

# 2008 STATE HONOR ROLL™ OF ASTHMA AND ALLERGY POLICIES FOR SCHOOLS



## INTRODUCTION

The terms “asthma” and “allergy” represent a variety of independent but related diseases that have become some of the most common childhood conditions in the U.S, and therefore, they have become some of the most common diseases affecting schools.

**Asthma** – including allergic (extrinsic) asthma, non-allergic (intrinsic) asthma, and exercise-induced asthma – is a chronic disease of the airways in the lungs in which airways become blocked, narrowed or constricted due to a variety of allergens and irritants causing moderate, severe and even life-threatening breathing difficulties.

**Allergy** – including food allergies, anaphylaxis, nasal allergies and many other related allergic diseases – is a chronic disease of the immune system that triggers over-reactive immune responses to different types of allergens, which can cause a variety of moderate, severe and even life-threatening physical reactions.

Schools play a key role in asthma and allergy management because asthma and allergies in children are increasingly prevalent. Parents and lawmakers are interested in promoting treatment and prevention in schools. Evidence suggests that effective school asthma and allergy prevention and management programs can deliver multiple benefits in terms of student health, performance and academic achievement.

The Asthma and Allergy Foundation of America’s (AAFA) 2008 State Honor Roll™ of Asthma and Allergy Policies for Schools assesses state-wide school policies across key parameters of asthma and allergy prevention and management. This evaluation celebrates exemplary state efforts, an important step in promoting school health.

The Foundation investigated states for laws that guide medication and treatment policies in school settings, asthma and allergy awareness, and environmental factors, including air quality and tobacco policies. Based on this assessment, AAFA created the State Honor Roll™. For 2008, six states achieved State Honor Roll status: Connecticut, Massachusetts, New Jersey, Rhode Island, Vermont and Washington.

These states not only provide a model and guidance to schools, but they also perform best at requiring school compliance with the core set of standards selected by AAFA. Each state is detailed in Appendix I: 2008 State Honor Roll Profiles.

This report also recognizes other states worthy of “Honorable Mention,” and each is detailed in Appendix II: Honorable Mention State Profiles. AAFA does not intend for this report to be an analysis of school- or district-level policies. Nor does this report evaluate the actual implementation of policies at the school level.

In the past, other studies have reported states’ progress in this area. Notably, the U.S. Centers for Disease Control and Prevention’s (CDC) School Health Policies and Programs Study of 2006 (SHPPS)<sup>1</sup> assesses school health policies at the state, district, school and classroom levels. While other reports have addressed various components of the asthma/allergy challenges in schools, none has provided a comprehensive overview and evaluation of medical, awareness, education and environmental policies in schools regarding both asthma and allergies.

AAFA’s study method relied on a search for relevant laws and policies as opposed to the CDC’s approach of surveying state education departments in all 50 states and the District of Columbia. This is not to say AAFA’s researchers ignored school level practices, and at points, this report contrasts policies with practices reported in the CDC’s School Health Profiles (SHP) survey of 2006.<sup>2</sup> AAFA’s research methodology and selection criteria are detailed in the Methodology section of this report.

## **Project Goals**

- To provide parents with information that will enable them to assess the asthma and allergy policies at their children’s schools and advocate for improvements where warranted
- To provide legislators with an overview of how school policies and practices in their state compare to others and provide models for improvement
- To help school personnel set standards and benchmarks by providing the best practices and the experience of other schools

## **Asthma in Schools**

- Nearly 10 million U.S. children under 18 have been diagnosed with asthma, and more than 5 million school-aged children have active asthma; it is the most common chronic condition in children today<sup>3,4</sup>
- Childhood asthma prevalence more than doubled from 1980 to 1996 and remains at historically high levels<sup>5</sup>

1 The School Health Policies and Programs Study (SHPPS) 2006, Centers for Disease Control and Prevention, <http://www.cdc.gov/HealthyYouth/shpps/index.htm> (accessed 7/21/08)

2 CDC’s School Health Profiles (SHP) 2006, Centers for Disease Control and Prevention. Many states and districts have given CDC permission to distribute their data files upon request. Other states and districts manage the distribution of their data files. For information on acquiring data files from specific states or districts, e-mail your request to [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov), call 1-800-CDC-INFO or access an online request form at [www.cdc.gov/healthyyouth/profiles/data.htm](http://www.cdc.gov/healthyyouth/profiles/data.htm) (accessed 7/28/08).

3 Centers for Disease Control and Prevention. National Center for Health Statistics, National Health Interview Survey, 1999-2006.

