

# Fighting Childhood Asthma: How Communities Can Win

A PolicyLink Report

Fall 2002

*Funded by a grant from*



***Fighting Childhood Asthma: How Communities Can Win** has been a team project, involving an internal team within PolicyLink and external consultants who served as reviewers and editors of this current revision. We express sincere thanks to all who assisted in the completion of this report, especially to Angela Glover Blackwell, founder and president of PolicyLink, for her leadership. A special thanks to our team of skilled external reviewers: Marielena Lara, MD; Vicki Legion, MPH; Michael LeNoir, MD; and Bob Prentice, PhD. We are also grateful for all the individuals and organizations that shared their expertise and resources with us in site visits, interviews and conversations.*

# Fighting Childhood Asthma: How Communities Can Win

A PolicyLink Report

**Principal Authors**  
.....

Mildred Thompson  
Robert Phillips  
Judith Bell

Funded by a grant from



## ABOUT THE AUTHORS

**Mildred Thompson, Senior Program Associate**, leads PolicyLink research focused on documenting the value of community participation in strengthening health delivery systems. She has been involved in research and advocacy projects such as the federal Healthy Start program created to reduce infant mortality in disadvantaged communities, contributed to the development of initiatives to address health disparities, and assisted in identifying strategies to reduce childhood asthma. Thompson has worked with local and national organizations to enhance the role of community-based initiatives in successfully meeting the needs of diverse populations. Prior to PolicyLink, she served as Director of Community Health Services with Alameda County's Public Health Department.

**Judith Bell, Executive Vice President**, is integral to the development of the PolicyLink signature strategies for achieving economic and social equity. She develops new programs and partnerships focused on achieving policy impact. Bell oversees strategic planning and programmatic activities, including PolicyLink initiatives on equitable development, regional equity, bridging the digital divide and health disparities. Prior to joining PolicyLink, Bell was the director of the West Coast Regional Office of Consumers Union, where she promoted greater access to health care, health insurance and low-cost auto insurance. Bell developed and co-directed a 50-state project to preserve charitable assets when nonprofit health care institutions convert to for-profit businesses. The project saved over \$5 billion of charitable funds and led to the creation of several new health care foundations.

**Robert Phillips, Senior Associate**, leads PolicyLink research on development of private equity funds for a number of initiatives including the California's Community Capital Investment Initiative. As a member of the PolicyLink community-centered policing team, Phillips conducted interviews and research for "Community-Centered Policing: A Force for Change." Previously, Phillips crafted progressive investment strategies for Service Employees International Union and health and urban policy positions for the AFL-CIO. He also serves as a member of the Board of Trustees for the Alameda County Medical Center in Northern California.

## PREFACE

A fundamental tenet of most families, communities and nations is the protection of their children from harm, disease and neglect. Each generation strives for advances beyond its current reach. Unfortunately, the desired goals for many children are impeded by significant social, economic and health inequities. Such is the case with asthma — a serious health threat in the United States. Asthma is more than a physical health problem; its prevalence and severity are directly affected by environmental, housing and social conditions. In America, poor children have less access to consistent, quality health care; are likely to live in neighborhoods with known toxicities; and often attend schools and recreation centers filled with undetected asthma triggers. As a result, poor children have more asthma-related deaths and hospitalizations than other children.

The conditions leading to the high prevalence of asthma for poor children will not be addressed until there are improved data systems, better indoor and outdoor air quality, coordinated and enhanced systems of care, informed and involved communities and constituencies, and responsive public policies. Changes must be comprehensive and coordinated. PolicyLink and The California Endowment offer *Fighting Childhood Asthma: How Communities Can Win* as a catalyst in the battle to garner this much-needed support. We encourage readers to view this report as part of a menu of choices that can be tailored to meet the unique needs of different communities. With focused attention on the recommendations in this report, combined with local efforts to lift up opportunities and address gaps, major changes can occur.

PolicyLink is a national nonprofit, research, communications, capacity-building and advocacy organization advancing a new generation of policies to achieve economic and social equity and assisting others in building strong, organized communities. Its initiatives are informed by the wisdom, voice and experience of local practitioners developing innovative solutions to America's most pressing problems. The California Endowment, a private, statewide health foundation, was formed in 1996 to expand access to affordable, quality health care for underserved individuals and communities, and to promote fundamental improvements in the health status of all Californians.

We hope that *Fighting Childhood Asthma: How Communities Can Win* will prove to be a useful tool in California and beyond for local community groups and coalitions, policymakers, health officials, foundations and others as they seek to improve conditions for — and thus the lives of — children with asthma.



Robert K. Ross, M.D.  
President/CEO  
The California Endowment



Angela Glover Blackwell  
President  
PolicyLink

## TABLE OF CONTENTS

<b>Executive Summary</b>	1
<b>Overview: The State of the Asthma Problem</b>	5
<b>Key Action Areas: Challenges and Opportunities</b>	7
<b>Chapter 1. Data and Tracking</b>	
Promising Practices	9
<b>Chapter 2. Asthma and the Health Care System</b>	
Clinical Management	9
Promising Practices	11
Cultural Factors	13
Promising Practices	14
Provider Training	15
Promising Practices	15
<b>Chapter 3. Asthma and the Environment</b>	
Asthma and the Outdoors	17
Promising Practices	17
Asthma in the Home	18
Promising Practices	21
Asthma and Schools	22
Promising Practices	23
<b>Chapter 4. Capacity-Building Activities</b>	
Individual Action	25
Promising Practices	25
Constituency Building and Coordination	25
Promising Practices	27

*(Table of Contents continued)*

<b>Conclusion</b>	28
<b>Policy Goals and Recommendations:</b>	
Data and Tracking	29
Asthma and the Health Care System	30
Asthma and the Environment	31
Capacity-Building Activities	32
<b>Endnotes</b>	33
<b>Appendixes</b>	
Approach and Methodology	37
List of Interviewees	39
Bibliography	43
Foundation Funded Asthma Programs by Category	47
Asthma Bill Tracking	57

## EXECUTIVE SUMMARY

This report provides an overview of current efforts to improve the prevention, tracking, diagnosis and treatment of childhood asthma and accompanying opportunities for policy change. Asthma is a growing problem for children and families in California and in the nation as a whole. Asthma prevalence in the United States increased by 75 percent between 1980 and 1994, with rates for children under four increasing 160 percent. In 1998, 1.8 million Californians had asthma, including 500,000 children. The American Lung Association (ALA) reports that asthma is the reason for one in six pediatric visits in the United States.<sup>1</sup> It is the third-ranking cause of hospitalizations for children under 15 in the United States. While children of all socioeconomic statuses contract asthma, it disproportionately affects low-income children, particularly African-American and Latino children. Moreover, for uninsured and underinsured children, lack of access to care can exacerbate a vulnerable health status.

Although asthma is a medical condition, understanding, preventing and managing it transcends the boundaries of medicine. Much is known about what can stimulate an asthma episode and what can control the severity of an attack. In an asthma attack, the airway passages become inflamed and constrict, making it difficult to breathe; there is tightening in the chest and often wheezing. Air pollution exacerbates asthma. Indoor toxins bred in poor housing and poorly maintained schools help trigger the disease. Lack of access to affordable, culturally-sensitive health care leaves some asthma sufferers beyond the reach of prevention and proper treatment.

Existing data gathering systems inadequately reveal asthma's true dimensions. The only national prevalence data cover 1980–1994. Current asthma prevalence rates are unknown. Furthermore, in most cases systems are not in place to detect concentrations of asthma in particular locations. Many of the efforts to combat asthma are isolated and fragmented. Finally, the lack of a powerful, engaged constituency calling attention to the asthma problem and demanding solutions has kept asthma largely off the radar screen of the general public and consequently has not created a sense of urgency for policymakers to institute far-reaching improvements.

This report focuses on the challenges and opportunities for progress in a number of key areas related to childhood asthma. In each area, the report conveys the perspectives of expert practitioners who are pushing for improvements in how the asthma problem is addressed. Equally important, the report documents innovative grassroots initiatives for change on the part of communities disproportionately affected by childhood asthma. It also surveys key existing and emerging legislative and policy efforts to improve asthma strategies. While this report assumed a national perspective in its research, interviews, and site visits, it was completed to lift lessons learned and to highlight useful new programs, policies and practices for potential application in California. The primary focus was on learning what is in place and what gaps exist in California. (See Appendixes 1 and 2 for a detailed description of the research methodology and a list of interviewees.)



The following examples represent some of the promising steps that California has already taken to address its childhood asthma epidemic. The research uncovered a number of promising developments.

