consistent with state and local laws and should include the following elements:

- An explanation of the rationale for preventing tobacco use (i.e., tobacco is the leading cause of death, disease, and disability)
- Prohibitions against tobacco use by students, all school staff, parents, and visitors on school property, in school vehicles, and at school-sponsored functions away from school property
- Prohibitions against tobacco advertising in school buildings, at school functions, and in school publications
- A requirement that all students receive instruction on avoiding tobacco use
- Provisions for students and all school staff to have access to programs to help them quit using tobacco
- Procedures for communicating the policy to students, all school staff, parents or families, visitors, and the community
- Provisions for enforcing the policy

- ▶ Educate school personnel, students, parents and the community about tobacco-free policies. The entire school community must understand what the actual tobacco-free policy stipulates and the consequences of an individual's violating the policy. A Sample Presentation/Outline to Union/Association or School Board about the Importance of Tobacco-free School Environments is included with this hand-out.
- ▶ Develop systems to enforce policies. Identify problem areas for targeted efforts (i.e., bathroom, stairwells). (See the Resources section of this Toolkit for more information about policy enforcement.)

REFERENCE MATERIALS

- ❖ State of West Virginia Tobacco-Free Schools Policy
- ❖ Sample Presentation/Outline to Union/Association or School Board about the Importance of Tobacco-free School Environments

⁵ Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. MMWR 1994;43(No. RR-2): 7-8.



State of West Virginia Tobacco-Free Schools Policy

Policy 2422 5a — Tobacco Free Schools
TITLE 126
LEGISLATIVE RULE
BOARD OF EDUCATION

SERIES 66
TOBACCO CONTROL (2422.5A)

126-66-1. General.

- 1.1. Scope. — This policy sets the requirement for schools in West Virginia to be tobacco free.
- 1.2. Authority. — W.Va. Constitution, Art. XII, § 2 and W.Va. Code 18-2-5.
- 1.3. Filing Date. — April 13, 1998
- 1.4. Effective Date. — May 13, 1998

126-66-2. Purpose.

2.1. The purpose of this policy is to prohibit the use or distribution of tobacco products in school buildings, on school grounds, in school-leased or -owned vehicles, and at all school affiliated functions in order to improve the health of West Virginia students and school personnel. Students under the age of 21 shall not possess any tobacco product at any time. The use of tobacco products has a direct link to numerous health problems, and this policy is intended to prevent students, school personnel and visitors from being exposed to secondhand smoke and prevent youth addiction to tobacco products. This policy is intended to promulgate a positive, pro-active approach to tobacco control. In addition, school personnel shall act as positive role models for students by not distributing or using tobacco products.

126-66-3. Application.

- 3.1. This policy shall apply at all times to any building, property or vehicle leased, owned or operated by a county board of education, a Regional Education Service Agency (RESA), the State Department of Education or the State Board of Education. This policy shall apply to any private building, or other property including automobiles or other vehicles used for school activities when students or staff are present.
- 3.2. No person shall distribute or use any tobacco product in any area defined in Section 3.1. of this policy at any time. In addition, students under the age of 21 shall not possess any tobacco product at any time in areas or situations defined in Section 3.1.
- 3.3. Individuals supervising students off school grounds are prohibited from distributing or using any tobacco product while in the presence of students or any time while engaged in any activities directly involving students.
- 3.4. No school or board property, as defined in Section 3.1. of this policy, or school, county, RESA or state publication may be used for advertising of any tobacco product.
- 3.5. Groups using areas described in Section 3.1 shall sign agreements with the county board of education agreeing to comply with this policy and to inform students, parents, and spectators that this policy remains in force on evenings, weekends, and other times that school is not in session.

126-66-4. Implementation.

4.1. All county boards of education, schools and RESAs must have a tobacco control policy that meets the stipulations of this policy and adheres to the following guidelines by January 1, 1998. A copy of the county policy should be submitted to the Office of Student Services and Assessment in the West Virginia Department of Education for approval.

4.1.1 Administration:

The tobacco control policy should make reference to:

- a. the responsibility of school administration to implement provisions of this policy, specifically education, communication, and enforcement provisions;
- b. clear procedures for identification, intervention, and referral of students with tobacco-related problems; and
- c. maintenance of an environment for students, staff, and visitors that presents no physical harm, discomfort, or unsanitary condition resulting from tobacco product use.

4.1.2. Communication: The tobacco control policy must include, at a minimum, procedures for communicating the policy to students, school staff, parents, families, visitors, and the community at large. This policy must be communicated through, at a minimum, the following mechanisms:

- a. staff development;
- b. employee and student handbooks;
- c. parent/guardian notification; and
- d. general public notification (e.g., signs, announcements)

4.1.3. Prevention Education: The tobacco control policy should reference, at a minimum, required K-12 tobacco prevention education as outlined in the following:

- a. State Board of Education Policy 2520, Health Education; and
- b. Safe and Drug-Free Schools guidelines.

4.1.4. Cessation Support Education: The tobacco control policy must address how the RESA, county or school plans to:

- a. provide or refer, if available, to voluntary cessation education and support programs which address the physical, psychological, and social issues associated with nicotine addiction and provide on-going support and reinforcement necessary for desired behavior change; and
- b. provide information about available programs to all 7-12 grade students and staff on a regular basis.

4.2. Board Action: All county boards of education, schools, RESAs and the State Department of Education must develop procedures to assure compliance with the stipulations of this policy. Compliance is mandatory.

4.2.1. Enforcement provisions for students, staff and the public are to be included in policy.

- a. Such action for students may include, but is not limited to: counseling, school/community service, parent guardian notification, mandatory education sessions, police notification, and/or prosecution.
- b. Such action for staff may include, but is not limited to: referral to Employee Assistance Program (EAP); conference with supervisor; and disciplinary actions consistent with county, RESA or State Board of Education personnel policy.
- c. Such action for the public may include, but is not limited to: request to stop use or leave premises; and police notification.

4.2.2. Enforcement measures should be aligned with:

- a. State Board of Education Policy 4373, Student Code of Conduct;
- b. State Board of Education Policy 5310, Personnel Staff Evaluation: Professional Responsibilities and Performance Standards;
- c. State Board of Education Policy 1461, Drug-Free Workplace; and
- d. W.Va. Code 16-9A-1 through 16-9A-4, Tobacco Usage Restrictions.

4.2.3. In addition, the policy should include referral to law enforcement authorities for appropriate action on violations of W.Va. Code 16-9A-1 through 16-9A-4 in accordance with measures outlined in individual school, county, or RESA policies.

4.3. Policy Review: The tobacco control policy should include provisions to review the policy every two years and make appropriate modifications as necessary.



I. Introduction: Smokefree and Tobacco-Free School Environments

Why important?

- Individual health of smokers/potential smokers
- Secondhand smoke as a source of short- and long-term health effects
- Secondhand smoke as an asthma trigger for students, faculty, and staff

II. Tobacco use among students

- Tobacco use usually begins in early adolescence.
- Cigarette smoking during childhood and adolescence produces significant health problems among young people. [For longer presentation: add information about health problems]
- Preventing young people from starting to use tobacco is critical to reducing the death and disease caused by tobacco use. [For longer presentation: add information about number of current smokers under 18; numbers of tobacco deaths, etc.]

III. Tobacco, indoor air quality and asthma

- Secondhand smoke is a major indoor air pollutant, containing about 4,000 chemicals, including 200 known poisons, such as formaldehyde and carbon monoxide, as well as 43 carcinogens.
- Secondhand smoke is a major asthma trigger for students, faculty, and staff; secondhand smoke worsens the asthma of an estimated 200,000 to 1 million children.
- Asthma stats/overview:
 - leading serious chronic illness among children
 - current attack prevalence is 4 million American children under 18¹
 - accounts for 14 million lost school days; is the leading causes of school absenteeism due to a chronic condition; third leading cause of hospitalization among children under 15
 - asthma breathing problems happen in episodes—can be anywhere from mild to life-threatening, requiring emergency medical treatment
 - each person with asthma has specific triggers; for many, it's cigarette smoke
- Creating asthma-friendly schools must include comprehensive smokefree policies.

IV. Tobacco as a workplace issue for faculty and staff

- Smokefree workplaces provide clean indoor air and protect employees from life-threatening effects of secondhand smoke.
- Health effects can have a major impact on employees' morale, productivity and sense of well-being.
- A smoking employee costs the employer at least \$1,000 per year in total excess direct and indirect healthcare costs.
- Workers have been awarded unemployment, disability and worker's compensation benefits for illness and loss of work due to exposure to secondhand smoke.

V. Tobacco use prevention [note: for short presentation, this section can be deleted.]

American Lung Association recommends that community/state policies to prevent tobacco use among young people should include:

- Tobacco education in the schools
- Restrictions on tobacco advertising and promotions on and near school grounds
- Complete ban on smoking by anyone on school grounds
- No sale of tobacco products to minors
- Tax increases on tobacco products so young people cannot afford them

—continued—

¹ 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).

VI. Elements of school-based smokefree policies [Note: for short presentation, this section can be shortened or deleted.]

- Educating students about how to resist social influences to smoke; incorporate specific tobacco use prevention programs
- Sustaining comprehensive school health education and community-wide programs that involve parents, media, community organizations and other elements of the adolescent's social environment
- Using teen-focused smoking cessation programs that involve appropriate facilitators who work well with teens in a non-judgmental way

Note: The net effects of smoking restrictions should reduce the psychosocial benefits of smoking to adolescents, making it less likely that those who experiment with smoking will continue to smoke and become dependent.

