# In the Schoolyard and Beyond:

## Addressing Childhood Asthma in Your Community



This publication provides six action steps that youth-serving organizations, families and schools can take to ensure consistent asthma-friendly environments.









#### What Is Asthma?

Asthma is a chronic (ongoing, long-term) disease that narrows the passageways to the lungs. This condition makes it difficult to breathe.

#### When asthma is present, the lungs show three key changes:

- · Inflamed airway linings
- · Tightened muscle bands around air passageways
- Too much mucus

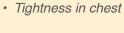


Children with asthma have it all the time, but they will only have trouble breathing if something irritates their lungs. No one knows what causes asthma, but it is known that certain conditions (triggers) can prompt the symptoms associated with the disease.

#### **Symptoms of Asthma**

Children with asthma may display one or more of the following symptoms:

- Wheezing
- · Coughing, often occurring at night or in the early morning
- · Shortness of breath





## Why Address Childhood Asthma in Your Community?

- More than 5 million children ages 5-17 have asthma.<sup>1</sup> Students miss nearly 13 million school days each year to asthma.<sup>2</sup>
- Asthma may limit a child's ability to learn, sleep and play, require expensive treatment, and result in increased numbers of visits to the doctor and emergency room.<sup>3</sup> It is the third leading cause of hospitalization among children under 15.<sup>4</sup>
- Asthma that goes undiagnosed or that is poorly controlled can be fatal.<sup>5</sup>
- Asthma affects all ages, every race, both males and females, rich and poor.
   Asthma is more common in children, Hispanics, African Americans and those who live in poverty.<sup>6</sup>

### Creating Asthma-Friendly Environments in Your Community

Youth-serving organizations, families and schools can work together to create asthma-friendly environments. A coordinated approach calls for communities to consistently:

- (1) Use asthma action plans.
- (2) Reduce asthma triggers.
- (3) Manage medications and help children master the correct way to use them.
- (4) Encourage opportunities for physical activity.
- (5) Establish and maintain good communication.
- (6) Provide and/or take advantage of asthma education.

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey, 1999-2008.

<sup>&</sup>lt;sup>2</sup> Akinbami, L. "Asthma Prevalence, Health Care Use and Mortality: United States 2003-05." Centers for Disease Control and Prevention, National Center for Health Statistics. 2006.

<sup>&</sup>lt;sup>3</sup> Wang, Li Yan Wang, Yuna Zhong, and Lani Wheeler. "Direct and Indirect Costs of Asthma in School-age Children," Preventing Chronic Disease: Public Health Research, Practice and Policy, 2:1, January 2005.

<sup>&</sup>lt;sup>4</sup> Hall, MJ and CJ DeFrances. "2001 National Hospital Discharge Data.

<sup>&</sup>lt;sup>5</sup> Akinbami, Lara J. "The State of Childhood Asthma: United States, 1980-2005," Advance Data From Vital and Health Statistics, No. 381. Revised December 2006. National Center for Health Statistics, 2006.

<sup>&</sup>lt;sup>6</sup> Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Accessed July 2010.

#### 1. Use Asthma Action Plans

Each child's asthma is unique and requires an action plan\* from the child's doctor or other health care provider. The action plan is a blueprint and contains information on medication (when and how to take it), triggers, symptoms and emergency care. The asthma action plan should be shared with the child's family, school, after-school programs and with everyone responsible for the child during his or her day.

#### **Youth-Serving Organizations**

- Keep up-to-date asthma action plans on file for every child with asthma.
- Ensure staff has read, understood, and has access to the asthma action plan.
- Communicate with families to learn about each child's triggers and symptoms.

#### **Families**

- Ensure all of your child's caregivers have an up-to-date asthma action plan.
- Establish a consistent relationship with your child's health care provider and ensure that you and your child fully understand the medications and treatment actions listed on the action plan.
- Work with school health staff and your health care provider to complete and submit an up-to-date asthma action plan each school year, or an amended plan during the year, if needed.

- Implement policies to ensure updated asthma action plans are on file and used, understanding they are critical to good asthma management.
- Enable school health staff to track and communicate asthma history with appropriate caregivers.

<sup>\*</sup> Find sample asthma action plans at www.cdc.gov/asthma/actionplan.html.

#### 2. Reduce Asthma Triggers

Asthma symptoms may vary from person to person. Asthma triggers may be indoor or outdoor irritants or allergens and can include: second-hand smoke, dust mites, pets, cockroaches, vehicle exhaust, mold, grasses, trees, pollen, and strenuous physical exercise.<sup>7</sup>

#### **Youth-Serving Organizations**

- Identify and raise awareness of asthma triggers within your facility.
- Adopt and enforce policies that reduce triggers in and around your facility, such as no smoking, no automobile idling and fragrance-free policies.