- In February 2001, The California Endowment initiated a series of programs that focus on improving the quality of life for school-aged children with asthma. The first phase was the launch of the California Asthma Among the School-Aged (CAASA) program, a \$3.6 million, three-year statewide initiative designed to implement a model program to improve clinical diagnosis, treatment and management of asthma for school-aged children with asthma. CAASA brings together the Integrating Medicine and Public Health Program (IMAP), the California Department of Health Services (DHS), the University of California, San Francisco (UCSF), and seven clinics statewide. The second phase of The Endowment's asthma programs is the Community Action to Fight Asthma (CAFA) program, a \$12 million, three-year statewide initiative that complements the CAASA program by addressing the multiple environmental triggers of asthma among school-aged children with asthma. Funding for CAFA supports 12 community-based partnerships across California that work with the public, private and nonprofit sectors to identify and reduce asthma triggers in places where children live, learn and play.
- The Los Angeles Unified School District instituted a Safe School Inspection Program that conducts comprehensive health and safety inspections of all of its 900 schools, focusing on both indoor and outdoor conditions. When conditions are found that require remediation, a Corrective Action Notice is issued to the school principal. The corrections must be made within a specific period of time. In addition, the District has formed an Indoor Air Quality Task Force that meets monthly and consists of representatives from the Environmental Protection Agency (EPA), parents, community activists, health educators, school inspectors and nurses.
- In an effort that is both comprehensive and culturally appropriate, the Central California Asthma Project, in conjunction with the San Joaquin Valley Health Consortium and the American Lung Association of Central California, promotes outreach and organizing activities to combat asthma among those already affected, some of whom are undocumented farm workers, in six counties of the Central Valley. The Central California Asthma Project provides in-home asthma education and respiratory therapists to work directly with asthma patients; it works closely with neighboring schools and hospitals to assure appropriate coordination and follow-up.
- California Governor Gray Davis signed SB 702 in October 2001. The bill creates an environmental health tracking system to provide information and answers to: (1) when and where diseases occur; (2) what environmental hazards are involved; and (3) what the actual exposure of Californians is to these hazards. The bill garnered strong public support and signaled an encouraging first step for the state to obtain needed data on the extent of asthma's impact.

These developments, together with others, create the foundation for a leap forward in efforts to reduce childhood asthma in California. This report argues that an engaged constituency, able to use new data to develop and advocate for change, is indispensable for bringing about the qualitative changes needed to alter the scope of the asthma epidemic for children.

Those already concerned with aspects of the asthma problem — parents, school personnel, health providers, faith-based leaders, community residents — can form the core of a powerful alliance for change. Such community-based efforts have the potential to draw significant attention to the asthma problem, develop effective interventions and, ultimately, command greatly increased resources. Further, with the proper support, these efforts hold the promise of crafting solutions appropriate to individual communities and for developing the constituencies and power needed to ignite comprehensive, state-based action. *Fighting Childhood Asthma* offers policy recommendations that build on emerging developments and that cover many aspects of the asthma problem — data tracking, the health care system, environmental factors including air quality, schools, capacity-building activities, individual action and building an engaged constituency. The common characteristics of needed changes are comprehensiveness, coordination, information sharing and community involvement. These ingredients will allow the current, relatively piecemeal approaches to be integrated and pushed to the next level to tackle the serious challenges of children with asthma. This report contains numerous policy recommendations that can be grouped under the following key policy goals:

- **Improve data collection, tracking and analysis** by expanding resources, obtaining current prevalence data, developing a coordinated statewide asthma information system, collecting and analyzing community level data and developing uniform guidelines for diagnosing children under five.
- **Increase health coverage** to include all aspects of asthma screening and management, to promote nontraditional approaches for reaching underserved children and to create broad access to the most up-to-date asthma strategies.
- **Require training for all professionals** in child-related fields (such as childcare workers, teachers, and coaches), in identifying asthma, making referrals and maintaining asthma-free environments. Further, health care professionals should reflect California’s diversity and be trained to diagnose and treat childhood asthma in a culturally competent manner.
- **Promote collaboration** among local and state public agencies with responsibility for asthma, to advance approval and implementation of a coordinated statewide asthma action agenda.
- **Ensure healthy environments** by expanding air quality monitoring programs, creating new resources for environmental assessments, and strengthening and enforcing air quality standards and the rights of low-income tenants. In particular, ensure safe indoor and outdoor air quality in and around all facilities serving children, including schools, childcare centers, after-school programs and recreational centers.
- **Advance broad public awareness** through public education campaigns that utilize the media, networks (including civic associations, neighborhood groups, and faith institutions) and Internet technology to create an informed, engaged public.
- **Increase capacity of individuals, organizations and communities** to build broad coalitions and to engage parents of children with asthma and others to become a powerful force that leverages resources and promotes effective asthma-related policies and actions.

## OVERVIEW: THE STATE OF THE ASTHMA PROBLEM

Twenty years ago, asthma attacks were believed to be caused by the interplay of stress levels, genetic composition and a tendency toward psychosomatic illness. Over the past fifteen years, however, advances in biomedical research have improved medical providers' understanding of the internal (individual vulnerability) and external (environmental) causes of asthma. Understanding that asthma can result from where you live, as much as how you live, has far-reaching consequences on health and health outcomes. Attitudes and beliefs have shifted from "blaming the victim" to understanding the role of complex factors. Environmental and socioeconomic factors have been accepted as key determinants in the incidence and severity of asthma. More recently, health disparities research has revealed the greater impact of the disease on communities of color.

The following statistics convey some of the dimensions of the growing asthma problem:

- Among children under four, asthma rates increased 160 percent between 1980 and 1994.<sup>2</sup>
- In 1998, 1.8 million Californians had asthma, including 500,000 children.<sup>3</sup>
- The asthma rate is rising more rapidly in preschool children than in any other group.<sup>4</sup>
- Asthma is the cause of one in six pediatric visits.<sup>5</sup>
- Asthma is the third-ranking cause of hospitalizations for children under 15.<sup>6</sup>
- Nationally, 10 million school days are missed each year as a result of asthma.<sup>7</sup>

While there is inconclusive evidence on what causes asthma, much is known about the conditions that can stimulate an asthma episode and what can be done to control the severity of an attack. An asthma attack is usually the result of an irritant that inflames and constricts the airway passages, leading to difficulty in breathing, tightness in the chest and wheezing. Irritants triggering an asthma attack can come from several sources, including poor outdoor or indoor air quality.

Asthma disproportionately affects low-income children, particularly African-American and Latino children. Children in low-income communities are more exposed to environmental hazards in homes, schools and outdoors than children in higher-income neighborhoods. Many live in communities with ozone levels that exceed federal standards; they also have less access to consistent, high-quality health care.

Their neighborhoods have become the sites for toxic waste disposal and under-regulated industrial plants. Indoors, they fare no better: inadequate ventilation, dust mites, animal dander, cockroaches, mold and mildew may compromise breathing. Furthermore, financial barriers may prevent consistent use of prescribed medications.

- In 1998, 41 percent of families with asthmatic children were classified as having no primary insurance.<sup>8</sup>
- Over half of the hospital payments for children with asthma were made by Medi-Cal.<sup>9</sup>
- Between 1995 and 1998, African-American children were four times more likely to be hospitalized . . . and seven times more likely to die from asthma than white children.<sup>10</sup>
- Latino children are hospitalized for asthma in California on average at a rate that is 10 percent greater than for white children, but in four counties — Imperial, Fresno, Kings and San Francisco the rate is more than 50 percent greater.<sup>11</sup>

In a draft report, a statewide task force on asthma recently recognized these problems: “The disease burden of asthma is greatest in lower-income and nonwhite populations. Low socioeconomic status is a demographic risk factor for asthma and morbidity from this disease. Environmental factors may also partially account for the disproportionate amount of asthma morbidity in low-income neighborhoods.”<sup>12</sup>

California health officials, providers and community residents do not presently have all of the information and tools needed to respond to the burgeoning asthma crisis. California has not adopted a state plan or targeted policies to meet the growing needs of children with asthma. California’s Asthma Coordinator within the Department of Health, in collaboration with asthma experts, has been developing a statewide strategic plan for the past two years. However, a number of uncertainties exist related to this planning effort. There is no specific target date for adoption of the plan. Steps involved in its approval are unclear, and implementation dates are uncertain.

Additionally, implementation processes have not been developed.

---

***Families alone cannot initiate the deep level of changes needed to prevent their children from becoming asthmatic. A comprehensive approach is required.***

---

Given asthma’s diverse and commonplace triggers, efforts for change must focus on the quality of the air in environments where children live and play, and in the schools and childcare

facilities they attend. Accessible and culturally sensitive health care can also mitigate the effects of asthma on children. Families alone cannot initiate the deep level of changes needed to prevent their children from becoming asthmatic. A comprehensive approach is required. Better understanding of the causes, triggers and management of asthma will result in effective strategies that will, in turn, yield viable public policy.

Increasingly, communities across the state are demanding more accountability by regulatory agencies and health officials. As a result, changes are surfacing in health delivery systems, education and training, data gathering and analysis, broad community awareness and in public policy. These promising practices provide the outlines of positive change.

## Chapter 1. Data and Tracking

Assessing any problem requires good data: What is the extent of the problem? Where is it concentrated? Whom does it affect? Where is it growing most rapidly? Is there any correlation between one problem and another? For assessing the problem of children with asthma, difficulties in obtaining current, accurate prevalence data exist on all levels. Surveillance systems are needed nationally, within states and locally. For those seeking to counteract childhood asthma, asthma-related data can be notoriously unreliable. One practitioner complained:

*The data we do have, pieced together from national surveys and statistics from emergency room visits, are of use only for documenting asthma's growing prevalence nationwide. Rarely does one find documentation of asthma rates in towns, cities, or counties.<sup>13</sup>*

In January 1999, the President's Task Force on Environmental Health Risks and Safety Risks to Children concurred with this assessment. The task force acknowledged that asthma is a growing epidemic and that there is "no national system to collect data from states specifically on asthma."<sup>14</sup>

In a report released in May 2000 by Health Track at Georgetown University,<sup>15</sup> researchers used Centers for Disease Control and Prevention (CDC) data to determine that most states do not have an ongoing asthma-monitoring program. The study found that only seven states have "ready access" to statistics on emergency care for asthma. It also found that among the 23 states that do track asthma, their tracking efforts cannot be confirmed as adequate.