VII. Characteristics of model smokefree school policies:

- Smoking on school grounds, in school buildings, on school buses, and at school-sponsored events is prohibited for students, school personnel, and visitors.
- Schools enforce the smokefree policy and consistently administer penalties for violations.
- Disciplinary measures for non-compliance with policy are educational as well as punitive.
- Policy development includes active collaboration with teachers, students, and parent groups to give direction and build support for tobacco-free schools.
- All components of a school's smoking policy, including consequences for violations, are communicated in written and oral form to students, staff, and visitors.
- District-wide educational programs addressing the prevention of tobacco use are initiated or expanded as part of the policy implementation process.
- Smoking cessation programs or other incentives are developed for students, school personnel, and if possible, the public.
- Programs are periodically evaluated to provide information on acceptance and effectiveness of policy.
- Schools do not accept any contributions from the tobacco industry, including direct financial support and materials paid for or produced by or for the tobacco industry.

◆ **Recommended Component:** **Provide Smoking Cessation Services for Students and Staff**

Simply creating a tobacco-free policy will not solve the main problem faced by smokers who want to quit: it's tough to quit smoking. Providing smoking cessation services for both students and staff will support them directly as they work to meet the policy. Helping smokers quit will increase the chances that your policy will have fewer violations, and that students and staff will be healthier.

According to CDC, 10.0% of states and 42.0% of districts require districts or schools to provide tobacco-use cessation to students when needed. Additionally, 34.3% of districts have arrangements with organizations or professionals not located on school property to provide one-on-one or small-group discussions on tobacco-use prevention to students when needed, and 29.0% have arrangements to provide tobacco-use cessation.⁶

Provide Smoking Cessation Services Checklist

- Seek funding for school-based cessation from tobacco funding sources
- Establish a district-wide policy ensuring access to cessation services
- Create mandatory brief intervention as consequence of violating policy
- Provide voluntary smoking cessation services on demand

- ▶ **Seek funding for school-based cessation from tobacco funding sources.** These may include sources such as state tobacco tax, master tobacco settlement funds, and CDC-sponsored state tobacco programs.
- ▶ **Establish a district-wide policy ensuring access to cessation services.** This will provide ready services to anyone ready to quit smoking.
- ▶ **Create mandatory brief intervention as consequence of violating policy.** This will, at a minimum, introduce cessation support and options to smokers. See the State of North Carolina Tobacco-Free Violation/Intervention Policy included with this hand-out.
- ▶ **Provide voluntary smoking cessation services on demand, if able.** For example, offer the American Lung Association's *Not On Tobacco (N-O-T)* program for students, which is voluntary and implemented by trained facilitators in the school. Provide resources for staff cessation, such as the American Lung Association's *Freedom From Smoking® Online* program and/or support materials. Schools should identify available resources in the community and provide referral and follow up services to students. Local tobacco coalitions or the local health departments often keep a list of available tobacco cessation resources. Consider using a proven, validated program such as those that are certified by the Substance Abuse and Mental Health Services Administration (SAMHSA). Model program information is available online (<http://www.modelprograms.samhsa.gov/template.cfm?CFID=9784845&CFTOKEN=84802>).

REFERENCE MATERIALS

- ❖ State of North Carolina Tobacco-Free Violation/Intervention Policy

⁶ Fact Sheet: Tobacco-Use Prevention. CDC's School Health Policies and Programs Study (SHPPS) 2000 (accessed August 4, 2006, <http://www.cdc.gov/healthyyouth/shpps/factsheets/pdf/tobacco.pdf>)



STATE OF NORTH CAROLINA Tobacco-Free Violation/Intervention Policy

Enforcement policies for students, staff, and visitors:

1st Offense

Tobacco education/alternative to suspension course or a one-day suspension; parent notification

2nd Offense

Tobacco education/alternative to suspension course is mandatory; parent notification

3rd Offense

Three-day suspension; parent notification

4th Offense

Administrator's discretion

Enforcement for staff should follow the school's personnel regulations as with any other personnel policy.

Enforcement policies for visitors: Communicate, communicate, communicate!

◆ **Recommended Component: Use Integrated Pest Management (IPM) Techniques to Control Pests**

Exposure to pesticides can cause both short-term and long-term health problems. In addition to pesticides being used on school property, some buildings in rural areas are at risk of “pesticide drift,” which may lead to pesticide exposure for students and staff. Researchers recommend that school establish IPM programs and take additional preventive measures (reduction in pesticide drift and pesticide spray buffer zones) to protect students and staff.⁷

IPM is an effective and environmentally-sensitive approach to pest management, relying on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interactions with the environment. This information is used to manage pest damage by the most economical and safest means. IPM is mandated for use in schools in some states. Be sure to check with your state to determine if IPM is mandated in schools.

Use IPM Techniques checklist

- Implement an IPM program in the school as part of a broader IAQ management program
- Establish policies and/or laws requiring notification of school personnel, students and families before pesticide application
- Raise awareness in school and community about the need for and benefit of IPM practices
- Establish school district IPM policies & track effectiveness
- Work with teacher associations and labor unions/associations to ensure IPM language is in contract.

► **Implement an IPM program in the school as part of a broader IAQ management program.** A school IPM program includes seven steps:

- Develop an official IPM policy statement
- Designate pest management roles for occupants, pest management personnel, and key decision-makers
- Set pest management objectives for each site
- Inspect sites and identify and monitor pest populations for potential problems
- Set action thresholds, which are levels of pest populations or environmental conditions that require remedial action
- Apply IPM strategies to control pests
- Evaluate results to determine if pest management objectives are reached and keep written records of all aspects of the program

► **Establish policies and/or laws requiring notification of school personnel, students and families before pesticide application.** This would aim to eliminate exposure to pesticides, which is related to a range of health effects and illness.

► **Raise awareness in school and community about the need for and benefit of IPM practices.** Key points are:

⁷ Alarcon, W.A., Calvert, G. Blondell, J. et al. Acute Illnesses Associated with Pesticide Exposure at Schools. Journal of the American Medical Association, July 27, 2005—Vol 294, No. 4, 455-465.

- Controlling pests can help control asthma, as it will decrease triggers such as cockroaches
 - Using unnecessary chemicals to control pests increases health risks, particularly in children
 - IPM presents alternatives to scheduled spraying of pesticides
 - IPM provides a cost-effective strategy to controlling pests
- **Establish school district IPM policies & track effectiveness.** See the Sample School Pest Management Policy Statement in the IAQ Coordinator's Guide (p. 44-45) of IAQ Tools for Schools or the Sample Integrated Pest Management School Policy included with this hand-out.
- **Work with teacher associations and labor unions/associations to ensure IPM language is in contract.** Faculty and staff, through union/association commitment, can require specific IPM management to ensure that they are not exposed to pests and pesticides.

Detailed information on IPM programs is available from EPA's Office of Pesticide Programs (www.epa.gov/pesticides).

REFERENCE MATERIALS

- ❖ Sample Integrated Pest Management (IPM) School Policy



Sample School Policy

This model policy was derived from existing elements of policies currently being implemented in the San Francisco Unified, Los Angeles Unified, Oakland Unified, Ventura Unified, and Kentfield school districts.

(School Name) School District Least-Toxic Integrated Pest Management Policy

(adopted __/__/__)

The _____ School District ("District") recognizes that the maintenance of a safe, clean and healthy environment for students and staff is essential to learning. It is the goal of the District to provide for the safest and lowest risk approach to control pest problems, while protecting students, staff, the environment, and District property.

The District recognizes that pesticides pose risks to human health and the environment, with special risks to children. It is recognized that pesticides cause adverse human health effects such as cancer, neurological disruption, birth defects, genetic alteration, reproductive harm, immune system dysfunction, endocrine disruption, and acute poisoning.

The District hereby adopts the Precautionary Principle as the basis for this Least-Toxic Integrated Pest Management (IPM) policy. The Precautionary Principle states that "When an activity raises threats of harm to the environment or human health, precautionary measures should be taken, even if some cause-and-effect relationships are not fully established."

The District hereby adopts a Least-Toxic IPM Policy. This policy shall focus on long-term pest prevention and give non-chemical methods first consideration when selecting appropriate control techniques. The full range of alternatives, including taking no action, will be considered first, with chemical controls used as a last resort, giving preference to chemicals that pose the least hazard to people and the environment and excluding use of the most hazardous pesticides. The District's long-term goal is the eventual elimination of all chemical pest control methods.

A. Elements of the Least-Toxic IPM Policy

1. Establishing pest management area objectives (e.g., kitchens, playgrounds, classrooms).
2. Monitoring to determine pest population levels and identify decisions and practices that could affect pest populations.
3. Setting of injury and action levels to determine when vegetation or a pest population at a specific site cause(s) unacceptable economic or medical damage wherein corrective action should be taken.
4. Eliminating pest habitats to deter pest populations and minimize pest infestations.
5. Utilizing pest prevention methods, such as structural modification, and/or employing progressive non-chemical methods.
6. Employing as a last resort pesticides from the approved list, and, if demonstrated to be necessary, pesticides from the limited use list.

B. Decision-making Process

IPM Committee

An IPM Committee shall be established within 45 days of the passage of this policy to develop implementation guidelines and oversee implementation of this IPM policy. The IPM Committee will be responsible for identifying an approved list of pest control products that may be used in the District, ensuring that banned chemicals (see section C below) are not on the approved list. The Committee will also develop a plan for training (see section D below). The Committee will include at least one representative of each of the following groups: district parents, district students, district teachers, school administrators, district principals, public health representatives, environmental representatives, building and grounds or maintenance staff, and the IPM Coordinator.