#### **Families**

- Learn what triggers your child's asthma and take steps to reduce exposure, such as using allergen-free pillow cases.
- Provide a smoke-free environment at home, in the car and wherever your child may be.

- Establish programs to ensure good indoor air quality, such as the Environmental Protection Agency's Tools for Schools Program. www.epa.gov/iaq/schools
- Establish and enforce comprehensive tobacco-free schools, no idling and other policies that address asthma management, using tools such as the National School Boards Association's asthma policy checklist. www.nsba.org/ MainMenu/SchoolHealth/asthma-page/policy-dvlp/policy-checklist\_1.aspx

<sup>&</sup>lt;sup>7</sup> Centers for Disease Control and Prevention, National Center for Environmental Health. "You Can Control Your Asthma: A Guide to Understanding Asthma and Its Triggers." www.cdc.gov/asthma/pdfs/asthma\_brochure.pdf

## 3. Manage Asthma Medications and Master Techniques

There are two types of asthma medicines – quick-relief and long-term control. Health care providers should assess family, school and community factors in determining when a child should carry and self-administer medications. The provider should communicate the recommendations to the child's family and school, especially the school nurse, as part of the asthma action plan.<sup>8</sup>

All 50 states have established laws on students' right to carry and self-administer lifesaving asthma medication in schools.

Children should also have access to medical devices that help manage their asthma, such as a spacer/chamber and peak flow meter.

#### **Youth-Serving Organizations**

 Ensure quick-relief medication, peak flow and spacer/chamber is stored safely with the child's asthma action plan and easily accessible during an emergency.

#### **Families**

 Request that your health care provider prescribe three each of the following: quick-relief inhalers, peak flow meters, spacer/chamber devices, every school year (for use at home, at school and with out-of-school providers).

- Ensure that students with asthma who meet the criteria to self-carry medications do so, in accordance with state law.
- Prepare for safe and proper storage of asthma medications and devices and plan for their accessibility, as needed.
- Partner with organizations that provide outreach to families on insurance options, such as Medicaid and State Children's Health Insurance Program (S-CHIP), to help all eligible students receive coverage.

<sup>&</sup>lt;sup>8</sup> When Should Students With Asthma or Allergies Carry and Self-Administer Emergency Medications at School? Guidance for Health Care Providers Who Prescribe Emergency Medications, National Heart Lung and Blood Institute, www.nhlbi.nih.gov/health/prof/lung/asthma/emer\_med.htm.

**Asthma medication** reaches the lungs through the quick-relief inhaler only when the correct technique is used. It is essential that everyone who comes in contact with a child with asthma has a basic knowledge of asthma medications, devices and correct treatment techniques.

**Quick-Relief Asthma Medications/Quick-Relief Inhalers** provide prompt relief of asthma symptoms or can be used to pre-treat before physical activity. This medication comes in the form of an **MDI**, metered dose inhaler.





**Spacer/Holding Chamber Device** helps deliver the medication from a quick-relief inhaler.

Controller/Long-Term Asthma Medications are used daily to lessen the inflammation of the airways to prevent asthma episodes. They will not provide relief during an asthma episode or emergency. The medication is usually taken at home.





**Peak Flow Meter** is a hand-held device that measures how well the lungs are working. Peak flow readings can show if the airways have narrowed, even before the symptoms are felt.

## 4. Ensure Opportunities for Physical Activity

Regular exercise is important for all children, including those with asthma. A child with well-managed asthma should be able to exercise without experiencing an asthma episode. Those with children in their charge should regularly review whether the asthma action plan includes instructions on taking medication to avoid or reduce asthma symptoms during physical activity.

#### **Youth-Serving Organizations**

- Provide asthma education to all coaches, staff or volunteers who will be involved in physical activity with children so all are familiar with asthma symptoms and emergency procedures.
- Ensure children with asthma take their quick-relief medication 15–30 minutes prior to exercise, if prescribed.
- Ensure quick-relief medications, devices and asthma action plans are easily accessible.

#### **Families**

- Ensure your child understands how to manage his/her asthma during physical activity, if exercise is a trigger for an asthma episode.
- Ensure your child's physical education teachers, coaches and out-of-school providers have a copy of your child's most recent asthma action plan.

- Adopt and implement policies that provide all children the opportunity to participate in regular physical activity.
- Ensure that physical education teachers, coaches, faculty and staff
  have knowledge of asthma and asthma symptoms and are familiar with
  emergency procedures.
- Ensure physical education staff know which students have asthma and can easily access asthma action plans, quick-relief medications and devices.