These problems stem from at least three sources: first, contradictory definitions of asthma; second, lack of data compiled at every level; and third, wide inconsistencies in data collection and tracking methodologies. Consequently, there is incomplete information about the extent of the problem, which makes targeting appropriate remedial resources difficult.

The most consistent databases related to asthma are based on emergency room visits and asthma-related deaths. While these data are valuable, they are not a reliable source for assessing the real prevalence of the disease. They leave as uncounted those people with well-managed asthma, since asthma sufferers with access to quality care have less need to use emergency rooms.



In fact, few communities have the capacity to capture local data. Since asthma is not a reportable disease, administrative records may need to be reviewed in each county to determine the number of children diagnosed with the disease. Challenges inherent in this process include assurances that children are being properly diagnosed, accuracy in manual records review and costs associated with such a time-consuming process. Capacity may be lacking for local health departments to engage in this level of tracking. One asthma prevention strategist noted, "Without incidence and prevalence estimates at the state and local levels, health planners cannot accurately gauge the full extent of the disease burden, nor can they estimate the scope of measures necessary to combat this illness."<sup>16</sup> By obtaining accurate prevalence data, resources could become available to address the range of required interventions.

Another potentially important source of asthma data is schools. However, most school districts do not have tracking mechanisms in place to capture health-related information. Also, some school officials are not comfortable with becoming involved in students' health concerns. Increased emphasis on improving test scores, enhancing overall academic performance and concerns about school violence cause some teachers and principals to be reluctant to venture into yet another area of responsibility. Additionally, some school personnel may feel that students' health issues are more appropriately addressed by parents, rather than school staff.

While schools are not required to track students with asthma, some report that more students appear to be affected by asthma in the past few years through the number of asthma incidents on campus or the request to take asthma medication on campus. Furthermore, some data sources reference asthma as the leading cause of school absenteeism.<sup>17</sup> However, in most instances, statistics related to absenteeism and asthma are only estimates, not grounded in definitive data. Schools with the most accurate statistics regarding students' health status tend to be those with school-based health centers and those with nurses consistently on campus.

Compounding this issue are unclear definitions of who suffers from asthma. If a child has not had an asthma episode in the past two years, is he or she still considered to have asthma? Are self-reports considered valid, or must a physician be the sole reporter of the illness? There are no national standards on who should be tracked and for how long.

Perhaps the most significant obstacles to developing an effective national asthma database involve the lack of a clear mandate for such a program and the corresponding absence of adequate funds to successfully initiate it. The National Heart, Lung, and Blood Institute and the American Academy of Allergy Asthma and Immunology for example, created guidelines for the diagnosis and management of asthma, but their use is not mandatory. Consequently, they are not widely implemented.<sup>18</sup> Training health care providers on the use of the guidelines has apparently done little to increase their use.

---

*Perhaps the most significant obstacles to developing an effective national asthma database involve the lack of a clear mandate for such a program and the corresponding absence of adequate funds to successfully initiate it.*

---



o  
8

*Promising Practices*

*The following examples describe steps taken by the federal government and foundations to initiate data tracking mechanisms.*

Efforts are under way to improve asthma-related data gathering and tracking. Congress appropriated \$27.9 million in FY2001, an increase of \$17.4 million over the previous year, for the Centers for Disease Control’s asthma-related activities. Of these funds, \$7 million have been allocated for surveillance efforts. The CDC recently released a request for proposals to develop surveillance models. In addition, in 1999 and 2000, the CDC awarded grants to a total of 12 states, establishing cooperative agreements to develop asthma tracking and intervention initiatives.<sup>19</sup>

The federal Department of Health and Human Services (HHS) has also attempted to address information gaps. For example, the Agency for Health Care Research and Quality is supporting two projects on the quality and outcomes of asthma care. These projects are evaluating the efficacy and cost effectiveness of asthma management programs and supporting the development of a monitoring program that will assess the quality of asthma care delivered, the quality of life, and patient satisfaction with the health care received.

The Center for Medicare and Medicaid Services (formerly the Health Care Finance Administration) has conducted asthma studies focused on the frequency of services, risk factors and other indicators involved in a person’s medical history and relevant environmental impacts. The center is funding a substantial portion of work by the RAND Corporation to develop asthma-related indicators for children who receive health care services through managed care.

Several foundations are also providing funding to support surveillance/data-gathering efforts related to asthma. In Oregon, in conjunction with Oregon Health Sciences University, the Northwest Health Foundation supported a study to analyze causal factors in the asthma epidemic. The Pew Charitable Trust Fund has provided almost \$5 million in grants to Georgetown University for Health Track, an organization dedicated to educating the public and key federal policymakers about the need for a well-coordinated, national approach to environmental health tracking and monitoring.

**Chapter 2. Asthma and the Health Care System**

*Clinical Management*

Lack of access to affordable, quality health care constitutes a key barrier to the clinical management of asthma. In 1998, 41 percent of families with asthmatic children were classified as having no primary health insurance.<sup>20</sup> Uninsured children frequently lack a primary care provider and often obtain only episodic, crisis-oriented care rather than long-term, prevention-focused care. When faced with asthma emergencies, they tend to overutilize emergency rooms. According to one physician who specializes in asthma management, “99 percent of asthma emergencies are preventable, if the patient is well managed.”<sup>21</sup> Managing uninsured children’s asthma is further complicated by inconsistent use of prescribed medications due to financial barriers.



Obtaining the most current treatment and medication is often challenging for anyone with asthma, but for lower-income families, the struggle is even more complicated. Access to specialists and to more advanced therapies is more limited for low-income families. In fact, disparities are evident in many ways. One example of unequal treatment is the practice of steering uninsured people into less than optimal care. In the Los Angeles, school-based Breathmobile program, “Families with private insurance receive referrals to allergists; the other students continue receiving care through the mobile unit.”<sup>22</sup> While community members and schools value the van’s presence, they would like for their students to have access to a consistent source of primary care.

A comprehensive, coordinated approach is essential to improved asthma outcomes. Caring for a patient with childhood asthma generally involves the personnel of several systems, including primary care providers, school personnel and emergency room personnel. The effective management of asthma requires that these systems work as a cohesive network to control asthma’s impact on the individual and his or her family. Improvements in one system alone are not sufficient to adequately manage the disease and cannot be expected to have lasting results.

Environmental factors are key to a coordinated framework for addressing asthma. The primary care provider treating the child should know if the child lives in an asthma “hot spot” or is exposed to asthma triggers in school and home environments. Assessments should include questions related to exposure to ambient air pollution from diesel buses, location of the child’s school (e.g., near busy freeways), high rate of school absenteeism, or whether a parent smokes.

Coordination on levels other than direct patient care is also critical. Service systems involved in some piece of asthma strategies can jointly develop and share databases, which can lead to more effective treatment. Although confidentiality issues will need to be addressed, a coordinated approach to better manage patients with asthma has many benefits. One example of its usefulness involves insights gained by providers’ knowledge of medication history through coordination with pharmacies (see the Kaiser Hospital example in the “Provider Training” section of this chapter). Another benefit relates to the role of outreach workers. As they conduct home assessments, recommend changes, or

identify other family needs, such information enhances the primary provider’s ability to comprehensively care for the child.

Children in rural environments experience unique, complex challenges with asthma management. Finding clinics or health centers within a reasonable distance of the child’s home may be difficult. Locating affordable providers

who are linguistically and culturally compatible presents yet another challenge. In some isolated areas, the lack of pharmacies to obtain prescribed medicines has resulted in asthma emergencies that could have been prevented. In describing the unique set of issues facing children with asthma in rural environments, Sandra Eaton of the American Lung Association of Central California observes, “Geography defines a major part of the problem.”<sup>23</sup>

---

*In the case of asthma as a chronic disease, adequate provider-patient time and careful monitoring are essential and can make a difference in emergency room usage, hospitalizations and in controlling asthma triggers.*

---

1  
o





Even if asthma sufferers have access to health plans, these plans exhibit key shortcomings that inhibit effective management of asthma. The amount of time providers can spend with patients is constrained by managed care. In the case of asthma as a chronic disease, adequate provider-patient time and careful monitoring are essential and can make a difference in emergency room usage, hospitalizations, and in controlling asthma triggers. More provider time is needed to treat chronic diseases, such as asthma, than the limited time usually designated for those with acute illnesses. *Patient Care*, a Web-based physician's journal, describes the problems managed-care plans present to asthma sufferers:

*The downside of managed care for asthma management is clear. The time constraints these systems often impose make it difficult to provide the education, monitoring and follow-up that good asthma care requires.<sup>24</sup>*

Moreover, some health plans just partially cover, or fail to cover, the range of equipment and supplies important to managing asthma. Many health plans refuse to cover multiple inhalers, even though a child with a history of active asthma episodes ideally should have three inhalers.<sup>25</sup> Plans are inconsistent in their coverage of such items as nebulizers, peak flow meters and other equipment that reduces the possibility of asthma emergencies.<sup>26</sup> For example, Kaiser provides some coverage for its members to receive in-home equipment targeted to prevent asthma emergencies. Blue Cross of California will cover in-home asthma management and home assessments if prescribed by a physician.<sup>27</sup> Additionally, health plans may delay approval of medications or equipment. Covering the costs of physical remediation of asthma triggers in homes is rare though limited coverage by some plans does exist. To reduce the impact of asthma on children, coverage by health plans needs to be expanded to address a broader range of needs, including required medications, equipment and physical remediation.