IPM Coordinator

The District shall designate an IPM Coordinator. This person shall be responsible for coordinating school district efforts to adopt IPM techniques, communicating goals and guidelines of the IPM Program to staff and students, providing proper training, tracking pesticide use and ensuring that related information is available to the public, and presenting an annual report to the school board evaluating the progress of the IPM Program. The IPM Coordinator is responsible for all purchasing of pesticides to be used on District sites. Only persons specifically authorized by the IPM Coordinator are permitted to bring or apply pesticides on district sites or property; other site employees and non-employees are not permitted to bring or apply pesticides on district property.

C. Product Selection and Use Approval

Products selection will be based on IPM Committee review of the product's contents, precautions, and adverse health effects. The IPM Committee will make product recommendations to the board for final approval.

Products will be divided into three classifications: Approved Use List, Limited Use List and Banned Use List. If the use of a material not on either the Approved Use List or the Limited Use List is deemed necessary, the IPM Coordinator may apply for an emergency exemption. (See Section 4 below.)

1. Approved Use Products List

The IPM Coordinator shall maintain a list of all pesticides that the board has approved for use in the schools, along with any restrictions for such use. This list shall be referred to as the Approved Use Products List. The Approved List shall include, but not be limited to:

- Insecticide or rodenticide baits and traps;
- Caulking agents and crack sealants;
- Borates, silicates, and diatomaceous earth;
- Soap-based products;
- Natural products on the FIFRA's 25(b) list (40 CFR part 152.24(g)(1));
- Natural products on the California Certified Organic Farmers organic list;
- EPA "Generally Recognized as Safe" (GRAS) products pursuant to federal EPA;
- Cryogenics, electronic products, heat, and lights;

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Pesticide Action Kit

- Biological controls, such as parasites and predators;
- Microbial pesticides;
- Insect growth regulators; and
- Physical barriers.

2. Limited Use Products

A pesticide applicator or district staff may submit a written request to the IPM Committee that a particular pesticide not on the Approved List be approved for use for a specific and limited purpose. Limited Use Products may not be pesticides on the Banned Use List. The request must be reviewed by the IPM Committee, signed by the IPM Coordinator, and approved by the board. The IPM Committee may grant a limited use exemption, not to exceed three months, upon finding that the pesticide applicator has:

- Identified a compelling need to use the pesticide;
- Made a good-faith effort to find alternatives to the particular pesticide;
- Demonstrated that effective, economic alternatives to the particular pesticide do not exist for the particular use; and
- Developed a reasonable plan for investigating alternatives to the pesticide in question during the exemption period.

3. Banned Use Products List

The following high health risk pest management products will not be allowed on the Approved List:

- Pesticides linked to cancer, (US EPA Class A, B and C carcinogens and chemicals known to the state of California to cause cancer under Proposition 65);
- Pesticides that cause birth defects or reproductive or developmental harm (identified by the US EPA or known to the State of California under Proposition 65 as reproductive or developmental toxins);
- Pesticides that interfere with human hormones;
- Pesticides classified as Toxicity Categories I and II by US EPA;
- Carbamate or organophosphate pesticides; and
- Foggers, bombs, fumigants or sprays that contain pesticides identified by the state of California as potentially hazardous to human health (CFR 6198.5).

4. Emergency Exemptions

The IPM Committee may allow trained district staff or a company contracted to provide pest control to the district to apply a pesticide not on the approved or limited use lists if necessary for the protection of public health. Such exemptions shall be granted on a case-by-case basis and shall apply to a specific pest problem for a limited time. The IPM Coordinator may grant emergency exemption only if action is required before the next meeting of the IPM Committee. The Coordinator shall report all such emergency exemptions to the Committee.

D. Training

Training of personnel is critical to the success of an IPM program. Staff, students, pest managers, and the public shall be educated about potential school pest problems, the Least-Toxic IPM Policy, and procedures that will be used to achieve the desired pest management objectives. Within five months of district adoption of this policy, the IPM Committee will agree on a plan to educate and train these constituencies.

E. Contractors

All pest control companies contracted by the District shall follow all provisions of the policy.

F. Notice, Recordkeeping and Reporting

In compliance with and in addition to the notification, posting, and recordkeeping requirements mandated by the Healthy Schools Act, the District will notify parents, employees and students of all pesticide applications using the following guidelines:

1. The district will provide annual notification to parents or guardians in the Registration Packet distributed at the beginning of each school year or upon enrollment. Notification will include:
 - a. The IPM Policy statement;
 - b. The Approved list of pesticide products;
 - c. The availability of IPM activity records in the main office of each school; and
 - d. A request that parents or guardians notify the school principal if they believe that their child's health and/or behavior would be influenced by exposure to pesticide products.
2. The Approved List and Banned List will be conspicuously posted annually in the main office of each site and remain posted throughout the year.
3. Applications of products not on the approved list will be preceded by a 72-hour notification of parents or guardians and school staff, except for emergencies as determined by the IPM coordinator under section C(4) above. The IPM committee may require notification of Approved List Products.
4. Notification will include:
 - a. The product name and active ingredient;
 - b. Target pest;
 - c. Date of pesticide use;
 - d. Signal word on the label indicating the toxicity category of the pesticide;
 - e. Contact for more information; and
 - f. Availability of further information at the school's main office.
5. Records of each pest management action shall be available upon request to the public and kept at the school site for a period of at least four years. As required by the Healthy Schools Act, each record shall include the following information:
 - a. Name and address of the school site;
 - b. Location of the pesticide application;
 - c. Target pest;
 - d. Date and time the pesticide or management action was completed;
 - e. Pesticide product name/manufacture;
 - f. EPA/California registration number from product label;
 - g. Total quantity of pesticide product used (in lbs., oz., pt., qt., gals.);
 - h. Rate of use per acre;
 - i. Dilution;
 - j. Size of the area treated;
 - k. Application method (i.e., ground, air or other);
 - l. Application equipment used;
 - m. Re-entry period if applicable; and
 - n. Name of the pesticide applicator.
6. Signs shall be conspicuously posted around any area where pesticides not on the Approved List are to be applied in a non-emergency situation at least 72 hours before and 72 hours after application. In the event of an emergency as determined above, posting will go up at the time of the application. Signs shall include the information listed in Section 3 (Banned Use Products) above.

For more information on school pest control that protects children's health, contact the Healthy Schools Campaign at 888-CPR-4880 or <http://www.calhealthyschools.org>.

◆ **Recommended Component:** **Manage Students' Exposure on High Outdoor Air Pollution Days**

Information about daily, localized outdoor air pollution is readily available through the EPA's Air Quality Index (AQI), which is a standardized system that state and local air pollution control programs use to notify the public about levels of air pollution. The color-coded AQI delivers specific information about steps to protect yourself on high pollution days. (See the AQI Fact Sheet included with this hand-out.)

When ozone or particle pollution levels reach Orange or Red on the AQI, people with asthma should limit or avoid prolonged outdoor physical exertion. On Red days, everyone (including those without health problems) should avoid outside exertion. When ozone or particle pollution levels reach yellow on the AQI, unusually sensitive individuals should consider reducing prolonged or heavy exertion; this may include some people with asthma.

Schools should understand the relationship between particle pollution and ozone and health and be prepared to take specific action. Complete information about the AQI and accessing local air quality information is available through EPA's Airnow project. The Airnow homepage (<http://www.epa.gov/airnow>) provides information about particle pollution, smog, air quality levels, and a student curriculum on the AQI (<http://www.epa.gov/airnow/aqikids/index/html>).

Manage Students' Exposure on High Outdoor Air Pollution Days Checklist

- Establish school policies to manage exposure on high pollution days
- Raise awareness of air pollution effects and symptoms among school personnel, parents, and students
- Prepare to respond to local situations other than smog and particle pollution that may affect air quality
- Implement individual management of exposure to outdoor air pollution for sensitive students

► **Establish school policies to manage exposure on high pollution days.**

Schools policies that manage students' exposure on high pollution days should be based on recommendations included in the AQI, which reports localized particle pollution and ozone (smog) levels. (See the sample School Policy for Managing Students' Exposure to Outdoor Air Pollution and Important Information on Ozone and Your Child's Health included with this hand-out.)

Specifically, when particle pollution and/or ozone levels reach the "Orange" level, all children and exercising adults are at risk for health problems from ozone exposure. Schools should limit outdoor exertion for all children and exercising adults (including high school athletes). When pollution levels reach the "Red" level, all children and adults should avoid prolonged outdoor exertion.

Consider three basic principles to protect children on high pollution days:

- Plan to make changes in athletic practices and/or games/meets when AQI levels reach Orange and/or Red levels, according to information reported by EPA on its outdoor air pollution page, www.epa.gov/airnow.

- Schedule activities during “off-peak” times of year when high air pollution episodes are not anticipated; this is pertinent for outdoor physical education activities or other “intramural” outdoor activities.
- Provide lower-impact activities for children with asthma who are sensitive to particle or ozone pollution.

See the resource, Solutions for Physical Education and Recess on High Ozone Days, included with this hand-out.

► **Raise awareness of air pollution effects and symptoms among school personnel, parents, and students.**

Include information about the relationship between outdoor air pollutants and asthma during staff in-services, student asthma education programs, and parents’ group and individual meetings. Distribute the EPA publications *Smog: Who Does It Hurt?* and *Particle Pollution and Your Health* (available online at <http://www.epa.gov/airnow>).