### 5. Establish and Maintain Good Communication

School system leaders, community organizations, and families must communicate with each other to ensure consistent, quality asthma management during school, at home and during out-of-school time.

#### **Youth-Serving Organizations**

- Help build parent confidence in your organization's ability to effectively manage asthma by sharing education provided to staff and faculty.
- Communicate with the parents on their child's use of asthma medication or an asthma episode when in your charge.

#### **Families**

- Discuss your child's asthma with your health care provider; appropriate school staff such as teachers, coaches, faculty and staff, and out-of-school caregivers.
- Make sure your child understands his/her asthma medications and is able to communicate and advocate for his/her own needs.
- Inform school and caregivers when your child has experienced an asthma episode or asthma-related absence, and provide guidance on any changes in medication or procedures.

- Communicate effectively with the media, youth-serving organizations, families, and the general public using tools such as AASA's Asthma Communication Toolkit. www.aasa.org/asthmatoolkit.aspx
- Address asthma as part of your coordinated school health plan using strategies developed by the Centers for Disease Control and Prevention. www.cdc.gov/HealthyYouth/asthma/pdf/strategies.pdf

#### 6. Provide Asthma Education

All who work with children should be knowledgeable about asthma warning signs, triggers and how to respond to an asthma emergency.

#### **Youth-Serving Organizations**

- Provide asthma education and training for staff on medication use and emergency procedures.
- Talk with the family if you think a child in your care may have undiagnosed asthma.
- Become involved with local asthma coalitions, hospitals, clinics and parent organizations to enhance asthma management and education.

#### **Families**

- Learn about your child's asthma triggers, medications and management through your health care provider or any of the organizations listed in this guide under "Contacts and Resources."
- Share information about community asthma education resources with school staff and other parents.

- Provide asthma education and training to all staff.
- Provide general asthma awareness information to all students.
- Provide asthma education to children with asthma through resources such as the American Lung Association's curricula.
- Form partnerships with local asthma coalitions to enhance asthma management and education.
- Share what you know, what you are learning and your experience helping children with asthma in your school district with other school leaders.
   Contact American Association of School Administrators (AASA) and National School Boards Association (NSBA) to help you develop and spread your success stories.

#### **Contacts and Resources**

Below are organizations that can either provide or help you locate FREE resources to create, manage and support asthma-friendly schools, community centers, youth programs, summer camps and homes.

- Allergy & Asthma Network/Mothers of Asthmatics maintains a list of frequently asked questions for families with children with asthma. http://www.aanma.org/
- American Association of School Administrators provides free asthma resources such as
  a Powerful Practices assessment tool for schools, Questions School Leaders Frequently Ask
  About Asthma, Asthma Communications Toolkit, and this community guide.
  http://www.aasa.org/Asthma.aspx
- American Lung Association Open Airways for Schools program helps children learn to manage their own asthma. http://www.lungusa.org/lung-disease/asthma/
- Asthma Community Network provides tools, information and partners to help communities improve the quality of life for people with asthma. http://www.asthmacommunitynetwork.org
- Centers for Disease Control and Prevention, Division of Adolescent and School Health
  promotes the health and well-being of children and adolescents to enable them to become
  healthy and productive adults. http://www.cdc.gov/healthyyouth/asthma/index.htm
- Environmental Protection Agency offers resources for safe home and school air environments, asthma triggers, school bus idling, and *Tools for Schools*, a kit to help all schools ensure healthy indoor air environments. http://www.epa.gov/
- National Collaboration for Youth includes the YMCA/YWCA, Boys and Girls Clubs of America, Boy Scout/Girl Scouts, Camp Fire USA and 40 other organizations. Download information on youth development in your community. http://www.collab4youth.org/
- National Heart, Lung and Blood Institute provides tips and resources through their National
  Asthma Control Initiative for schools, parents and other caregivers to help children control
  asthma. http://www.nhlbi.nih.gov/health/prof/lung/asthma/naci/audiences/schools-childcare.htm
- National Parent Teacher Association provides parents and families tools to help children be safe, healthy, and successful — in school and in life. http://pta.org/
- National School Boards Association maintains an "Asthma & Schools" webpage, designed
  to provide easy access to information, resources, and tools to support management and policy
  practices related to students with asthma. http://www.nsba.org/MainMenu/SchoolHealth/
  asthma-page.aspx

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For additional copies of this guide in English or Spanish, contact AASA at children@aasa.org or 703-875-0700.