1  
1

### ***Promising Practices***

*The following examples demonstrate creative approaches to improving asthma management through specialty clinics, outreach to rural and migrant populations, in-home services, statewide legislative action and bridging the gap between established health assessments and asthma screening. Creative strategies by national and state foundations are also highlighted.*

The planning group for California's Statewide Strategic Asthma Plan proposes adding asthma to an existing health assessment exam, The Child Health and Disability Prevention Program (CHDP). This widely used exam establishes a periodicity of immunizations, along with well-child visits. The exam is provided free of cost for children from birth to age 19 whose family income is up to 200 percent of the federal poverty level. Conducting an asthma screening during a regular CHDP exam would dramatically enhance access to *initial* asthma screenings.

The Central California Asthma Project is addressing health care access for children with asthma in six counties in California's Central Valley. One of its programs provides in-home asthma education for residents, including farm workers who may be undocumented and fearful about seeking health care services. Respiratory therapists work directly with asthma patients. The Consortium also assists with community organizing activities and works closely with neighboring schools and hospitals to assure appropriate follow-up and coordination.



California has succeeded in moving one bill forward, AB 2877, which creates a comprehensive asthma strategy. Through innovative collaborations with managed-care organizations, state health departments, academic institutions and others, systems would be created to analyze data, assess the burden of asthma on state resources, assess patterns of care and initiate a public education campaign. Although the bill creates promise, it was passed without any funding attached.

In another positive development, several states are focusing primarily on closing the gaps in treatment and eliminating the unequal burden of asthma among the poor and ethnic and racial minorities. Five states (Connecticut, Indiana, Oregon, Texas and Virginia) have enacted legislation to improve health care access and coverage for asthma sufferers.

In Texas, new legislation establishes a Medicaid disease management pilot program for the treatment and study of childhood asthma. Similar to an existing one for diabetes, the program applies proven clinical practices, including patient education, technical assistance and risk management, to ensure the appropriate and cost-effective use of medication and specialized treatments in high-cost, chronic pediatric asthma cases. It also establishes an asthma and allergy research advisory committee to provide guidance on these issues to public officials.

With the passage of legislation in March 2000, Virginia became the first state to require the development of a comprehensive, statewide asthma strategy. HB 1012 “requires the commissioner of the Department of Health to create an asthma plan that includes disease surveillance, public and professional education, and public and private partnerships with health care providers, local school divisions, and community coalitions. It also requires identification of best practices for use in public health and clinical interventions.”<sup>28</sup> To date no other state has followed suit. New York and North Carolina have introduced bills aimed at developing statewide asthma management and control programs.

Recognizing that management and prevention must occur on a number of fronts in order to eliminate the gaps in care, foundations have undertaken a number of initiatives. The Robert Wood Johnson Foundation’s Allies Against Asthma, a \$12.5 million program begun in 1999, supports eight local coalitions working on interventions to bolster asthma prevention, access to care and patient education. Each coalition is composed of local health care providers, health plans, housing and environmental industries, community residents, schools, economic development agencies and public health organizations. The California Endowment has funded several asthma initiatives focused on primary care interventions and coalition building. One successful program, San Francisco-based YES WE CAN Urban Asthma Project, is a collaboration of health agencies, schools, community-based organizations, nonprofit educators, and others operating within a community health worker framework to expand clinical management and improve community linkages.

1  
2



Specialized asthma clinics offer an alternative to expanding provider time. Hospitals and medical practices are increasingly offering their asthma patients a clinic focused solely on asthma management. At several locations, asthma educators serve as an effective mechanism to provide intensive one-on-one interaction and follow-up. In this model, newly identified asthma sufferers meet with an asthma educator for an extended period of time, usually 90 minutes. They thoroughly review ways to prevent asthma triggers and proper use of medications; they find answers to questions that may arise about the impact of asthma on daily life. The 2,200 children who annually come through the asthma clinic at Oakland's Children's Hospital, for example, receive three follow-up clinic visits and a home visit.

### *Cultural Factors*

Understanding and respecting the unique cultural context and inherent health beliefs of patients is vital to establishing and maintaining good health care. The provider/patient relationship is always a key factor in quality services; with asthma patients, this relationship is even more crucial. Keeping the family centrally involved requires effort and commitment. It is not uncommon for family members to discontinue care if they do not feel respected or valued. In a study, "Barriers to Asthma Care in Urban Children," conducted at Children's Hospital in Cincinnati, OH, in 1998, parents were clear about what worked for them and what did not. "Almost all parents stated that trusting their provider was paramount to receiving quality care." The study also revealed several behavioral factors that adversely affected the relationship:

- Health care providers' distrust of parents' knowledge and familiarity with the child and the child's disease;
- Judgmental attitudes of providers towards people from lower socioeconomic or minority backgrounds.

Finally, the study pointed to cultural factors that can adversely affect the provider/patient relationship. Parents distrusted medications and were hesitant to administer them daily. They did not distinguish between the daily use of medication and drug addiction. In fact, they feared their children would become addicted or that their bodies would become immune to needed medication. "Parents understood the concept of preventing asthma symptoms, but they did not equate prevention with medication use. Instead they preferred non-medical alternatives."<sup>30</sup> Some Latino cultures use herbs and culturally-based cures to reduce health symptoms, including asthma. Other ethnic groups also have unique approaches to health.

Providers' lack of sensitivity to their patients' unique cultural or financial situation can manifest itself in many ways. It could involve a provider judging a migrant farm worker harshly for not immediately removing a child from an area with known pesticides. Although aware of the harmful effects of the pesticides, the parent may not be able to immediately move the family because such a move would result in unemployment. As a result, the family may discontinue bringing the child for care, fearing continued criticism. Alternatively, a provider may insist that families purchase expensive filters and other equipment beyond their financial means and neglect to refer them to free smoking cessation classes or explain how to clean mold and mildew.



Often health information is provided in English-only brochures, posters, or pamphlets, barring non-English-speaking clients from equal access to important information. Recognizing the importance of culture in health care, institutions are beginning to seek ways to make system changes. Providers are increasingly recognizing the importance of training themselves in a culturally sensitive manner. *Patient Care*, for example, reported on a model that was developed by physicians at New York's Presbyterian/Cornell Medical Center to improve communication between physician and patients and to improve patient compliance. The model is summarized as **ESFT**:

- Explanatory model
- Social risk of noncompliance
- Fears and concerns about medication
- Therapeutic contracting and playback<sup>31</sup>

In this model, the physician first determines how the patient understands his illness. Next, the physician assesses the patient's financial and social risks for noncompliance and implements a plan based on this information. The provider then explores medication fears and beliefs and asks the patient to repeat what was said to determine his or her level of understanding. Adopting a practice such as this can assist in improving patient compliance and in reducing inequities in care. "Cultural differences are among the most serious barriers to equity in health care."<sup>32</sup>

For successful management of childhood asthma, a culturally competent approach must be adopted by an array of providers. In addition to health care professionals, other key service providers in a child's life must be properly trained. School and childcare personnel (teachers, athletic coaches, etc.) need to understand asthma and different cultural responses to it. Health provider curriculums and residency training programs are beginning to reflect some change in this area, but more can be done to ensure that culturally competent approaches to patient care are understood and practiced by all health care providers and that other service providers receive needed training.

### *Promising Practices*

*Efforts to improve the cultural competence of community-based programs and national consortiums are subsequently explored.*

Increasingly, asthma programs are adapting practices geared to meet client needs. Rather than traditional, institutional approaches, many programs are community-based and use outreach workers as a liaison between agencies and communities. Attention must be given to ethnicity, culture and language to effectively reach families

---

***For successful management of childhood asthma, a culturally competent approach must be adopted by an array of providers.***

---

most in need. An Oakland American Lung Association Program Manager, working with a West Oakland coalition, described the value of having workers reflective of the communities they serve. "Promoting local coalitions is important because these communities need familiar faces to make change happen. I don't

live the issues . . . they need people who live them, who look like them. We need to find and fund these leaders."<sup>33</sup>



Collaboration between the Asthma and Allergy Foundation of America, Los Angeles County and the University of Southern California Medical Center resulted in a mobile asthma program, Breathmobile. Primarily targeting low-income, high-risk, minority students, this mobile medical team provides diagnostic and treatment services, educational and resource materials in different languages, and helps to reinforce concepts presented by medical providers.