► **Prepare to respond to local situations other than smog and particle pollution that may affect air quality.**

Situations other than a high ozone or particle pollution day may result in students and staff being exposed to other harmful pollutants other than ozone. Schools should set policies based on information provided by local health departments or air pollution control agencies. Exposures may include (but are not limited to):

- sulfur dioxide from nearby factories and power plants
- diesel exhaust
- agricultural burning
- forest fires and pesticide spraying/pesticide drift

► **Implement individual management of exposure to outdoor air pollution for sensitive students.**

Consider basing this on three key items:

- Asthma Action Plans should include information on air pollutants, such as any known outdoor pollutants that are triggers for individuals
- Modify activities and exposure for students with respiratory symptoms on high pollution days
- Establish a referral process for students with symptoms, to confirm outdoor air pollution as a trigger; this would involve communication between schools, parents, and primary care physician or medical home

REFERENCE MATERIALS

- ❖ Air Quality Index Fact Sheet
- ❖ Sample School Policy for Managing Students’ Exposure to Outdoor Air Pollution
- ❖ Important Information on Ozone and Your Child’s Health
- ❖ Solutions for Physical Education and Recess on High Ozone Days



THE AIR QUALITY INDEX FACT SHEET

Using Air Quality Information to Protect Yourself From Ozone Air Pollution

The Air Quality Index, or AQI, is the standardized system that state and local air pollution control programs use to notify the public about levels of air pollution. Keeping track of the current air quality information can help you plan your activities during the ozone season so as to minimize your exposure to unhealthy levels of air pollution. This is especially important for people who are sensitive to air pollution, including young children, and people with asthma and other lung diseases. The American Lung Association also recommends that the elderly take precautions on high ozone and high particle pollution days.

How Does the Air Quality Index Work?

In most cities and suburbs, air pollution levels are measured daily and ranked on a scale of 0 for pristine air all the way up to 500 for air pollution levels that pose immediate danger to the public (fortunately, we do not have pollution levels that high in this country anymore). The AQI further breaks air pollution levels into five categories, each of which has a descriptor (name), color, and advisory statement. The AQI tracks levels of two pollutants: ozone (smog) and particle pollution. The purpose of the AQI is to help you understand what local air quality means to your health. To make it easier to understand, the AQI is divided into six categories. Each category corresponds to a different level of health concern. The six levels of health concern and what they mean are:

- **“Good”** The AQI value for your community is between 0 and 50. Air quality is considered satisfactory, and air pollution poses little or no risk.
- **“Moderate”** The AQI for your community is between 51 and 100. Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.
- **“Unhealthy for Sensitive Groups”** When AQI values are between 101 and 150, members of sensitive groups may experience health effects. This means they are likely to be affected at lower levels than the general public. For example, people with lung disease are at greater risk from exposure to ozone, while people with either lung disease or heart disease are at greater risk from exposure to particle pollution. The general public is not likely to be affected when the AQI is in this range.
- **“Unhealthy”** Everyone may begin to experience health effects when AQI values are between 151 and 200. Members of sensitive groups may experience more serious health effects.
- **“Very Unhealthy”** AQI values between 201 and 300 trigger a health alert, meaning everyone may experience more serious health effects.
- **“Hazardous”** AQI values over 300 trigger health warnings of emergency conditions. The entire population is more likely to be affected.

EPA has assigned a specific color to each AQI category to make it easier for people to understand quickly whether air pollution is reaching unhealthy levels in their communities. For example, the color orange means that conditions are “unhealthy for sensitive groups,” while red means that conditions may be “unhealthy for everyone,” and so on.

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201-300	Health alert: everyone may experience more serious health effects.
Hazardous	> 300	Health warnings of emergency conditions. The entire population is more likely to be affected.



Sample School Policy Managing Student's Exposure to Outdoor Air Pollution

Monitoring Ozone Levels:

The school district is responsible for monitoring and disseminating to the schools the air pollution information/forecast. This information will be gathered daily from (the media, local air pollution control agency, health department, etc.) and, when there is elevated air pollution, disseminated to each school principal via (phone, email, and fax).

Reducing Student Exposure:

Decisions for reducing exposure to air pollution will be based on individual student risk. Students at highest risk (including upper elementary and middle school students, students with respiratory diseases, and sports or activities that require heavy exertion for extended periods of time) will be protected.

On **Orange Days**, the school will be aware and monitor for individual symptoms. Students with a history of reactions to ozone exposure (often 24 hours after exposure) will be encouraged to minimize their exposure, via reduced exertion and/or duration.

On **Red Days**, the school will limit exposure for all students to one hour at heavy exertion levels (this includes sports that require high intensity workouts for long periods: basketball, soccer, running). Potential solutions to limit exposure include (but are not limited to):

- 1) Having practice/games inside
- 2) Having practice/games early in the day before ozone levels rise
- 3) Rotating players often and having breaks
- 4) Lowering exertion during practice (examples include skill building versus endurance training)



Important Information on Ozone and Your Child's Health

Dear Parent:

High levels of ozone in the air we breathe can have serious health effects on any person. In our area, high ozone can occur between the months of _____ and _____. Since that falls partly within the school year, we wanted to notify you of the school's policy on ozone exposure (enclosed) and provide you with information on signs and symptoms of ozone exposure as they can occur more than 24 hours after exposure.

Symptoms may include:

- 1) shortness of breath
- 2) coughing
- 3) pain when taking a deep breath
- 4) wheezing
- 5) eye and nose irritation

Talk to your doctor if your child complains of the symptoms listed above, especially if they occur after high ozone days. Please let us know if your child has been impacted by ozone. This information will allow us to develop an exercise routine that allows your child to get plenty of exercise without feeling unwell. Also, if your child has a history of asthma, please be sure to contact the school nurse with all appropriate health forms.

For more information about ozone and how it affects health, please read the publication, "Smog: Who Does It Hurt?" from the Environmental Protection Agency (EPA). You can access the publication on the EPA's website, at <http://www.epa.gov/airnow/health/>. If you do not have access to the internet, we can provide a copy of the document for you to read.

We look forward to a healthy and active new school year!

Enclosure: School Ozone Policy



Solutions for Physical Education and Recess on High Ozone Days

It is important to remember that ozone affects each child differently. Therefore, the best way to monitor activities during times of elevated exposure to ozone is to have children monitor and report any symptoms that might be related to ozone. If a child is particularly affected by ozone, or has been in the past, take steps to ensure that their exposure or activity level is reduced to decrease the chance of symptoms.

Purple Days:

Move activities inside

On **Red or Orange Days**, it is possible to reduce the risk of breathing problems by reducing exposure (either lowering the intensity of the activity or reduce the time exposed). **Always watch children carefully for signs of distress and ensure ready access to medications for kids with asthma.**

Possible Ways to Reduce Risk:

- 1) Reduce intensity of the activities:
 - a. Switch out players more often during practice and games
 - b. Focus on skill development versus endurance training
 - c. Alternate endurance activities with skills development
 - d. Take frequent rest and water breaks
- 2) Spend part of practice indoors and part outdoors
- 3) Split practice into two parts: one before and one after school
- 4) During weeks or months of high ozone, move practices to before school
- 5) Shorten the length of practices
- 6) Move inside when practical

Managing Physical Education & Activity

ABOUT PHYSICAL EDUCATION & ACTIVITY

Promoting participation in physical activity and sports among young people is a critical national priority, given our nation's sedentary lifestyle and the unprecedented rates of childhood obesity plaguing the United States. Physical activity is the first leading health indicator highlighted in Healthy People 2010. Regular participation in physical activity during childhood and adolescence helps build and maintain healthy bones, muscles, and joints; helps control weight, build lean muscle, and reduce fat; prevents or delays the development of high blood pressure and helps reduce blood pressure in some adolescents with hypertension; and reduces feelings of depressions and anxiety.^{1,2}

Physical activity has been shown to increase adolescents' self-esteem and reduce anxiety and stress³, which may increase students' capacity for learning. One study conducted by the California Department of Education in 2002 identified a distinct relationship between academic achievement and physical fitness. Specifically, higher reading and math achievement was associated with higher levels of fitness at three grade levels measured and students who met minimum fitness levels in three or more physical fitness areas showed the greatest gains in academic achievement at all three grade levels.⁴ Clearly, physical education classes and recess offer children these critical opportunities for physical activity during the school day. Their value to students' overall health and ability to learn should not be minimized.

HOW PHYSICAL ACTIVITY CAN AFFECT CHILDREN WITH ASTHMA

Children with well-controlled asthma are able to participate and are encouraged to participate in all forms of physical activity. For those students whose asthma is not well controlled, however, vigorous exercise will cause asthma symptoms.

¹ U.S. Department of Health and Human Services, U.S. Department of Education. Promoting Better Health for Young People Through Physical Activity and Sports. Washington, DC: U.S. Department of Health and Human Services. December 2000.

² U.S. Department of Health and Human Services. Healthy people 2010: Understanding and Improving Health. Washington, DC: U.S. Department of Health and Human Services, Government Printing Office, 2000.

³ U.S. Department of health and Human Services. Physical Activity and Health: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

⁴ "State Study Proves Physically Fit Perform Better Academically" (Rel #02-37). California Department of Education news services. California Department of Education Web site (<http://www.cde.ca.gov/news/releases2002/rel37.asp>); accessed December 12, 2002

Many students with asthma have “exercise-induced asthma” (EIA). Episodes are triggered by rapid breathing of cold or dry air which occurs with exercise. Students with EIA can and should participate in physical activities. They may need to warm-up gradually and usually need to take pre-exercise medication.

Implementing an asthma-appropriate physical activity program in a school will require education of students, parents, and staff. Its success will rely on a clear channel of communication among the school nurse and/or clinic aide, coaches, athletic trainers, physical education and other teachers, as well as parents, students, and physicians.

As with asthma education and other AFSI components, any policy changes you effect to ensure an asthma-friendly physical activity program can make a long-lasting impact on students with asthma.