4 American Association of School Administrators. A Childhood Epidemic. School Governance & Leadership, Spring 2003.

5 Centers for Disease Control and Prevention. Surveillance for Asthma - United States, 1960-1995, MMWR. 1998; 47 (SS-1).

- In 2003, almost 13 million school days were missed due to asthma among the more than 4 million children who reported at least one asthma attack in the preceding year<sup>6</sup>
- Asthma is the leading cause of school absenteeism due to chronic illness<sup>2</sup>
- Over 40% of all emergency room visits related to asthma each year, and approximately 33% of all asthma hospitalizations are for children<sup>1</sup>
- Rates of visits to physician offices and hospital outpatient departments for asthma have continued to increase despite the plateau in asthma prevalence; however, death rates from asthma have begun to decline<sup>7</sup>

## **Allergy in Schools**

- Food allergy is the most common cause of anaphylaxis outside of the hospital and is responsible for approximately 30,000 anaphylactic episodes and 150 to 200 deaths each year in the U.S.<sup>8,9,10</sup>
- Approximately 2.2 million school-aged children have food allergy<sup>11</sup>
- The incidence of food allergy and food-induced anaphylaxis has been rising in recent years<sup>7,12,13,14</sup> and the number of American children under five years of age with peanut allergy doubled between 1999 and 2004<sup>9</sup>
- Food allergies disproportionately affect children due to the immaturity of their immune systems; an estimated 6-8% of children versus only 2% of adults have food allergies<sup>15</sup>
- Insect stings and exposure to latex may also trigger anaphylaxis in sensitized children; in a school of 500 children, approximately two will be allergic to insect stings (more in southern areas where imported fire ants are a menace)<sup>16</sup>
- Studies of fatalities due to anaphylaxis have shown that the majority of cases occurred outside the home, with a significant number occurring at school<sup>17,18</sup>
- Estimated hospitalization costs for food anaphylaxis are an estimated \$5,000 per incident, with a reported incidence of 2.8 per 100,000 hospital admissions<sup>19</sup>

6 Centers for Disease Control and Prevention. National Center for Health Statistics, National Health Interview Survey, 1999-2006

7 Centers for Disease Control and Prevention. Advance Data from Vital and Health Statistics. Number 381, December 12, 2006, Revised December 29, 2006.

8 Kemp SF, Lockey RF, Wolf BL, Leiberman P. Anaphylaxis: a review of 266 cases. Archives of Internal Medicine 1995;155(16):1749-54.

9 Yocum MW, Khan DA. Assessment of patients who have experienced anaphylaxis: a 3-year survey. Mayo Clinical Proceedings 1994;69:16-23.

10 Sampson HA. Anaphylaxis and emergency treatment. Pediatrics 2004;111(6):1601-08.

11 Food Allergy Facts and Statistics, www.foodallergy.org (accessed August 4, 2008).

12 Wang J, Sampson HA. Food anaphylaxis. Clinical and Experimental Allergy. 2007;37(5):651-60.

13 Keet CA, Wood RA. Food allergy and anaphylaxis. Immunology and Allergy Clinics of North America. 2007;27(2):193-212.

14 Centers for Disease Control and Prevention. National Center for Health Statistics, Asthma Prevalence, Health Care Use and Mortality: United States, 2003-2005.

15 Report of the Expert Panel on Food Allergy Research. National Institute of Allergy and Infectious Disease, National Institutes of Health, 2003. www.niaid.nih.gov (accessed 7/23/2008)

16 Kagy L, Blaiss MS. Anaphylaxis in Children. Pediatric Annals. 1996;27(1):727-34.

17 Bock SA, Munoz-Furlong A, Sampson HA. Fatalities due to anaphylactic reactions to foods. Journal of Allergy and Clinical Immunology. 2001;107(1):191-93.

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## Asthma & Allergy School Milestones

- 1975 – Congress enacts *The Education for All Handicapped Children Act* [reauthorized in 1997 as *The Individuals with Disabilities Education Act (IDEA)*] requiring schools to promote the health, development and achievement of students with disabilities and other health impairments, including asthma
- 1991 – The National Asthma Education and Prevention Program (NAEPP) develops *Managing Asthma: A Guide for Schools*
- 1995 – The U.S. Environmental Protection Agency (EPA) develops *Indoor Air Quality Tools for Schools*
- 2000 – EPA develops *Managing Asthma in the School Environment*
- 2002 – Rand Corporation's *Improving Childhood Asthma Outcomes in the United States: A Blueprint for Policy Action* recommends school-based asthma management programs
- 2002 – The CDC develops *Strategies for Addressing Asthma Within a Coordinated School Health Program*, and funds 20 states and 7 cities to develop demonstration programs for reduction of asthma episodes and asthma-related absences
- 2004 – Congress passed the *Asthmatic Schoolchildren's Treatment and Health Management Act*, which rewards states that pass laws protecting students' rights to carry and self-administer asthma and/or anaphylaxis medications by giving them federal funding preference for asthma-related programs
- 2005 – The National Association of State Boards of Education develops *Fit, Healthy and Ready to Learn*, a complete blueprint for developing a school asthma management program, as well as models of successful existing state approaches
- 2005 – *Healthy People 2010* national health objectives includes goals for reducing asthma

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19 Mulla ZD, Simon MR. Hospitalizations for anaphylaxis in Florida: epidemiologic analysis of a population-based dataset. *International Archives of Allergy and Immunology*. 2007;144(2):128-136.

