

## Comprehensive School Based Asthma Education (OAS+)

A Program of the Center for Managing Chronic Disease  
at the University of Michigan

Developed by  
The Partnership to Control Asthma in Public Schools  
Contract #NHLBI N01-HR-56078  
Noreen M. Clark, PhD, Principal Investigator

## Lessons Learned from the Partnership to Control Asthma in Public Schools

In the following pages you will find:

- A program description and steps
- An asthma case identification survey for parents
- A sample Action Plan to keep in a child's school file
- Information regarding where to obtain the Open Airways for School curriculum and sample parent's permission slip
- Tips and outlines for training OAS+ educators
- Environmental Detectives Curriculum for classmates of children with asthma
- An outline for a school asthma fair
- A description of an Environmental Action Committee and Building Walkthrough Environment Checklists
- An article describing the program evaluation and findings



**The Comprehensive School Based Asthma Education (OAS+)** program was developed by The Partnership to Control Asthma in Public Schools, a project funded by the National Heart, Lung, and Blood Institute.\* The project taught Open Airways to 542 elementary level students with asthma. Over 2,000 students participated in asthma awareness education. The program involved teachers, parents, administrators and building services staff in the various aspects of managing asthma in the schools as part of an evaluation of a comprehensive school asthma program.

This guide highlights elements of the program project for someone considering initiating a similar effort. We hope the material serves as to illustrate one program's successful experience. It describes what you and the schools participating in your project can do to help children manage their asthma better. The guide outlines how a project may collaborate with schools in a way that fits within the school's ongoing student health activities.

### **Why the project got started...**

Asthma is a lung disease that makes it hard to breathe, and can be life threatening if not properly managed. Children with asthma can find it difficult to fully participate in the same activities as other children. They often miss more school than their peers, and may experience feelings of anxiety or frustration about having asthma.

Between 1982 and 1993 the prevalence of asthma in the United States increased 46% overall and 80% among people under 18. By the time the project was underway 7% of all children were estimated to have the disease (NAEPP, 1998). In Detroit, the numbers were much higher. Screening conducted in 1997 by the Partnership to Control Asthma in Public Schools found that approximately 18% of children in the participating 14 schools had diagnosed asthma or asthma symptoms. These numbers were alarming and required action.

Together, representatives of the Partnership developed a comprehensive approach that identified children with asthma or asthma symptoms and then provided education for prevention and management to children, parents and school staff. This approach fit nicely with the procedures and policies outlined in the Detroit Public Schools Student Health Handbook.

Please use this guide to help you with your planning. Examples of all the materials you should need to develop are here.

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## ACKNOWLEDGEMENTS

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Environmental Assessment materials and *Environmental Action For Asthma* Report Cards were adapted from the work of Partners in Asthma Management, Center for Health Promotion Prevention and Research, University of Texas at Houston School of Public Health, Kay Bartholomew PhD, Principal Investigator.

# **A Partnership To Control Asthma In Public Schools Area D**

## **Project Elements**

1. A **Medical Advisory Group** to attend to the medical soundness of project activities.
2. A **Policy Committee** to identify ways to help schools help children to self-manage asthma.
3. **Staff in-service** regarding asthma and its management for all school personnel.
4. **Open Airways self-management education** provided for children with asthma at school.
5. **Environmental Detective**, a 3 lesson education program used in the classroom to encourage students to be supportive of their friends with asthma.
6. **Education for building services staff** to inform them about environmental influences on asthma and involve them in the school's Environmental Action efforts.
7. **School asthma fairs for families and the community** held after school to enable parents to help their children become effective asthma self-managers.

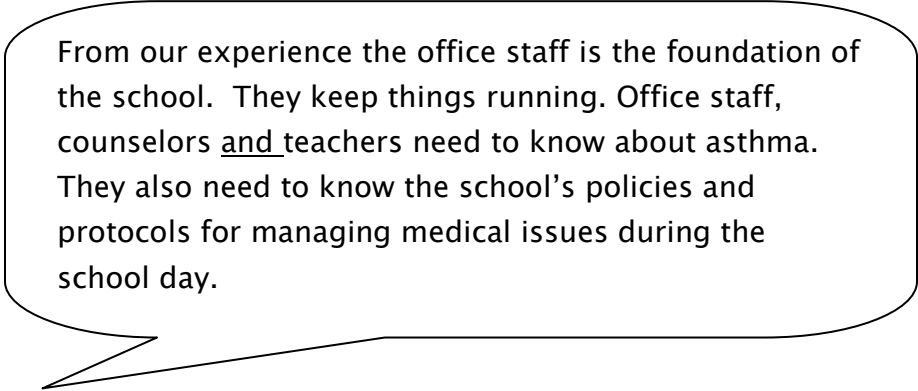
This short guide highlights key steps in establishing an asthma management program in schools.