PHYSICAL EDUCATION & ACTIVITY COMPONENTS

- ◆ Four components are recommended for ensuring asthma-appropriate physical activity. All are detailed in hand-outs, which include reference materials.
- ◆ Encourage full participation.
- ◆ Manage physical activity for students with asthma.
- ◆ Assure ready access to medication.
- ◆ Provide options for modified activity.

◆ **Recommended Component:** ***Encourage Full Participation When Students are Well***

Students with asthma can participate fully in physical activity when they are symptom-free and in their personal “green” peak flow zones. CDC’s School Health Index suggests that schools consider using a second teacher to assist students and using peer teaching to team students as a way to maximize participation.

Students and teachers/coaches/trainers should pay attention to how the student is feeling, as well as to a reduced peak flow. In accordance with their individual asthma plans, students should check peak flow prior to activity and plan physical activity accordingly. For example, if the student is in the “yellow” zone, he or she may feel fine but should modify activity so as not to exacerbate symptoms. Modifying activity at this point can prevent a full-blown asthma episode. Taking medication may allow the child to move back to the green zone. Several peak flow posters and education materials are available. An American Lung Association Tip Sheet: Peak Flow Meter Readings & Physical Activity Notes is included with this hand-out. (See the Resources section of this toolkit for American Lung Association materials, as well as “Super Web Sites,” which will list many peak flow materials.)

REFERENCE MATERIALS

- ❖ American Lung Association Tip Sheet: Peak Flow Meter Readings & Physical Activity Notes



**American Lung Association Tip Sheet:
Peak Flow Meter Readings & Physical Activity Notes**

Color	Peak Flow Reading	Physical Activity Notes
Green	80-100%	Full participation
Yellow	50-80%	<ul style="list-style-type: none">• student should take rescue inhaler as prescribed• modified participation• inquire about pre-medication• increase warm-up and cool-down periods, etc., per student's Asthma Action Plan
Red	less than 50%	<p>Medical Alert:</p> <ul style="list-style-type: none">• student should take rescue inhaler as prescribed• may require emergency protocol• check student's Asthma Action Plan• no physical activity• if student improves after taking medication as prescribed, include student in activities such as time- or scorekeeper

◆ **Recommended Component:** **Manage Physical Activity for Students with Asthma**

Individuals with exercise-induced asthma do not necessarily have other asthma triggers. For others with asthma, exercise may be one of several triggers. In these specific cases, as well as when asthma is not well-controlled (i.e., when the student has an upper respiratory infection), activity may need to be modified.

There is no perfect physical activity for students with exercise-induced asthma, but all sports are tolerated well when a student's asthma is under control. Further, a student's severity of asthma does not necessarily correlate with aerobic fitness. Specifically, a 2000-2001 study of children with asthma found greater limitation of physical activity among overweight or obese children than among appropriate-weight children with asthma.⁵

While some educators or parents may be apprehensive about the physical activity of a child with asthma, focus them on the lung health benefits of exercise. That is, the lung is healthier the more it is exercised. For people with asthma, strengthening their lungs will mean that they will be better able to deal with their asthma, physically.

Education for physical education teachers and coaches should incorporate a few key points about managing physical activity for students with asthma:

- Students with asthma can and should participate in physical education and sports.
- Students with asthma can fully participate in physical activity when they are symptom-free.
- Activity may need to be modified when a student's asthma is not well-controlled (i.e., when the child has an upper respiratory infection).
- Asthma episodes can kill, so preventing asthma episodes and responding effectively to them are paramount.
- Pre-medication, if prescribed, and physical warm-ups are essential and can help prevent asthma episodes.
- Asthma Action Plans should include modified exercise recommendations from personal physician.
- Appropriate school staff must have access to individual Asthma Action Plans and individual asthma emergency protocol.

UNDERSTANDING MANAGEMENT ASTHMA TOOLS

Teachers, coaches, and athletic trainers should understand peak flow readings and have a reference sheet (see American Lung Association Tip Sheet: Peak Flow Meter Readings & Physical Activity Notes included with this hand-out) so that they can respond appropriately and help manage individual activity. Students should be learning to read peak flow charts and understand how to modify activity based on their own peak flow reading and symptoms.

For students with exercise-induced asthma, physical education teachers, coaches, and athletic trainers should have copies of students' Asthma Action Plans and work with students to be sure that pre-medication and/or any directives for activity modification are followed. (See Modified Physical Activity Plan and Breathing Difficulties Related to Physical Activity for Students with Asthma: Exercise-Induced Asthma included with this hand-out.)

⁵ Pianosi, Paul and Davis, Heather. Determinants of physical fitness in children with asthma. *Pediatrics*, Vol. 113, No. 3. March 2004.

As a general rule, any child not fully participating in the physical education program needs to be reported to his parents. If it is a recurring problem, the student needs to be referred to a doctor (via the school nurse) for care.

Any student in the yellow or red zone without an apparent cause (i.e., student has a cold or is in contact with a known trigger) should be referred to the school nurse, and eventually to his or her healthcare provider for a review of the student's "level of severity" diagnosis and for a potential change in his/her asthma management plan. This is particularly important if the situation occurs more than once.

Physical education teachers and coaches should be prepared to respond to asthma emergencies. See the Sample emergency Response Poster and Asthma Emergency Protocol for Students without Asthma Action Plans, included with this hand-out.

REFERENCE MATERIALS

- ❖ American Lung Association Tip Sheet: Peak Flow Meter Readings & Physical Activity Notes
- ❖ Modified Physical Activity Plan
- ❖ Breathing Difficulties Related to Physical Activity for Students with Asthma: Exercise-Induced Asthma
- ❖ Sample Emergency Response Poster
- ❖ Asthma Emergency Protocol for Students Without Asthma Action Plans



**American Lung Association Tip Sheet:
Peak Flow Meter Readings & Physical Activity Notes**

Color	Peak Flow Reading	Physical Activity Notes
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Asthma and Exercise
General Guidelines when there is no Asthma Action Plan

Peak Flow Meter Zone	Modification
All Students with Asthma	<ol style="list-style-type: none"> 1. Pre-medicate as prescribed by physician 2. Ensure that rescue medication is readily available 3. Ensure long warm-up and cool-down 4. Monitor the environment for potential triggers (change environments if necessary) 5. Permit student to monitor breathing status using a Peak Flow Meter
Green (80 – 100%)	<ol style="list-style-type: none"> 1. No Modifications required 2. Full participation in all activities
Yellow (50 – 79%)	<ol style="list-style-type: none"> 1. Have students take medication as directed by their Asthma Action Plans 2. Consider activities that involve stopping and starting or a warm moist environment 3. Provide appropriate activity modifications, including rest periods and/or lower intensity of activity
Red (0 – 49%)	<ol style="list-style-type: none"> 1. Stop activity 2. Follow emergency asthma plan 3. Help athlete use inhaled medication 4. Call 911 if athlete does not improve

Breathing Difficulties Related to Physical Activity for Students With Asthma: Exercise-Induced Asthma

Information for Physical Educators, Coaches and Trainers

First Aid for Exercise-Induced Asthma

If, during physical activity, you notice that a student is having difficulty breathing, coughing frequently, or wheezing (noisy when breathing out), it may be asthma:

- **STOP the student's** activity and encourage the student to sit and rest.
- **Call 911** immediately if student requests or is in severe distress—struggling to breathe, lips blue, unable to walk or talk.
- Follow the designated **asthma management plan** (individual student plan, if available, or school protocol).
- Follow the school protocol to **notify the school nurse** (or other designated staff) if medication is not available or if symptoms are not resolved within 5 to 10 minutes after using the inhaler.
- **Never** let a child with breathing problems leave the gym or field **alone**.
- If symptoms resolve, permit students to **resume activity** when they are ready, according to their asthma management plan.
- Follow the school protocol to **inform parents** of the event and document actions taken.



This guidance sheet was developed as a partnership activity facilitated by the NAEPP, coordinated by the NHLBI of the NIH/DHHS

March 2005

Ways To Help Students with Asthma Participate in Physical Activity

Identify Students with Asthma in Your Class or on Your Team

- Ask your school nurse or use student health information to identify those students who have a diagnosis of asthma or a history of asthma symptoms with physical activity.
- Ask the school nurse for a copy of each student's asthma management plan. Keep the copies easily available for all on-site and off-site activities.
- Discuss with students (and parents, if appropriate), the individual student's triggers, signs and symptoms that relate to physical activity.
- Take appropriate steps to inform a student's parents/guardians if the student frequently experiences asthma symptoms with physical activity. The student's asthma management plan may need to be re-evaluated by the student's physician because most students with asthma should be able to participate fully in physical activities, most of the time.
- Help students and the school nurse make sure that the students' prescribed asthma medicines are available for use, according to their asthma management plans, before physical activity and as needed for acute symptoms,

Encourage Students to Prepare for Physical Exercise

- Students who have been prescribed pre-exercise treatment (usually an inhaled quick-relief bronchodilator) should take their medicine 5 to 10 minutes prior to exercise
- Encourage a period of warm-up activity before exertion (e.g., walking, flexibility exercises, or other low-intensity activities).
- Check the student's asthma management plan for information about his or her triggers, and help the student avoid them when possible. Each student with asthma is sensitive to different factors in the environment, called triggers. Common triggers include dust, pollen, mold, air pollution, and smoke. Cold, dry air can also trigger asthma; wearing a scarf or cold air mask will help because it warms and humidifies the air before it reaches the airways.