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## EXECUTIVE SUMMARY

In the U.S., more than 5 million children have asthma, 2.2 million children have food allergies and an estimated 10 million children have other allergic diseases such as nasal and skin allergies.

The Asthma and Allergy Foundation of America (AAFA) created the *2008 State Honor Roll™ of Asthma and Allergy Policies for Schools* to provide a blueprint for advocates and policymakers to recognize and develop better state-wide school-based policies and practices for students with asthma and allergies.

Six states have been named to AAFA's 2008 State Honor Roll, which recognizes their leadership in mandating comprehensive state-wide school policies that address the needs of students with asthma, food allergies, anaphylaxis and other related allergic diseases in public elementary, middle and high schools. The 2008 Honor Roll states are (listed in alphabetical order):

- Connecticut
- Massachusetts
- New Jersey
- Rhode Island
- Vermont
- Washington

AAFA promotes state-level school policies because of the potential to uniformly impact students no matter where they attend school in a state. AAFA research and policy experts, in consultation with leaders in the fields of medicine, education and advocacy, identified 18 “core policy standards” grouped into three broad categories relating to asthma and allergies. Researchers determined which states had the 18 core policy standards in place and considered these states to be at the forefront of asthma and allergy school health.

States with a minimum of 15 of the 18 policy standards in place were named “Honor Roll” states. AAFA recognized these states as good models for policymakers, administrators, teachers, parents and advocates in other states.

Overall, AAFA found that states are stepping up to address the needs of students with asthma and allergies in public school settings. They are protecting students’ access to their own medications and documenting chronic diseases, yet half do not require schools to develop emergency protocols for asthma and anaphylaxis episodes. Most states are engaged in awareness programs for asthma, fewer states for allergies.

States are overwhelmingly banning tobacco use in schools, but few fund tobacco cessation programs for school students and staff. Most states recommend indoor air quality activities for schools, but fewer have procedures to notify parents of pesticide applications. States are offering a variety of school health services, but only one state requires the nationally recommended levels of school nurses for students.

**Core Policy Standards:**

AAFA identified “core policy standards” to measure state performance in promoting asthma and allergy health in schools. Following are the core policy standards reviewed:

Category	Domain	Policy Type
Medication and Treatment	Medication Policies	<ol style="list-style-type: none"> <li>1. State requires physician’s written instructions to be on file to dispense prescription medication to students.</li> <li>2. State policy ensures students’ right to self-carry and self-administer prescribed asthma medication.</li> <li>3. State policy ensures students’ right to self-carry and self-administer prescribed anaphylaxis medication.</li> </ol>
	Identification and Reporting	<ol style="list-style-type: none"> <li>4. State policy mandates schools to identify and maintain records for students with chronic conditions including asthma &amp; anaphylaxis.</li> <li>5. State requires a procedure updating health records periodically.</li> <li>6. State requires that schools maintain asthma/allergy incident reports for reactions, attacks, and medications administered.</li> </ol>
	Management Policies	<ol style="list-style-type: none"> <li>7. State requires schools to have emergency protocols for asthma.</li> <li>8. State requires schools to have emergency protocols for anaphylaxis.</li> </ol>
	Health Services Capacity	<ol style="list-style-type: none"> <li>9. Nurse-to-student ratio is 1:750 or better.</li> </ol>

*(continued next page)*

Category	Domain	Policy Type
Awareness	Awareness in Schools	10. State recognizes problem of asthma in schools and has begun to address it. 11. State recognizes problem of allergy in schools and has begun to address it.
School Environment	Indoor Air Quality	12. State has mandated that all schools must have IAQ management policies. 13. State has adopted a policy requiring that districts and schools conduct periodic inspections (of HVAC system & other items important in asthma/allergy management). 14. State has IAQ policies that include specific components important in asthma/allergy management (HVAC, HEPA, carpeting, pesticide use).
	Outdoor Air Quality	15. State requires schools to notify parents of upcoming pesticide applications.
	Tobacco Policies	16. All smoking is prohibited in school buildings and on school grounds. 17. All smoking is prohibited on school buses and at school-related functions. 18. Tobacco use prevention is required in health education curriculum.

The full report details the methodology, findings, performance of all 50 states on core policy standards, and detailed profiles the 2008 Honor Roll states (Appendix I) and other states worthy of “Honorable Mention” (Appendix II).

**Summary Charts:**

The following three pages are comprised of two color-coded charts illustrating a summary of Honor Roll State scores and scores for all 50 states.

***CHART 1: Summary of 2008 Honor Roll States (Page 10)***

***CHART 2: Summary of All 50 States (Pages 11-12)***