*Provider Training*

When it became apparent that children were not outgrowing asthma symptoms, practice patterns began to slowly change. The 1997 National Institutes of Health’s (NIH) National Heart, Blood, and Lung Institute guidelines for diagnosing and managing children with asthma targeted only children over five years old. New guidelines are being drafted for diagnosing children with asthma who are younger than five years old. Some providers have begun to diagnose children under five with asthma, without the amended guidelines. However, for those providers who may not have changed their beliefs about diagnosing children under three, many children remain undiagnosed, even those who manifest asthma symptoms.

Furthermore, “most physicians get limited training in environmental health effects.”<sup>34</sup> Although some medical schools are adapting their curricula to address new and emerging NIH guidelines and to consider environmental factors that might have an impact on health outcomes, these are still not consistently integrated into medical or health care trainings.

*Promising Practices*

*Innovative approaches to addressing training needs of providers, patients and family members are explored in the following examples. New funding streams for child services, creative clinical practices by private hospitals and health management organizations, and new federal funds targeting asthma patients are cited.*

Five years ago, 15 to 20 percent of asthma patients at Kaiser Hospital in Vallejo, CA, were found to have a pattern of overusing asthma “rescue” medications. These patients, generally felt to be poorly managed in their asthma care, excessively overused the emergency room and had high asthma hospitalization rates. Additionally, limited time was allocated for training patients and providers. A centralized administrative database was developed to track patients’ medication patterns. It provides quarterly regional reports to providers and improves overall quality and management of patients. In its asthma clinics, Kaiser now hires clinical pharmacists to work as asthma care managers with other members of its multidisciplinary team of respiratory therapists and nurses. In addition to reviewing patterns of medication use, intensive training is provided to improve asthma patients’ ability to become better self-managed. Administrators had to accept that with the decline in costs related to emergency room use, there would be increased pharmacy costs because prevention medications were more expensive than short-acting “rescue” drugs. Long-term benefits for both patients and Kaiser far outweigh the costs. The cycle of repeat emergency visits by asthma patients has declined, patients and providers are better trained, and needed system improvements have been made to improve quality of care.



There has been a 50 percent drop in emergency room visits related to asthma, and the number of asthma-related hospitalizations has decreased by 70 percent, according to one of Kaiser’s top pulmonologist and asthma experts, Dr. Guillermo Mendoza.

Several medical centers have initiated provider training to bridge the knowledge and practice gaps among providers. In Fresno, at the Asthma Education and Management Program at the Community Medical Center, and in Oakland, at Children’s Hospital’s asthma clinic, a model is in place where providers are rotated through an intensive training program to enhance their diagnostic and management skills. Particular attention is placed on residents and interns so that they can begin their training with the most current practice standards. Provider trainings stress simple but essential tasks: how to conduct an effective asthma history, how to explain to patients the differences between long-term medicine and quick relief medicine, and how to explain the value of maintaining consistency of treatment.

The Agency for Toxic Substances and Disease Registry is supporting a project for continuing medical education for physicians on the relationship between asthma and the environment. The National Center for Environmental Health and the Centers for Disease Control and Prevention, through the ZAP Asthma Project in Atlanta, GA, are pursuing a comprehensive approach to controlling asthma that is utilizing a physicians’ advisory committee to improve clinician practices in diagnosing and treating asthma.

In an important effort to extend provider training to childcare providers, a recent collaboration among State Proposition 10 funds,<sup>36</sup> the American Lung Association and San Francisco’s City College included a four-hour segment on asthma education in childcare providers’ required health and safety class. In addition, through a grant from San Francisco’s Health Department, asthma education workshops are provided to Head Start programs in Spanish, English and Cantonese. Posters and informational brochures on asthma awareness are also distributed to childcare centers.



### Chapter 3. Asthma and the Environment

Critical to understanding the ways that school-aged children are affected by asthma, attention must be focused on the environments in which they live and play. The primary consideration: air quality, which has a profound impact on all human health. Indoor and outdoor air pollution contributes to asthma, allergies, bronchitis, lung cancer and other respiratory diseases. According to the American Lung Association, lung diseases, including asthma, claim nearly 335,000 lives every year and are the third leading cause of death in the United States.<sup>37</sup>

#### *Asthma and the Outdoors*

Hazardous chemicals, pesticides and emissions from industrial plants, automobiles and diesel engines are known contributors to disease. The Clean Air Act of 1970, passed under pressure from environmentalists, set air quality standards to assure public safety, to protect the public from environmental contaminants and to reduce the amount of pollutants released in the air.

Nevertheless, some industries have failed to comply with existing laws and regulations, repeatedly ignoring them and amassing numerous violations. According to an EPA enforcement representative:

*Industry doesn't feel enforcement will happen. The cost for control is a significant investment for companies. There is concern that if they comply, will others be allowed not to. And some of the older industries just resist change.*<sup>38</sup>

In many instances, regulatory agencies have been slow to respond to violations, and pollution levels have continued to exceed federal standards. The San Joaquin Valley is a case in point. According to Earthjustice, "... three of the five most polluted places in the nation are situated in the San Joaquin Valley."<sup>39</sup> Prior to an intent-to-notice being filed against the local Air Pollution Control District and the EPA, *19 deadlines had been missed* for correcting soot and smog levels in the region. According to the EPA:

*We were aware that emissions were a problem, but were not aware until recently that the emissions constituted a respiratory irritant and presented a public health risk.*<sup>40</sup>

#### *Promising Practices*

*Legal action by grassroots organizations, advocacy efforts by environmental justice organizations, statewide legislative changes, and regulatory agency changes have all resulted in improvements in air quality in some areas. A few examples are highlighted:*

In the context of continuing air quality problems, responses are emerging at the grassroots, state and federal levels that are geared to ensuring compliance with existing laws, creating stronger air quality laws and tracking the relationship between air quality and health. Residents of the San Joaquin Valley, for example, mobilized to demand public accountability for pollution levels. Assisted by the Latino Issues Forum, residents educated themselves on the effects of pesticides and pollutants, built broad public awareness of the dangers of pollution levels and attended hearings where they voiced their concerns. Their efforts ultimately resulted in legal action.



Also at the grassroots level, some environmental justice organizations are beginning to embrace asthma as a key issue. In New York, West Harlem Environmental Action, Inc. (WE-ACT), is working to improve environmental quality in the African-American and Hispanic communities of Harlem and has identified asthma as one of its top three priority areas. WE-ACT works with residents, governmental agencies and others to advocate for better indoor and outdoor air quality, among other issues. In Richmond, CA, Communities for Better Environment has a program that works with local groups in the Bayo Vista community to address asthma, especially as it relates to the local Tosco refinery. Cal-EPA's Air Resources Board initiated a community air-monitoring program, targeting six cities in California. The program includes neighborhood indoor and outdoor air quality assessments and will measure air pollution during several seasons at multiple locations. In each of the locations chosen, a school site is one of the primary targets for testing.<sup>41</sup>

In a move that may provide valuable documentation about pollution and asthma, California Senator Martha Escutia (D-Norwalk) introduced legislation, SB 702, intended to track the connection between environmental contaminants and chronic diseases. This bill, which was signed by Governor Davis in October 2001, "creates an environmental health tracking system that will provide solid, reliable information and answers to (1) when and where diseases occur, (2) what environmental hazards are involved, and (3) what the actual exposure of Californians is to these hazards."<sup>42</sup>

The EPA reached settlements with several major companies that resulted in the removal of products and chemicals that contributed to childhood asthma and allergies.<sup>43</sup> In December 2000, a settlement was reached with steel manufacturers; in 1998 a major diesel engine settlement was reached for \$83.4 million.<sup>44</sup> In March 2001, clean air agreements were reached with petroleum refineries in several states.<sup>45</sup>

### *Asthma in the Home*

While numerous air hazards exist outdoors, most people spend 90 percent of their time indoors.<sup>46</sup> Indoor pollutants often occur at rates that are double the rate for outdoor pollutants. The physical environment in poorly maintained homes and schools can result in air quality problems triggering asthma. (Triggers at school sites are considered in the next section, "Asthma and Schools.") In the housing arena, asthma triggers include mold, dust mites, animal dander and second-hand smoke.

Public housing tenants face particular challenges. Many public housing units were built in the 1940s and 1950s, when minimal building standards were enforced. Insulation was not a requirement, resulting in inadequately insulated walls, which in turn led to increased moisture — one of the contributing causes of mildew and mold.<sup>47</sup> Public housing tenants have few avenues to address poor indoor air quality. For example, according to the head of Oakland's 3,300-unit Public Housing Authority, when tenants register complaints with the authority, an authority inspector will "walk through" the unit with the tenant, pointing out changes that need to be made by the tenant. This walk-through may entail suggestions on moving furniture to maximize ventilation or ways to control mildew, mold, dust mites, or other asthma or allergy triggers. However, the housing authority official indicated that there were no requirements for them to perform the actual cleaning or to inform tenants, prior to their moving in, of ways to prevent allergens or asthma triggers.