Consider Modified Exercise as Needed

- If a student has obvious wheeze, breathing difficulty, or measures a low peak flow rate prior to exercise, have the student treat his/her symptoms according to the asthma management plan. The treatment is usually with prescribed inhaled quick-relief bronchodilator. Physical activity may then be either resumed, modified or halted, depending on the student's response to treatment.
- When a student is having mild symptoms or when triggers are present, consider modifying the intensity, location, or duration of physical activity. Very intense, continuous activity is more likely to cause asthma symptoms than intermittent or very light or non-aerobic exercise (e.g., walking, some field events, or weight training). There is no perfect physical activity for people with exercise-induced asthma. All sports are tolerated well when a student's asthma is under control.
- When environmental conditions are bad (e.g., ozone alerts, high pollen counts, freshly cut or sprayed fields) students with asthma may need to avoid being physically active outdoors.

5 Steps to Follow for an Asthma Episode in the School Setting

If student has excessive coughing, wheezing, shortness of breath, or chest tightness:



Help to an upright position; speak calmly and reassuringly



Follow individualized action/emergency plan for use of quick-relief inhaler



If quick-relief inhaler or action/emergency plan not available, send to health office accompanied by peer or with staff member



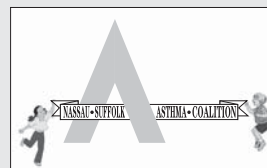
Get emergency help from school nurse or designated emergency staff if student has any of these:

- Inhaler not helping
- Breathing hard & fast
- Nostrils open wide
- Can't walk or talk well

**Call
911**

If not breathing, unconscious, lips are blue, struggling to breathe (hunched over or ribs show), or other signs of distress

Notify parent or guardian.



Contact (631) 231-5864 X12



Asthma Emergency Protocol for Children with Asthma Who Do Not Have Their Own Emergency Plan

ASTHMA (or Respiratory Distress) Standard Protocol for Students without a Personal Asthma Action Plan

POSSIBLE OBSERVATIONS/SYMPTOMS

(May include one or more of the following.)

- Coughing, wheezing, noisy breathing, or whistling in the chest
- Difficult breathing, tightness in chest, shortness of breath, or chest pain
- Self reporting/complaints of discomfort when breathing
- Breathing hard and fast
- Nasal flaring (front part of nose opens wide to get in more air)
- Can only speak in short sentences or not able to speak
- Blueness around the lips or fingernails

ACTIONS

1. **Quickly evaluate the child. Call 911 and immediately administer quick-relief medication if in severe distress! (For example: unable to speak, lips blue or peak flow < 50% of predicted best).** Administer oxygen, if available, and patient is in respiratory distress.
2. Restrict physical activity and allow student to rest. Encourage student to breathe slowly and relax.
3. Place the student in an area where he/she can be closely observed. Never send a student to the health room alone.
4. Check and record:
 - a. Peak flow meter reading. (If personal best is unknown, use prediction chart.)
CALL 911 if peak flow is less than 50% of personal or predicted best.
 - b. Respirations and pulse (Normal rates listed on back. Report to MD or EMS)
5. **Administer quick-relief medication. Medication must be ordered by a personal physician order or a standing order signed by a school physician or public health physician.**
Administer albuterol from school supply, if available and student does not have a personal albuterol inhaler. Use a spacer and disposable mouthpiece.
6. Contact parents (even if situation does not appear severe).
7. Reassess student after 10-15 minutes. Check for ease of breathing, peak flow, pulse, and respirations.
8. If student is improving, keep the student in the health room under supervision until breathing returns to normal.
9. **If student is not improving contact student's physician or call 911.**
10. With parental permission, provide report of health room encounter to student's physician.
11. Obtain a personal asthma action plan for this student from the student's family or physician.

Normal Breathing and Pulse Rates by Age (from EPR-2)

Age	Breathing Rate	Pulse Rate
< 2 months	<60/minute	<160/minute
2-12 months	<50/minute	<120/minute
1-5 years	<40/minute	<110/minute
6-8 years	<30/minute	<110/minute
9-15 years	<30/minute	<100/minute
16-18 years	<20/minute	<90/minute

◆ **Recommended Component:**
Ensure Ready Access to Pre-Medication as Prescribed and Immediate Access to Quick-Relief Medication

State legislation and/or school/district policies will determine if students self-carry and self-administer asthma medications. If self-carry/self-medication is not allowed, schools must ensure a system through which students can readily access medications for pre-exercise medication, as prescribed by personal physicians. Pre-medication, if prescribed, and physical warm-ups are essential and can help prevent asthma episodes.

Schools must also ensure immediate access to rescue medications. This may be accomplished by having teachers, trainers or coaches carrying rescue inhalers in waist packs, especially when playing fields are located far away from health rooms. Inhalers must always be properly labeled.

LESSONS LEARNED!

Several AFSI pilot sites succeeded in their schools' adopting new policies that specific medication access before and during physical activity. This very focused policy can impact any student with asthma, as well as those who experience exercise-induced asthma and/or whose asthma can be triggered by air pollution (such as during an outdoor team practice or physical education class).

A current Asthma Action Plan should be available for each student with asthma. For students with exercise-induced asthma, it should be updated at least annually (preferably each semester) and include:

- instructions for pre-medication at the appropriate time (15-30 minutes) prior to exercise
- medication dosages
- specific communications tools for teachers, athletic trainers, and coaches that highlight:
 - ◆ signs and symptoms of an asthma episode
 - ◆ peak flow measurement/personal peak flow targets
 - ◆ recommendations for length of warm-ups/cool-downs
 - ◆ triggers
 - ◆ recommended modifications for physical activity, including warm-ups
 - ◆ emergency procedures
 - ◆ pre-medication information and reminder to instructor/coach to ask student at beginning of class or practice about pre-medication

◆ **Recommended Component:** ***Provide Options for Modified Activity as Indicated by a Student's Asthma Action Plan***

Specific exercise modifications should be incorporated into individual Asthma Action Plans. Students with exercise-induced asthma require modifications such as specific, extended warm-up and cool-down periods, as well as pre-medication.

Again, modifications should be related to the student's peak flow readings and whether or not the student has exercise-induced asthma specifically. (See the American Lung Association Tip Sheet: Peak Flow Meter Readings & Physical Activity Notes included with this hand-out.) In the green zone, the student is free to participate without modifications. If the student is in the yellow zone, extra care is required. He or she should first take their medication as prescribed by their physician and then might be able to participate in modified activities if their peak flow reading improves. For example, modifications might include:

- increased warm-up and cool-down periods to help prevent or lessen episodes of exercise-induced asthma
- alternating run/walk rather than a full distance run
- incorporating less intense aerobic activities (walking, some field events, weight training)

(See the Modified Physical Activity Plan included with this hand-out.)

In the red zone, teachers should:⁶

- Stop the student's current activity
- Follow the asthma action plan
- Help the student use his or her inhaled medication; observe for effect
- Get emergency help if:
 - ◆ the student fails to improve
 - ◆ any of the symptoms listed on the student's asthma action plan as emergency indicators are present
 - ◆ any of the following symptoms are present (consider calling 911):
 - the student is hunched over, with shoulders lifted, and straining to breathe
 - the student has difficulty completing a sentence without pausing for breath
 - the student's lips or fingernails turn blue

See specific action steps in Breathing Difficulties Related to Physical Activity for Students with Asthma: Exercise-Induced Asthma included with this hand-out.

REFERENCE MATERIALS

- ❖ American Lung Association Tip Sheet: Peak Flow Meter Readings & Physical Activity Notes
- ❖ Modified Physical Activity Plan
- ❖ Breathing Difficulties Related to Physical Activity for Students with Asthma: Exercise-Induced Asthma

⁶ National Heart, Lung and Blood Institute. Asthma & Physical Activity in the School: Making a Difference. 1995



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- Follow the designated **asthma management plan** (individual student plan, if available, or school protocol).
- Follow the school protocol to **notify the school nurse** (or other designated staff) if medication is not available or if symptoms are not resolved within 5 to 10 minutes after using the inhaler.
- **Never** let a child with breathing problems leave the gym or field **alone**.
- If symptoms resolve, permit students to **resume activity** when they are ready, according to their asthma management plan.
- Follow the school protocol to **inform parents** of the event and document actions taken.



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March 2005

Ways To Help Students with Asthma Participate in Physical Activity

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- Discuss with students (and parents, if appropriate), the individual student's triggers, signs and symptoms that relate to physical activity.
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Consider Modified Exercise as Needed

- If a student has obvious wheeze, breathing difficulty, or measures a low peak flow rate prior to exercise, have the student treat his/her symptoms according to the asthma management plan. The treatment is usually with prescribed inhaled quick-relief bronchodilator. Physical activity may then be either resumed, modified or halted, depending on the student's response to treatment.
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- When environmental conditions are bad (e.g., ozone alerts, high pollen counts, freshly cut or sprayed fields) students with asthma may need to avoid being physically active outdoors.

Resources

“SUPER WEBSITES”

(Note: The following Web sites are managed by reputable organizations and contain vast resources to support all aspects of asthma-friendly schools activities and include links to a range of organizations and additional resources. These Web sites are recommended starting points for researching asthma and air quality resources.)

American Lung Association

www.lungusa.org

Allergy & Asthma Network/Mothers of Asthmatics

www.aanma.org/schoolhouse

Allies Against Asthma

www.asthma.umich.edu

American Academy of Allergy, Asthma, & Immunology

www.aaaai.org

American Academy of Pediatrics (School Health Committee and Section)

www.schoolhealth.org

American College of Allergy, Asthma, & Immunology

www.acaai.org

Asthma & Allergy Foundation of America (AAFA)

www.aafa.org

Centers for Disease Control and Prevention’s Division of Adolescent and School Health Healthy Schools/Healthy Youth

www.cdc.gov/healthyYouth

Centers for Disease Control and Prevention’s National Center for Environmental Health

www.cdc.gov/asthma

National Association of School Nurses

www.nasn.org

National Asthma Education and Prevention Program/National Heart, Lung & Blood Institute

www.nhlbi.nih.gov/about/naepp

National Education Association Health Information Network

www.asthmaandschools.org

U.S. Environmental Protection Agency/Indoor Air Quality

www.epa.gov/iaq

U.S. Environmental Protection Agency/Outdoor Air Quality

<http://airnow.gov>

ASTHMA EDUCATION/ADMINISTRATIVE RESOURCES

(Note: This list is limited to those referenced within the text of this toolkit. Additional programs are available on the “Super Web Sites” listed above.)