### **STEP ONE** – Decide What Your Program Will Be

Although we all know schools are not in the health care business, we also know everyday school staff care for sick and injured students. Principals and school administrators care for and keep track of thousands of students with chronic illnesses like asthma each year. But they need help.

Having an asthma program in a school will help school staff stay in control of asthma over the long run. Fewer emergencies, more institutional memory. Being in control...after all, that's what it's all about.

A "Best Practice" School Program: There are a number of things you may want to include in your program's school asthma management program. It may include managing student health information in the office, student education, parent outreach, staff education, documentation, or any or one of the above.



From our experience the office staff is the foundation of the school. They keep things running. Office staff, counselors and teachers need to know about asthma. They also need to know the school's policies and protocols for managing medical issues during the school day.

### **STEP TWO:** Build your relationship with the schools

Developing rapport with high level administrators is essential. Program planners need to successfully communicate the importance of asthma management to student achievement. Small group meetings, inviting administrators to meet asthma coalition partners and sharing a meal (**invitation, dinner meeting agenda, welcome back fax**) are all strategies we used to build our relationship with administrators. It is also a good idea to **interview** the school principal about asthma in the school building. Learning what is important to the school principal is critical.

A successful working relationship with the office staff is probably the most important part of a successful program.

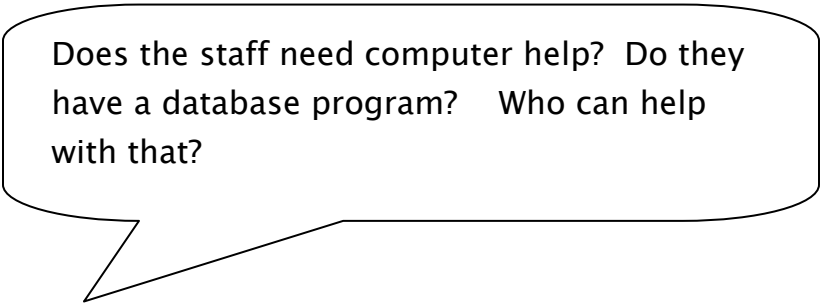
### STEP THREE: Determine Who Has Asthma

First a school needs to know who has asthma. The school office staff or school nurse may be aware of students who keep their medicines in the office or have medicine administration permission forms on file, but they may not know the students who self medicate who don't have forms. Many children do not even have an asthma diagnosis from a physician. As many as 11% of children screened at the outset of the Partnership project had symptoms of asthma with no diagnosis.

The school can identify the children with asthma in one of three ways. *Teachers are critical to this effort.* The school will need to allocate a staff member to develop a list of students and work with the project team (if external) to gather names, coordinate logistics and maintain the list of participating students. This may entail creating or amending an existing database at the school.

Options for identifying children with asthma:

- The emergency health form if it includes questions about chronic illness is a good source for information about students with asthma.
- Send home a **questionnaire** to the parents of children the school suspects have asthma (best). A survey may identify students with suspected undiagnosed or untreated asthma.
- If your emergency form does not ask health questions try sending home a second emergency card with a sticker that asks simply, "Does your child have asthma?"



Does the staff need computer help? Do they have a database program? Who can help with that?

### STEP FOUR: Have an Asthma Plan on File for All Children with Asthma

A **school asthma action plan** will link the school the child's family and the child's physician. It ensures that the school is informed about the child's individual health about how to handle an emergency for this student. It also opens up a direct link between the physician and the school.

## Lessons Learned from the Partnership to Control Asthma in Public Schools

Copy and distribute your state's approved plan or one developed by the American Lung Association. Asthma plans must be completed by the parent and the physician. Teachers should be responsible for collecting them and returning them to the office. File these with the student's emergency card. Give a copy to the teacher.

**Problem:** Parents don't return documents.

Solution: The school office can FAX it to the *physician with the parent's signature.*

Double Check Emergency Information – be sure that the emergency information from the asthma plan matches that on the emergency card. Be sure everyone knows your school's protocol for what to do in an asthma emergency.

**Help with Medicines** – Contact the School District Office of Physical Education and Health for any information or training on how to manage and dispense medicines.

### STEP FIVE Informing Staff and Parents about Asthma

**Staff In-services:** We turned to the American Lung Association and the Detroit Asthma Coalition to speak at parent teacher meetings. The coalition had a speaker's bureau for presentations to the community and to professionals like teachers. The Office of Physical Education and Health in the Detroit Public Schools helped identify speakers for teacher meetings.