There appears to be inconsistency among local housing authorities applying or interpreting federal guidelines that outline responsibilities for maintaining safe environments. According to an engineer in the U.S. Department of Housing and Urban Development’s (HUD) San Francisco office, it is the responsibility of the housing authority to ensure that units are free of asthma triggers. “Based on HUD’s Housing Quality Standards, it states that housing authorities must give tenants a safe and sanitary place to reside. This includes the elimination of mold and mildew.”<sup>48</sup> Although rarely enforced, policies are in place that allow for the elimination of federal funding if public housing units are not properly maintained. The official further revealed that Las Vegas decided to gut and rebuild a large number of its public housing units because of severe mold problems.

Low-income tenants in HUD’s Section 8 housing have more protection. Under Section 8, low-income residents are given a voucher to pay for a place to live. Private property owners are then paid a market rate by a local housing authority. If a complaint is registered regarding mold, mildew, or any other unsafe or unhealthy condition, Section 8 tenants can withhold rents until remediation occurs. Some housing advocates suggest that both public housing tenants and Section 8 tenants should be able to withhold rent until a unit is brought up to standard. Critical in both situations is the need for better enforcement of HUD’s policies that assure the safety and health of all tenants. According to the Boston Medical Center:

---

*The physical environment in poorly maintained homes and schools can result in air quality problems triggering asthma.*

---

*Tenants should have access to legal aid to be able to obtain what is often their legal right — housing that is free of lead, free of infestation, and free of causes of severe asthma and allergies.*<sup>49</sup>

Several lawsuits have sought monetary awards for health damage and for eliminating health hazards, like the presence of mold and mildew in housing occupied by low-income tenants. However, the private attorneys who handled the cases stress the complexity of the litigation and the need for lawyers with specialized knowledge and experience. Second, such litigation is very expensive because of its required up-front work. For example, air testing costs \$4,000 per unit. Consultants must also be hired to analyze data to show a causal link between the presence of hazards and illness. Medical records must be obtained, reviewed, and analyzed by medical professionals. All of these expenses mean that low-income residents will have a difficult time obtaining legal assistance — even when their situations are egregious.<sup>50</sup>

Once remediation needs are identified, families face challenges in correcting indoor air quality problems. Few health plans address the broader needs of asthma patients, beyond medication and clinical services. Attention should be given to providing home remediation efforts key to asthma management. For example, remediation activities such as removing carpets, cleaning mold and mildew, and purchasing air filters, mattress covers, and other items can reduce the triggers of asthma episodes. (See the “Clinical Management” section in Chapter 2, “Asthma and the Health Care System,” for examples of health plan remediation coverage.)



Families in rural environments are also exposed to toxic pesticides and live in unsafe, crowded and often unsanitary conditions. Migrant farm workers, in particular, may not be aware of environmental risks related to asthma; they may feel intimidated about approaching landlords or public housing officials with their complaints for fear of eviction. Migrant farm workers fear loss of housing and employment if they complain about such unacceptable living conditions.

While initiatives directly focusing on indoor home air quality for childhood asthma have been limited, lead prevention programs provide an opportunity to explore comprehensive programs that could deal with asthma triggers in the home. An estimated 43,700 children in California live in areas considered critical lead risk areas.<sup>51</sup> A grassroots environmental justice organization, People United for a Better Oakland (PUEBLO), participated in a successful lead prevention legislative effort that resulted in establishing the Childhood Lead Poisoning Prevention Program within the Department of Health Services. The new law requires “. . . programs to compile information, identify target areas, analyze information and implement a program of medical follow-up and environmental abatement to reduce childhood lead exposure.” Included are the requirements to test homes for lead levels, to perform lead screenings for children and to require trainings. It also imposes a fee on manufacturers of lead-based products and requires reporting of excessive lead levels to health departments.

Alameda County has also attempted to place lead prevention programs in a broader context. The county’s Lead Prevention Program is housed under the Community Development Agency — the only lead program in the state so organized. According to Steven Schwartzberg, Director of the county’s Lead Prevention Program, “We wanted to make a strong connection [among] environment, health and housing. Through this department we can do that.”<sup>52</sup> Alameda County’s programs have succeeded in raising community awareness about the hazards of lead and in conducting lead level testing in homes and in children.

Statewide, lead programs have not been as successful in obtaining support for treatment. Currently, Medicaid pays for only one blood screening per child, one environmental investigation, and a Denver Developmental Assessment, which tests for developmental functioning.

Although gaps exist in the provision of services, and only \$12 million has been allocated statewide to administer lead prevention programs, these programs offer an opportunity to learn how asthma programs can work towards establishing a state office of asthma prevention. By implementing some of the key strategies outlined in this report, asthma programs across the state can harness needed information and resources to create asthma prevention systems and services similar to those in lead prevention programs.

HUD is launching technical assistance strategies designed to aid local housing authorities in maintaining asthma-free environments. Easy-to-use brochures are being developed for distribution to public housing residents across the country, advising them of ways to protect themselves from indoor allergens and hazards. For example, residents may not be aware of ways to prevent or control mold or mildew. They may need to understand the importance of proper ventilation, the value of windows being open, or keeping the fan on in a bathroom without windows. Many may not know the relationship between cockroaches, pets and asthma.



Booklets are also being developed to target housing owners, managers and developers, suggesting measures that should be in place before they design, build or renovate properties. Unfortunately, given that this initiative does not have a legislative mandate, no enforcement or sanctioning can occur. According to Ellen Taylor, Senior Industrial Hygienist at HUD, “This is a situation in which litigation may need to drive the issue.”<sup>53</sup>

***Promising Practices***

*HUD has launched several national initiatives to improve conditions in homes that will reduce asthma triggers. Other federal, state and local efforts are under way.*

HUD, through its \$10 million Healthy Homes Project, is also exploring the possibility of having Medicaid pay for improvements in homes with identified asthma triggers. As a first step, HUD is seeking Medicaid funds that would allow health care providers to “prescribe” environmental assessments for asthma sufferers, in the same way as they would prescribe medications. One innovative lead success story that could be emulated occurred in Rhode Island, where a federal waiver was obtained to replace windows that had contributed to increased lead exposure in homes.

The Healthy Homes Project, initially focused on lead prevention, now provides funds to identify and implement single interventions that address multiple hazards in homes. This includes an ability to conduct lead and asthma assessments, make repairs and improve any identified hazardous condition. This type of comprehensive home assessment should be the standard so that all potential indoor risk factors are addressed. In California, a \$1.5 million grant is provided to 17 counties as part of a statewide collaboration to train AmeriCorp members to initiate home visits and to begin remediation efforts.

Another Healthy Homes grant, to Los Angeles’ Esperanza Community Housing Corporation, trains bilingual community residents as peer educators, patient advocates and community health leaders. Asthma and lead prevention activities occur in homes, through tenant organizing and through educating apartment owners on health and safety standards.<sup>54</sup>

In addition to HUD’s and the Environmental Protection Agency’s (EPA) efforts to mitigate issues concerning air quality, some federal and state agencies are attempting to determine the effects of air quality on children. The National Center for Environmental Health has supported a variety of studies examining the effects of various air pollutants on the health of both asthmatic children and those not diagnosed with the disease. Also, the Agency for Toxic Substances and Disease Registry is conducting two broad studies to understand the relationship between exposure to hazardous substances and lung and respiratory diseases — including asthma — in children.

San Francisco recently passed a revised nuisance law that now includes mold and mildew as conditions that landlords are responsible for correcting. This law relates to San Francisco’s “health of rental units” strategy.



*Asthma and Schools (including childcare and recreational centers)*

Schools constitute a key action area for childhood asthma strategies in two respects. Often schools in low-income communities are poorly maintained and have environmental triggers that exacerbate asthma. Schools contribute to or inhibit effective asthma management, based on the presence of school nurses and rules governing access to medication. Though focused on schools, concerns outlined in this section also relate to conditions in childcare facilities, after-school programs and recreational facilities. Also warranting attention: preventing asthma triggers and remediation of problems in these environments.

The presence of mold, mildew, poor ventilation systems and sometimes rodents contributes to asthma complications. Yet there are no strong, statewide standards requiring health and safety measures that would protect children from indoor toxins while they are in school. Many of the facilities in low-income neighborhoods are old and were built using materials that may not pass current safety requirements; others were built on or near contaminated sites. Although schools are required to have yearly inspections, few schools in low-income communities actually obtain remediation based on findings. Children, disproportionately low-income children, consequently become ill and lose not only days from school, but also the ability to keep up with their schoolwork. One local advocate stated that, "School officials need to understand the relationship between unhealthy buildings and school performance."<sup>55</sup>

As the EPA reminds, "Some conditions in the school environment are closely associated with the incidence of sick-building syndrome and asthma symptoms. In addition, persons with asthma or other sensitivities may have reduced performance in the presence of environmental factors that trigger their asthma."<sup>56</sup>

Illustrating the severity of this problem, a public school in St. Charles, IL, was forced to close in April 2001, because toxic mold was making students sick. After large numbers of students were absent repeatedly and fewer exhibited the capacity for playing sports, officials closed the public school in mid-year. ABC News anchor Peter Jennings reported, "We have a national crisis in our public schools. . . . It is a public health hazard." He added that the toxic mold was a result of old buildings and poor maintenance.

The gradual decrease of school nurses is a further challenge. Currently, there is no mandate that each California school have a nurse on site, except for specific health screenings. These required screenings include hearing, vision, TB tests and assessments for scoliosis<sup>57</sup>; they do not include asthma screening.