American Academy of Pediatrics School Asthma Project

Program designed to help pediatricians understand school health services and asthma management.

American Academy of Pediatrics
800-433-9016
www.schoolhealth.org

Asthma Management in Educational Settings (A.M.E.S.)

Notebook for school nurse, other school personnel, and parents. Provides guidelines for the care of students with asthma.

American Lung Association of Washington/Idaho
800-732-9339 or 206-441-5100
<http://www.alaw.org/asthma/ames/>

Asthma Wellness: Keeping Children with Asthma in School and Learning

Asthma wellness issue of School Governance and Leadership; includes questions school leaders frequently ask about asthma

American Association of School Administrators
www.aasa.org

Asthma Wellness PowerPoint Presentation

Short, simple presentation that promotes the importance of having an asthma management program in a school district as part of the coordinated school health model. Available for download at <http://www.aasa.org/focus/content.cfm?ItemNumber=1951&snItemNumber=1956>.

American Association of School Administrators
www.aasa.org

Fit, Healthy & Ready to Learn Part III

School health policy guide on asthma, school health services, and healthy environments

National Association of State Boards of Education
(703) 684-4000
www.nasbe.org

How Asthma-Friendly Is Your School?

Checklist to evaluate how well a school assists children with asthma; also available in Spanish.

National Heart, Lung & Blood Institute/National Asthma Education
and Prevention Program
301-496-1051
www.nhlbi.nih.gov/health/public/lung/asthma/friendhi.htm

Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide

Detailed instruction in program evaluation, including extensive information about logic models.

Centers for Disease Control & Prevention
TChapel@cdc.gov
www.cdc.gov/eval

Is the Asthma Action Plan Working?

Brief assessment tool to guide school nurses in determining how well an asthma action plan is working for a student; includes information about good asthma control and a checklist of assessment items.

National Heart, Lung & Blood Institute/National Asthma Education
and Prevention Program

301-496-1051

http://www.nhlbi.nih.gov/health/prof/lung/asthma/asth_act_plan_frm.htm

Managing Asthma: A Guide For Schools

Guide is intended to assist schools planning and/or maintaining an asthma management program; designed to offer practical information to school staff members of every position.

National Heart, Lung & Blood Institute/National Asthma Education
and Prevention Program

301-496-1051

http://www.nhlbi.nih.gov/health/prof/lung/asthma/asth_sch.htm

Meeting in a Box: Managing Asthma in Schools

Ready-to-go presentation covering the basics about asthma, environmental triggers, medications, and other tools used in asthma management plus topics specifically addressing school issues.

Asthma & Allergy Foundation of America (AAFA)

202-466-7643

www.aafa.org

Powerful Practices: A Checklist for School Districts Addressing the Needs of Students with Asthma

In-depth checklist intended primarily for school administrators to help an individual district identify areas in which it is currently doing well, as well as areas in which it may want to focus more energy.

American Association of School Administrators

Phone 703-528-0700

www.aasa.org

School Asthma Education Slide Set

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.

National Heart, Lung & Blood Institute/NAEPP

To order: <http://email.nhlbihin.net/product2.asp?sku=SLIDE-006>

To download: http://hin.nhlbi.nih.gov/naepp_slds/menu.htm

School Health Index

Self-assessment and planning tool that schools can use to improve their health and safety policies and programs; available as interactive online version and in paper format.

Centers for Disease Control and Prevention' Division of Adolescent and School Health

1-888-231-6405

www.cdc.gov/healthyyouth/shi

School Nurse Asthma Management Program

Comprehensive school nurse education module, including asthma basics, asthma management documents, curriculum, resource guide, and presentations.

National Association of School Nurses
1-877-627-6476 (1-877-NASN4SN)
www.nasn.org

Strategies for Addressing Asthma within a Coordinated School Health Program

12-page booklet presenting overview of education and intervention strategies to support students with asthma.

Centers for Disease Control, Division of Adolescent & School Health
888-231-6405
<http://www.cdc.gov/HealthyYouth/asthma/strategies.htm>

Tools for Assessing Asthma Educational Materials/Instrumentos Para Evaluar Materiales Educativos Sobre El Asma

Toolkit with score sheets, checklists, and other screening instruments for evaluating various aspects of asthma education materials, including format, language, cultural appropriateness, and asthma-specific content. Available in English and Spanish

Allies Against Asthma
<http://www.asthma.umich.edu/index.html>

When Should Students with Asthma or Allergies Carry and Self-Administer Emergency Medications at School

Guidance sheet with list of factors that healthcare providers should use when determining when to entrust and encourage a student with diagnosed asthma and/or anaphylaxis to carry and self-administer prescribed emergency medications at school

National Heart, Lung & Blood Institute/National Asthma Education and Prevention Program
301-496-1051
http://www.nhlbi.nih.gov/health/prof/lung/asthma/emer_medi.htm

ASTHMA EDUCATION/CURRICULAR RESOURCES

Allergies and Asthma at School Kit

Kit for parents and students, providing tips and tools for talking to teachers, coaches, bus drivers, school administrators about asthma and/or anaphylaxis.

The Allergy & Asthma Network Mothers of Asthmatics
1-800-878-4403
www.breatherville.org

Asthma 101

Asthma curriculum for school staff, faculty and parents

American Lung Association of Illinois
217-787-5864
www.lungil.org

Asthma Awareness Curriculum for the Elementary Classroom

K-6 curriculum designed to develop basic understanding of asthma, teach students about action that can help people with asthma, and provide resources for parents and family members.

NIH Publication No. 93-2894.

National Heart, Lung & Blood Institute/National Asthma Education and Prevention Program

301-496-1051

<http://www.nhlbi.nih.gov/health/prof/lung/asthma/school/>

Asthma Education: An Integrated Approach

Manual for teachers that presents ideas for incorporating asthma education into everyday classroom curricula in math, science, and language arts.

State of Minnesota, Department of Health

800-728-5420 or 651-281-9993

<http://www.health.state.mn.us/asthma/thanksedu.html>

Environmental Management of Pediatric Asthma: Guidelines for Healthcare Providers

Intervention guidelines for integrating environmental management of asthma; includes environmental history forms to help determine patients' environmental asthma triggers, patient flyers, and fact sheets.

The National Environmental Education & Training Foundation

202.833.2933

www.neetf.org/health/asthma.htm

Open Airways For Schools

Curriculum for children ages 8-11, teaching how to detect warning signs of asthma, help themselves manage asthma, and respond to an asthma attack; also available in Spanish.

American Lung Association

1-800-lungusa

www.lungusa.org

Power Breathing™

Three-session teen program, with focus on learning about asthma and developing decision-making skills needed to make appropriate choices in self-management and integrating asthma management into their day-to-day lifestyles. Includes video animation and board game.

Asthma & Allergy Foundation of America (AAFA)

800-7-ASTHMA or 202-466-7643

www.aafa.org

Quest for the Code® CD-ROM Game

Features voices of celebrities and 3-D animation. Focuses on a game targeted for ages seven to 15's management of asthma; both English and Spanish versions included; includes a parent guide. Free.

Starbright Foundation

1-800-315-2580

www.starbright.org

PHYSICAL ACTIVITY & ASTHMA RESOURCES

Asthma and Physical Activity in the School

Booklet for school personnel, with discussion of asthma, signs/symptoms, response to asthma episodes, and asthma and exercise.

National Heart, Lung & Blood Institute/National Asthma Education and Prevention Program
301-496-1051
http://www.nhlbi.nih.gov/health/public/lung/asthma/phy_asth.htm

Breathing Difficulties Related to Physical Activity for Students with Asthma: Exercise-Induced Asthma

Tip sheet for physical educators, coaches and trainers, with general guidance for responding to and preventing breathing difficulties related to physical activity among students with diagnosed exercise-induced asthma. (Summary of detailed actions described in *Asthma & Physical Activity in the School and Managing Asthma: A Guide for Schools*)

National Heart, Lung & Blood Institute/National Asthma Education and Prevention Program
301-496-1051
http://www.nhlbi.nih.gov/health/prof/lung/asthma/exer_induced.htm

Exercise & Asthma: Helping Students and Athletes Stay Active

Resource folder for physical education teachers, coaches and athletic trainers, includes overview of asthma and exercise, pre-exercise medication, asthma medications, inhaler use, and response to asthma emergencies.

American Lung Association of Wisconsin
262-703-4200

Moving into the Future: National Standards for Physical Education, 2nd Edition

Report defining what a student should know and be able to do as result of a quality physical education program at each grade

American Alliance for Health, Physical Education, Recreation & Dance
800-213-7193
<http://www.aahperd.org/naspe/>

Promoting Better Health for Young People Through Physical Activity and Sports

Report released by the White House with ten strategies to promote health and reduce obesity through lifelong physical activity and sports

Centers for Disease Control and Prevention/Healthy Youth
1-888-231-6405
http://www.cdc.gov/healthyyouth/physicalactivity/promoting_health/

1996 Surgeon General's Report on Physical Activity and Health

Landmark review of the research on physical activity and health, includes links between physical activity and diseases, and recommendations for increasing daily physical activity

U.S. Department of Health & Human Services
202-512-1800
www.cdc.gov/nccdphp/sgr/sgr.htm

AIR QUALITY PROGRAM RESOURCES

(Note: This list is limited to those referenced within the text of this toolkit. Additional programs are available on the “Super Web Sites” listed above.)