To optimize on the knowledge and skills of an informed staff, a school may want to hold an asthma or "health" staff in-service annually at the beginning of the year. Local physicians may be interested in being "Asthma Champions" for your school (**fact sheet**).

One Detroit elementary school developed a list of alumni as a resource for school improvement committee members. Alumni who are medical professionals have assisted with teacher and parent in-services on topics such as asthma



***Parent Night or School Asthma Awareness Fair:***

This is an opportunity to build coalitions (**letter, contact list**), energize school staff and build your school parent involvement (**flyer**) (something schools love). An excellent resource is *Asthma Awareness Day: a Planning Guide* by National Institute for Allergy and Infectious Disease, 1995. (**WEBSITE**) The basic elements (**schedule**) we used in four schools were: physical activities for children, food, meet the doctor group Q/A sessions with community physicians, display tables with area health organizations and social service agencies, extensive signage (**signs**) with health messages, drawings for useful gifts, a card survey that served as their "ticket and raffle ticket (and a volunteer clean-up staff!)

**STEP SIX** Teach the children with asthma *Open Airways for Schools* (OAS)

You may have trained volunteers or staff going in to schools. Another strategy is to have schools train teachers, nurses and/or and parent volunteers to teach OAS. The American Lung Association's Open Airways curriculum was revised in 2002. It includes a complete how-to and an instructor's guide. If you conduct the training you may want to expand the training (**training agenda, flyer, evaluation, Tips for instructors, coordination tips, permission form, sample class list**) to tailor the program to your community.

The Partnership evaluation of OAS confirmed an earlier scientific evaluation of the OAS curriculum in the 1980's showing it improved participating students' academic performance and self management skills (Clark, 2004). [This is an important message for teachers who may be reluctant to let a child go who has poor attendance.]

**Key steps in conducting Open Airways:**

1. Identify a time students can be pulled from class
  - in groups of 8 – 10 (**class list**)
  - by grade
  - for 6 lessons in 6 weeks
2. Identify students by grade and assign them to a "class group"
3. Send home a **permission form** (see attached)
4. Notify the student and teacher of the activity, time and place

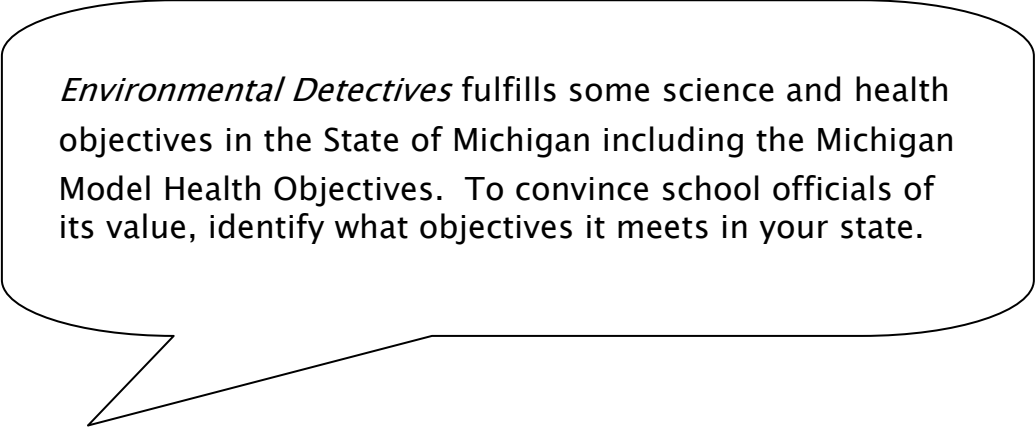
5. Educator delivers the lessons and completes the **process evaluations** and returns them to American Lung Association as directed by the Instructor's Guide. You may evaluate the effectiveness of the teaching as well. (**quality control evaluation**)
6. Keep track of OAS attendance

**STEP SEVEN** Teach their classmates *Environmental Detectives (ED)*

ED is a **three-lesson environmental awareness curriculum** appropriate for 3 – 4<sup>th</sup> grade classrooms. The program that includes small group work and hands-on activities, was developed by the Partnership to Control Asthma in Public Schools in consultation with experts in indoor and outdoor pollution (**handouts**). The lessons helps a student without asthma connect with the experience of a student who is troubled by environmental triggers. An evaluation of the lessons showed an increase in students' overall knowledge about asthma and an improvement in their awareness of key management steps. Plan the schedule with the principal (**planning document**). Instructors will require an 6-8 hour training. (**list of materials, training overheads, environment smart overheads, leaders resource, instructor quality evaluation.**)

Teacher letter – Send a memo to teachers (**teacher letter**) to see who is interested in teaching the program or having a trained health educator come to their class. Determine which teachers want a copy of the curriculum kit. It is available from on this CD from the **University of Michigan School of Public Health**. Also put an **article** in school newsletter.