Many school districts simply purchase a portion of a nurse's time for conducting these required exams. Other districts use general funds to allow the nurse to perform broader health services. Still other districts pay for nurses from different categorical funds, thereby limiting the nurses' activities to those specified by the grant(s); for example, teen pregnancy prevention or tobacco control.



2  
2

Another consideration: many school districts do not allow students access to their asthma medication in school. In 1997, Delaine Eastin, the California Superintendent of Public Education, issued an advisory to county and district superintendents and school nurses on medication in schools. This detailed advisory provided clear guidelines on how to administer medication, who should administer it, and even more critical, stated the importance of children having access to their medication. "The ability to access necessary prescribed medication during the school day is critical to the educational achievement of many children in California."<sup>58</sup>

Even with such strong support for access, no mandate was connected with these guidelines; districts could choose not to follow the superintendent's recommendation. In fact, many have chosen not to follow these guidelines. Over the past two years in California, 10 children died because they were unable to have access to their medication, according to Patricia Michael, a state Department of Special Education administrative consultant.

***Promising Practices***

*Below are examples of school-based strategies to improve conditions for students with asthma while attending schools. A task force on indoor air quality and respiratory health has been implemented in Los Angeles, an EPA sponsored, long-term pilot project in six California cities is under way and legislation was recently passed in California that will place nurse consultants in schools. Some states now allow students to have access to their asthma medication during the school day.*

---

***Over the past two years in California, 10 children died because they were unable to have access to their medication, according to Patricia Michael, a state Department of Special Education administrative consultant.***

---

Sometimes costly errors can goad a community into action. The Los Angeles Unified School District, for example, in 1997 constructed a new school, the Jefferson New Middle School on a contaminated site. Nearly \$100 million was spent on another Los Angeles school site, the Belmont Learning Center, before investigations revealed significant oilfield gases in subsurface soil. The subsequent public outcry and demand for answers led to state legislation in 2000, that requires all proposed school sites be certified by the California Department of Toxic Substances Control before state funds are allocated. Similar community interests on the environmental conditions of existing Los Angeles schools led to the creation of a Safe School Inspection Program that can serve as a model for other urban school districts. This comprehensive health and safety program conducts inspections of all of the district's 900 schools, focusing on both indoor and outdoor conditions. When conditions are found that require remediation, a Corrective Action Notice is issued to the school administrator which requires that necessary actions be taken within a specific period of time. As a supplement to the inspection effort, the district also established a Task Force on Indoor Air Quality & Respiratory Health that meets monthly and consists of EPA representatives, parents, community activists, health educators and school inspectors. The Task Force advises the school district on strategies to identify and abate indoor air pollution and other asthma triggers affecting a significant proportion of the district's 800,000 students.



At the state level, the California Environmental Protection Agency’s Air Resources Board has begun a Children’s Health Study to assess the respiratory health effects on school-aged children of long-term exposure to major air pollutants, including ozone, particles and acids — both indoors and outdoors.

A conference convened by Kaiser Permanente Health Plan and The American Lung Association in November 2000, strongly recommended that students have access to medication during school hours. In addition to indicating that students should have the ability to carry their own medications, they further recommended that schools should “provide intensive case management for students with asthma who are absent 10 or more days per year.”<sup>59</sup>

Regarding access to medications, a new set of standards on Management of Asthma in Schools was drafted by California’s Department of Education in July 2001. These standards establish a beginning framework for the types of support that should be required for students with asthma. Support for such standards appears to be growing, although they still have not been officially adopted.

Similarly, seven states (Illinois, Massachusetts, Minnesota, New Jersey, Pennsylvania, Texas and Virginia) have pending legislation allowing students to carry and use asthma inhalers on school grounds. These bills were introduced in response to a number of “no-drug” school policies that required that asthma sufferers’ medication be locked in the nurse’s or principal’s office.

2  
4

At the national level, the EPA has been successful in implementing an “Indoor Air Quality Tools for Schools Action Kit” in numerous schools. This 19-step asthma management plan and checklist has been effective in alerting schools to chemical pollutants in buildings, assisting teachers in preventing classroom triggers, improving ventilation systems and increasing awareness of animal allergens from classroom pets or pests. This kit is often used in conjunction with the American Lung Association’s “Open Airways for Schools,” which is targeted to elementary school children with asthma. These school-based asthma programs can be effective in addressing childhood asthma, however, both are voluntary.



## Chapter 4. Capacity-Building Activities

### *Individual Action*

Alerting an individual about the status of a problem is an important step in any epidemic. Many people depend on the media for current information and for translating technical information into practical steps that can make a difference in their daily lives. Spreading the word that asthma is a major health problem and that specific activities can lessen or prevent its impact enables individuals to learn what they need to do to protect themselves and their families. Community education — through public education and media campaigns — and other locally targeted awareness activities serve as a stimulus for initiating changes that can reduce the risks for asthma.

Individuals need access to information from a variety of sources to become aware, make choices and take necessary action. They are increasingly using the Internet to obtain useful information regarding health conditions, current events and related areas of interest. Web sites are being designed that will show the types and levels of toxins in specific neighborhoods. Tailoring these applications for parents of children with asthma, as well as for health providers, school officials and caregivers will help to increase knowledge and spur coordinated action.

### *Promising Practices*

*An asthma program in Atlanta, GA, was able to witness its positive impact on family members.*

Understanding how to change conditions for children with asthma is an important first step in preventing triggers and in properly managing the illness. As family members learn more aggressive techniques in keeping environments free of allergens, as they become more consistent in following prescribed treatments and become better advocates for their children, reductions in preventable asthma episodes should occur. Dr. Joyce Essien, one of the founders of the ZAP Asthma Program<sup>60</sup> in Atlanta, explained how one single father, caring for his son with asthma, made a significant difference in the number of asthma episodes his son experienced. The father makes an effort to keep his home clean. He no longer allows smoking in the house and now that he understands why the child has to take so many medications, he is more consistent in administering them.<sup>61</sup>

### *Constituency Building and Coordination*

Experience has demonstrated the importance of a mobilized constituency in effecting change. Parents of children with special needs, for example, have successfully advocated for resources and improvements in the service systems addressing their children's needs. In addition, their advocacy spurred the development of and mandate for better diagnostic tools, as well as the enactment of new laws to ensure equity and inclusion for special needs children in public schools. Efforts by environmental justice organizations are other examples of successful organizing and advocacy. (For a description of PUEBLO's efforts see the "Asthma in the Home" section of Chapter 3, "Asthma and the Environment.")

Recent legislation requires, among other things, home-lead testing, lead screenings for children and environmental abatement to reduce childhood lead exposure. Several local and regional coalitions have formed to confront asthma and related issues; they have



begun to learn and act together. California has more than four regionally focused asthma coalitions, in the San Francisco Bay area, San Joaquin Valley, Central Coast and San Diego. Each coalition — broadly represented with members from health agencies, community groups, advocacy organizations and others — works toward improving conditions for those with asthma. Activities include information and resource sharing, coordination of training and outreach activities, peer mentoring, and support and long-term strategic planning.

These coalitions could be expanded in numerous ways. They can target other geographic regions of the state and work with local groups to create other coalitions. Linkages could be strengthened to include more representation from environmental organizations, housing agencies and parents. Coalitions could also expand community capacity to address local, regional and national advocacy issues. Through collaboration, technical-skill building could be enhanced in policy development, and data collection and evaluation.

Coalitions in the San Joaquin Valley and San Francisco can particularly serve as models for community-based action on asthma issues. These diverse local partnerships composed of parents, health providers, school and childcare personnel, tenants organizations, faith-based institutions, environmental justice organizations, and others are learning how to maximize their unique contributions to strengthen the coalition’s overall effectiveness.

Communities can initiate targeted interventions. For example, if air quality is poor in a particular local area, a newly formed partnership could focus on gathering available data and increasing public awareness of the relationship between particular pollutants and asthma. This partnership could then initiate local action to reduce certain environmental risk factors. If substandard housing is widespread in another area, a local partnership might begin by documenting the presence of asthma triggers such as mold and poor ventilation and advocate for remedies.

Opportunities exist to coordinate with other successful grassroots initiatives. Advocates in a particular community may be able to work with those conducting home lead screenings to obtain relevant asthma data at the same time. Local partners can draw on such data to further describe the problem, or if data are inadequate, propose improved data collection to better track risk factors and the incidence of the disease. Most importantly, partners can capitalize on increased public awareness to advocate for needed policy changes and increased resources.

Parents of asthmatic children, in particular, have a clear stake in asthma awareness and advocacy initiatives. Organizing models and resources can facilitate parental as well as broader community involvement. For example, “Plan to Lead”— a “democracy

---

*Parents of asthmatic children, in particular, have a clear stake in asthma awareness and advocacy initiatives.*

---

training” project of the California Partnership for Children ([www.capartnership4children.org](http://www.capartnership4children.org)) funded by The California Endowment — provides a free, 20-week training with intensive instruction in team building, leadership skills, coalition building, advocacy skills and working with policymakers. Through collaboration with community groups and others, they become better

equipped to ensure that the needs of their children are being met by launching mobilization activities, leading to sustained advocacy efforts and policy change.





