

◆ **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	Date of Evaluation	X = Good Technique ? = Needs Improvement			
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	Date of Evaluation	X = Good Technique ? = Needs Improvement		
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

Sample Letter to Parents/Guardians of Students with Asthma



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...	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 Chart

Asthma Action Plan	Individualized Emergency Plan	Individualized Nursing Care Plans (Health Care Plans)	Individualized Education Plan (IEP)	504 Plans
<p>Purpose:</p> <ul style="list-style-type: none"> To provide specific instructions about self-care and management of asthma <p>Target:</p> <ul style="list-style-type: none"> All students with asthma, especially those with persistent asthma. <p>Responsible Party:</p> <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. <p>Other:</p> <ul style="list-style-type: none"> Used in developing Emergency Action Plans 	<p>Purpose:</p> <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 <p>Target:</p> <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). <p>Responsible Party:</p> <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. 	<p>Purpose:</p> <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. <p>Target:</p> <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). <p>Responsible Party:</p> <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. 	<p>Purpose:</p> <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). <p>Target:</p> <ul style="list-style-type: none"> Students qualifying for special education services because of a chronic illness do so through the categories of "other health impaired." For special education students aged 3-21 years. <p>Responsible Party:</p> <ul style="list-style-type: none"> Multidisciplinary team in collaboration with parents. Health component of the IEP is developed by the school nurse. 	<p>Purpose:</p> <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). <p>Target:</p> <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). <p>Responsible Party:</p> <ul style="list-style-type: none"> 504 coordinator or liaison and team as designated by school or district.
<p>Other:</p> <ul style="list-style-type: none"> Based on student's Asthma Action Plan or 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). 	<p>Other:</p> <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). 	<p>Other:</p> <ul style="list-style-type: none"> Nursing Care Plans (Health Care Plans) 	<p>Other:</p> <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). 	<p>Other:</p> <ul style="list-style-type: none"> Nursing Care Plans (Health Care Plans)

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

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.

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



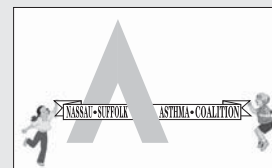
Get emergency help from school nurse or designated emergency staff if student has any of these:

- 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.