Healthy Environment–Healthy Me

K-6 curriculum that introduces students to the environment, examining how they affect it and how the environment affects them. Curricular activities help develop the knowledge and understanding students need to create safe and healthy environments at home, at school and throughout their community. (K-3 lesson plans, vocabulary words, student worksheets, and letters to parents/guardians are also available in Spanish.)

Environmental and Occupational Health Sciences Institute
Rutgers University
www.eohsi.rutgers.edu/rc

HealthySEAT

Healthy school environments assessment tool via self-audit, customizable software intended for school district and state use.

U.S. Environmental Protection Agency
www.epa.gov/schools

Hydroville USA: Challenge Problems for High School Students

High school curriculum focused on students’ developing content and process skills through the use of context-based environmental health science scenarios that integrate physical science, biological science, environmental health, mathematics, language arts and social studies.

Environmental Health Sciences Center Community Outreach and Education Program
Oregon State University
541-737-8892
www.hydroville.org

IAQ Tools for Schools Kit & Training Modules

IAQ management program for schools, including problem-solving wheel, coordinator’s guide, and complete checklists for planning and tracking; includes Taking Action video and Ventilation Basics video. Available free of charge

IAQ INFO Clearinghouse
[Request EPA document number 402-K-05-001 (Hard Copy) or
402-C-05-001 (CD-ROM)]
1-800-438-4318
iaqinfo@aol.com

Pest Control in the School Environment: Adopting Integrated Pest Management

Booklet designed to encourage and assist school officials in examining and improving their pest management practices. Includes steps to establishing Integrated Pest Management (IPM) and a guide to evaluating costs.

EPA National Service Center for Environmental Publications (Request publication
number 735F93012)
1-800-490-9198

TOBACCO-FREE PROGRAM RESOURCES

(Note: This list is limited to those referenced within the text of this toolkit. Additional programs are available on the “Super Web Sites” listed above.)

Guidelines for School Health Programs to Prevent Tobacco Use and Addiction

Identify strategies most likely to be effective in preventing tobacco use and addiction among young people; developed by CDC staff in collaboration with experts from other federal agencies, state agencies, universities, voluntary organizations, and professional associations.

Centers for Disease Control & Prevention

<http://www.cdc.gov/HealthyYouth/tobacco/guidelines/index.htm>

Not On Tobacco (N-O-T)

Ten-session teen curriculum designed for voluntary participation. Incorporates life management skills for dealing with stress, decision-making, and peer and family relationships, addresses healthy lifestyle behaviors such as alcohol or illicit drug use, as well as related health issues such as exercise and nutrition.

American Lung Association

1-800-lungusa

www.lungusa.org

Tips for School Tobacco Policy Enforcement

Guide with specific tactics for overcoming primary challenges to enforcement of school tobacco policies, including issues of visitors, students’ using tobacco on school property, and students’ leaving campus to smoke in surrounding neighborhoods.

Wisconsin Department of Public Instruction

1-800-441-4563

<http://dpi.wi.gov/sspw/pdf/tobpolenf.pdf>

COMMUNITY ORGANIZING & PROGRAM PLANNING RESOURCES

Demonstrating Your Program’s Worth: A Primer on Evaluation for Programs to Prevent Unintentional Injury

Overview of value of evaluation, specifics on conducting simple evaluation, and hiring/supervising consultants for complex evaluation and incorporating evaluation activities into program activities.

Centers for Disease Control and Prevention

www.cdc.gov/ncipc/pub-res/demonstr.htm

Making the Connection: Health and Student Achievement

CD-Rom—PowerPoint presentation that makes a compelling case for school health programs by outlining the major research linking the components of coordinated school health programs with student success. Free.

Society of State Directors of Health, Physical Education and Recreation and the

Association of State and Territorial Health Officials

703-390-4599

www.thesociety.org

How Schools Work and How to Work with Schools: A Primer for Professionals Who Serve Children and Youth

Resource guide, presenting overview of the mission of education and detailed discussions of the structure and work of schools from the local, district, state, and national perspectives. Includes detailed strategies for working with schools, including funding resources.

National Association of State Boards of Education
277 South Washington Street, Suite 100
Alexandria, VA 22314
703-684-4000
www.nasbe.org

ADVOCACY RESOURCES

Organizing for Social Change: Midwest Academy Manual For Activists

Handbook on the fundamentals of direct action organizing; draws on examples from a range of organizations and issues, to illustrate strategy, issue organizing, and long-term organizational development.

Seven Locks Publishing
800-354-5348
www.sevenlockspublishing.com

State Legislated Action on Tobacco Issues

State-by-state guide to all tobacco control laws in the 50 states and the District of Columbia, includes restriction of smoking, cigarette excise taxes, preemptive state tobacco control laws, and smoker protection laws.

American Lung Association
Government Relations
202-785-3355
www.lungusa.org

ORGANIZATIONS

(Note: The following is a list of organizations involved in the development of this Asthma-Friendly Schools ToolKit, as well as any organizations referenced within the text of the toolkit. They are recommended as starting points for organizational contacts. This is not intended as a complete list of organizations involved in pediatric medicine, nursing, education, air quality, and asthma.)

Action for Healthy Kids

4711 West Golf Road
Suite 806
Skokie, IL 60076
1-800-416-5136
www.actionforhealthykids.org

Allergy and Asthma Network/Mothers of Asthmatics

2751 Prosperity Ave., Suite 150
Fairfax, VA 22031
800-878-4403
www.aanma.org

American Lung Association

61 Broadway
New York, NY 10006
212-315-8700
1-800-LUNG-USA
www.lungusa.org

American Academy of Family Physicians

American Academy of Family Physicians
11400 Tomahawk Creek Parkway
Leawood, KS 66211-2672
913-906-6000
www.aafp.com

American Academy of Pediatrics

141 Northwest point Boulevard
Elk Grove Village, IL 60007
800-433-9016
www.aap.org

American Alliance of Health, Physical Education, Recreation and Dance

1900 Association Drive
Reston, VA 20192-1598
800-213-7193
www.aahperd.org

Asthma & Allergy Foundation of America (AAFA)

1233 20th Street, N.W., Suite 402
Washington, DC 20036
800-7-ASTHMA or 202-466-7643
www.aafa.org

Centers for Disease Control and Prevention

Division of Adolescent and School Health
4770 Buford Hwy, MS-K29
Atlanta, GA 30341-3724
(770) 488-6100
www.cdc.gov/HealthyYouth

National Center for Environmental Health

1600 Clifton Road, N.E., MS E-17
Atlanta, GA 30333
(404) 498-1088
www.cdc.gov/asthma

Environmental Law Institute

1616 P Street, NW, Suite 200
Washington, DC 20036
202-939-3800
www.eli.org

Healthy Schools Network

773 Madison Avenue
Albany, NY 12208
516-462-0632
www.healthyschools.org

National Assembly on School-Based Health Care

666 11th Street, NW
Washington, DC 20001
202-638-5872
www.nasbhc.org

National Association of School Nurses (NASN)

1416 Park Street, Suite A
Castle Rock, CO 80104
1-877-627-6476 (1-877-NASN4SN)
207-883-2117
www.nasn.org

National Association for Sport & Physical Education

c/o AAHPERD
1900 Association Drive
Reston, VA 20191
800-213-7193
www.aahperd.org

National Association of State Boards of Education

277 South Washington Street, Suite 100
Alexandria, VA 22314
703-684-4000
www.nasbe.org

National Education Association Health Information Network

NEA - Health Information Network
1201 16th Street, NW, Suite 521, Washington DC 20036
800-718-8387 (Automated Resource Line)
202-822-7570
<http://www.nea.org/health/index.html>

National Heart, Lung and Blood Institute/National Asthma Education and Promotion Program

NHLBI/National Institutes of Health
Building 31, Room 4A16
31 Center Drive
Bethesda, MD 20892
301-496-1051
www.nhlbi.nih.gov/about/naepp

**Society of State Directors of Health, Physical Education, and Recreation
1900 Association Drive**

Reston, VA 20191-1599
703/476-3402
www.thesociety.org

U.S. Environmental Protection Agency

Indoor Environments Division
Ariel Rios Building
1200 Pennsylvania Avenue, NW (6609J)
Washington, DC 20460
202-546-9370
www.epa.gov/iaq

Outdoor Air Quality

US EPA Library
C267-01
109 Alexander Drive
Research Triangle Park, NC 27711
919-541-2777
www.epa.gov/airnow

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Beginning our second century, the American Lung Association works to prevent lung disease and promote lung health. Asthma is the leading serious chronic childhood illness. Lung diseases and breathing problems are the primary causes of infant deaths in the United States today. Smoking remains the nation's number one preventable cause of chronic illness. Lung disease death rates continue to increase while other major causes of death have declined.

The American Lung Association has long funded vital research to discover the causes and seek improved treatments for those suffering with lung disease. We are the foremost defender of the Clean Air Act and laws that protect citizens from secondhand smoke. The Lung Association teaches children the dangers of tobacco use and helps teenage and adult smokers overcome addiction. We help children and adults living with lung disease to improve their quality of life. With your generous support, the American Lung Association is "Improving life, one breath at a time."

*For more information about the American Lung Association
or to support the work we do, call
1-800-LUNG-USA (1-800-586-4872)
or log on to **www.lungusa.org**.*