Parent letter - Send home the parent letter to parents before classes start. **Three parent letters** go home during the class.



*Environmental Detectives* fulfills some science and health objectives in the State of Michigan including the Michigan Model Health Objectives. To convince school officials of its value, identify what objectives it meets in your state.

## **STEP EIGHT** The School Environment: Take steps to control asthma triggers

The Partnership conducted **environmental assessments** of 14 schools twice two years apart. Using the data from the assessments schools had the opportunity to develop an Environmental Action for Asthma Committee. The information collected was given back to the school in an **Environmental Action for Asthma Report Card**. In Michigan, the American Lung Association is working with a Statewide coalition, called CHAMPS, to improve health in Michigan school buildings. Turn to such experienced collaborators in your state to help communicate with and train building services staff about indoor air quality. The EPA Tools for Schools (**WEBSITE**) program provides materials a school asthma program may adapt.

In schools:

1. Identify members of an **ad hoc committee (principal fax)**— the principal, a teacher, building engineer, head custodian, a parent and a student are recommended stakeholders to help with this effort.
2. Conduct a walk-through of the building (**check air, check mold, dust check**) and brainstorm indoor air concerns and steps to correct them. Narrow the list to a few low cost tasks using building level resources (not district resources)
3. Set a date and time and invite district representatives and representatives from the local asthma coalition or environmental experts to attend a meeting
4. With the building services staff, identify low cost simple solutions that will improve indoor environment for those with asthma and allergies.
5. Assess progress

## **STEP NINE** Evaluate the asthma program

Your evaluation may have many components. Evaluation should not only focus on process achievements (numbers participating at a meeting) but also outcomes (fewer school asthma emergencies, a student with fewer absences than previously).

Share your evaluation results with the schools. Help the schools look back at their goals for the year. Were they met? Why not? What would work better next year?

Help the school write up the program successes in a brief bullet list:

"Our Asthma Program 2005:

- ◆ 14 absences due to asthma in 2<sup>nd</sup> grade
- ◆ 1 medical emergencies
  - Calling 911 for asthma
- ◆ 85% of parents returned emergency health card to the school
- ◆ 100% of students with asthma had management plans in the office
- ◆ 140 students in lower school had asthma in-service"

### **Step Ten:** Planning an ongoing program

When we met with school administrators about continuing their asthma programs we presented the following to help them institutionalize what they had begun to do as part of the Partnership. We suggested:

1. Set Goals: The Principal and key staff can set annual goals for handling health conditions (asthma) for the year and evaluate how well the goals were met.

Before they plan their program they decide on their goals:

*What do we want to do differently this year regarding asthma and our students?*

*What would we like to be able to say at the end of the year about:*

- a. the number of asthma emergencies?*
- b. the completeness of information about our students?*
- c. how our staff handle asthma care?*

Be specific so you can measure your success, for example:

*Our goals for this year: our school will have emergency cards for 80% of our students by October; we will have asthma management plans for all students with asthma; keep track of all absences due to asthma; all teachers will have one inservice about asthma; we will have less than one asthma emergency all year.*

With these goals you know you will need to 1) track whether each student has an emergency card; 2) count how many students have asthma (from the new DPS health form); 3) count which of these students have an asthma management plan and 4) have teacher or secretary document and count how many absences due to asthma there are and how many medical emergencies you have this year.

Think this is possible? Documenting the toll asthma takes on your students and staff will help pave the way for future resources. We don't have a problem until we can show we have a problem.

2. Set, plan and carryout program components: (such as)

- Orientation for school personnel about the school asthma management plan at the first staff meeting.
- Identification of all students with asthma
- Record keeping improvements
  - Student Asthma Plan in the office
- Awareness education for teachers and staff in the fall
- Open Airways training for students with asthma
- Awareness education for other students
  - Environmental Detectives
- Parent night or School Asthma Fair
- School environment monitoring
  - Ad Hoc Environmental Action Committee
- School Policies
  - Review and update our school's health policies

2. Share Information: Once the principal has selected what to do at the school, share with the staff that "our school has an asthma program!" Continue to publicize the school's asthma management program to demonstrate care for all students.

3. Set up an ongoing system: Principal and staff set up office procedures for managing information: where will we file Asthma management plans. Where medication permission forms be filed. Who else should have the information? All need to be considered.

How about keeping asthma fact sheets in the office to send home or give to teachers as needed?

What about changing attendance forms to ask, *was this absence due to asthma?*