



**AMERICAN LUNG ASSOCIATION®**

**Asthma-Friendly Schools Initiative®**

# Toolkit



# Introduction

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

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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

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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 Americans<sup>1</sup>, including at least 6.5 million children under 18.<sup>2</sup> 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.<sup>3</sup> 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.<sup>4</sup>

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<sup>1</sup> 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).

<sup>2</sup> 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>

<sup>3</sup> National Center for Health Statistics. National Hospital Discharge Survey

<sup>4</sup> 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.<sup>5</sup>
- 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.<sup>6</sup>
- In 2004, 5.2% of children (3.8 million) had at least one asthma attack in the preceding year.<sup>7</sup>
- In 2004, there were an estimated 750,000 ED visits by children under 18 with a first-listed diagnosis of asthma.<sup>8</sup>

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.

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<sup>5</sup> 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>

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

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

<sup>8</sup> 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

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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](http://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

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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

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## INTRODUCTION

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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

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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

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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

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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

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- ❖ 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.

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**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](http://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

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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

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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

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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

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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**

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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

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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

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

# Maximizing School Health Services

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## ABOUT SCHOOL HEALTH SERVICES

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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

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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.<sup>1</sup>

### ***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](http://www.lungusa.org/afsi)).

<sup>1</sup> 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

# Providing a Healthy School Environment

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*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**

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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)**

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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 Education<sup>1</sup> 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

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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](http://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](http://www.epa.gov/airnow).

## HEALTHY SCHOOL ENVIRONMENT COMPONENTS

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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

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<sup>1</sup> 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,<sup>2</sup> 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.<sup>3</sup>
  - ◆ 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.)

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<sup>2</sup> U.S. Department of Energy. EnergySmart Schools Web site. [http://www.eren.doe.gov/energysmartschools/bus\\_health.html](http://www.eren.doe.gov/energysmartschools/bus_health.html).

<sup>3</sup> 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**

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- ❖ 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