Community-based partnerships have a powerful role to play in identifying specific aspects of the asthma problem and driving local efforts for solutions. Coalitions at the regional level with statewide policy support could ensure that local issues are translated into statewide policy proposals and that statewide policies are effectively implemented. Regional partnerships could also facilitate cross-issue and cross-regional learning. To be most effective, regional coalitions should incorporate representatives from local partnerships and have access to sufficient support and technical assistance. Together, community-based partnerships and regional coalitions have the potential to forge real improvements in the surveillance and monitoring of asthma, in the awareness and understanding of asthma triggers, and in advancing policies that reduce asthma risk for school-aged children.

***Promising Practices***

*Following are successful efforts led by local community groups to rid their neighborhoods of toxic contaminants. Some required legal action. A citywide asthma task force was implemented in San Francisco; in two communities, strong and consistent advocacy efforts resulted in broad constituency building, a more coordinated approach and new partnerships with local health departments and schools.*

---

***Community-based partnerships have a powerful role to play in identifying specific aspects of the asthma problem and driving local efforts for solutions.***

---

San Francisco passed an ordinance in 2001 to create an Asthma Task Force charged with preparing a coordinated strategic plan to manage and prevent asthma and to recommend legislative action and citywide strategies. The task force includes representatives from community-based organizations, childcare organizations, individuals with asthma, environmental justice organizations, health care providers, academic researchers and educators, the Department of Public Health, property interests, tenant interests, and the EPA and HUD, among others.

In New York, concerned citizens, along with the West Harlem Environmental Action (WE-ACT) group, demanded that diesel buses stop using their neighborhood as a bus depot. For years there had been unsuccessful attempts to negotiate with the Metropolitan Transit Authority. Recommendations were also made to the mayor to better enforce laws against buses idling. A subsequent lack of action resulted in a complaint being filed with the U.S. Department of Transportation alleging that six diesel bus depots and parking lots were disproportionately located in Manhattan's minority communities. The complaint was co-filed by two civil rights attorneys who contended that having six bus depots in Northern Manhattan was excessive and unfair. (These complaints were filed under Title VI of the Civil Rights Act, an act barring federal funding for any program that discriminated based on race.) Additionally, WE-ACT convinced the EPA to test air quality and found that the existence of small particulates in the air exceeded federal standards by over 200 percent. This area is also known to have the highest asthma hospitalization rates in the city and one of the highest incidences of asthma in the country. By combining the EPA data, filing the complaint and mobilizing consistent support from area residents, the neighborhoods were able to successfully demand and obtain change. Stricter ordinances are now in place to ensure that safe air quality standards are being met. In 1997, a San Francisco Bayview/Hunters Point school principal noticed more of her students beginning to exhibit asthma symptoms. She was able to work with other local groups and the Health Department to take action.



An Asthma Education Task Force was formed, in partnership with the American Lung Association, Kaiser Permanente of San Francisco and an African-American women's service organization. Children with asthma and their parents were provided training and health education to better manage the illness. This model was replicated by other schools and was eventually adopted as a key component of Bay View/Hunters Point's state-funded, school-based Healthy Start Collaborative. The initial task force was later expanded and formed The Asthma Task Force, a citywide hub for a wide array of asthma activities. Members from this group developed a nonprofit organization, Asthma Resource Center of San Francisco, which, together with the San Francisco Department of Public Health and other organizations, established the Health and Environmental Resource Center. An asthma program is now a vital part of this resource center.

In a West Oakland neighborhood with a long history of industrial waste and other hazards, a group of residents formed a coalition to address environmental concerns. Armed with information linking poor health outcomes to environmental toxins, members of the group shared these data with public health officials. The result was a broadened partnership that led to the development of strategies and activities to increase awareness about the impact of environmental toxins on asthma. Community forums were held, targeted media messages were communicated and efforts to demand accountability from violating companies were increased. A successful "Clean Air Festival" was held across the street from one of the companies, a yeast factory, that had consistently ignored requests to reduce harmful emissions. Fumes from the yeast factory consistently produced strong odors that lingered in the air for most of the day; residents had frequently complained of stinging eyes, coughs and headaches. Staff at a nearby hospital noted that tracking mechanisms were put in place to monitor the number of children with asthma symptoms that came from that neighborhood. Interest in developing this system was based on the volume of West Oakland asthma patients being seen in both emergency departments and out-patient clinics. Through targeted efforts, this local coalition rallied the community, increasing participation in its events and alerting residents to ways they could take action.

## Conclusion

Childhood asthma is at a crossroad.

More children — particularly those in low-income communities of color — are becoming sick. This problem is exacerbated by a lack of public awareness and knowledge. Moreover, proposed steps to address the problem are inadequate. Efforts are not coordinated, no comprehensive approach exists and affected constituencies have not been fully organized into powerful forces for action and change.

On the positive side, promising practices and policy opportunities are emerging. Scattered programs in various locales suggest approaches that could be expanded and replicated. Concerned officials and parents forging partnerships portend the beginnings of important alliances. In addition, some policymakers have introduced crucial first steps to improve data collection and to begin tracking key problem areas. A comprehensive strategy built from this base could ignite and institutionalize meaningful changes to alleviate — and ultimately combat — childhood asthma.



Data and Tracking

**Improve data collection and analysis by expanding resources, developing a coordinated statewide asthma information system, collecting and analyzing community level data, and developing uniform guidelines for diagnosing children under five.**

- Establish a coordinated, statewide asthma surveillance system for collecting and analyzing health outcome and risk factor data at the statewide, regional and local levels.
- Create methodology for consistent and timely data collection and analysis.
- Create funding sources and mechanisms for collecting and analyzing prevalence, health outcome and risk factor data at the regional and community levels.
- Mandate the use of the National Asthma Education and Prevention Program (NAEPP) guidelines so that there are common asthma diagnosis definitions across all age groups.
- Fund efforts to develop effective databases at the national, state, regional and local levels.
- Create local tracking systems for students with asthma in coordination with emerging state efforts to link existing databases.
- Expand multidisciplinary collaborative efforts and comprehensive community coalitions.
- Establish national standards for diagnosis and tracking of children with asthma.



*Asthma and the Health Care System*

**Increase health coverage to include all aspects of asthma screening and management, promote nontraditional approaches to reaching underserved children and create broad access to the most up-to-date asthma management and prevention strategies.**

- Enroll all eligible uninsured children with asthma into applicable public programs — Medi-Cal and Healthy Families.
- Incorporate asthma screening into the Child Health and Disability Prevention Program’s exams.
- Require California State Departments of Health and Education and CAL-EPA to identify and implement steps to either expand coordination among activities of each department, or create new services that better link health and environmental considerations in the prevention and management of asthma.
- Increase asthma screenings and primary care services in rural areas, including through the targeted use of mobile clinics.
- Increase provider time with asthma patients.
- Expand dedicated asthma clinics and increase use of asthma educators.
- Advocate for use of alternative interventions, such as mobile asthma clinics and in-home services.
- Reduce disparities in access to current, innovative treatment modalities and medications through expansion of health coverage.
- Mandate that health plans provide broader coverage for asthma medication and equipment prescribed by physicians.
- Mandate culturally competent training for health care professionals, other service providers, including school and childcare personnel, and athletic coaches.
- Engage and employ outreach workers and providers who reflect the diversity of their patient population.
- Integrate training in environmental health effects into medical school curricula and post-graduate trainings.
- Integrate new guidelines for diagnosing children under five with asthma into medical school curricula and specialized provider trainings.
- Mandate asthma prevention and treatment information be included in required Health and Safety classes for childcare providers. Require such training as well for recreational center workers, athletic coaches and others who come into regular contact with children.



- Monitor and evaluate the ZAP Asthma Project and, if successful, encourage replication.
- Advocate for timely completion and adoption of a statewide asthma management plan for California and mandate its implementation.
- Implement coordinated systems for management of childhood asthma that include attention to environmental factors.
- Seek funds for implementation of recently passed bill number AB 2877 (now listed as Chapter 93, Statutes of 2000), which creates a comprehensive asthma strategy that includes disease surveillance, public and professional education, and public and private partnerships with health care providers, local school divisions and community coalitions. Push for community involvement in each aspect of this initiative

*Asthma and the Environment*

**Ensure good indoor and outdoor air quality by expanding air quality monitoring programs, creating new resources for environmental assessments, and enforcing air quality standards and the rights of low-income tenants through litigation and other advocacy strategies. In particular, ensure safe indoor and outdoor air quality in and around all facilities serving children, including schools, childcare centers, after-school programs and recreation centers.**

- Assist community efforts to take legal action against federal, state and local agencies responsible for enforcing air quality standards.
- Implement SB 702 to create an environmental health-tracking system to detect the relationships between environmental contaminants and chronic disease.
- Advocate for use of Medicaid funds for environmental assessment and needed physical remediation.
- Advocate for health plans to expand coverage to pay for home assessments, remediation efforts and equipment intended to reduce asthma triggers.
- Ensure collaboration among environment, health and housing agencies.
- Monitor implementation of asthma assessments in the Healthy Homes Project and, if successful in identifying asthma triggers, advocate for the inclusion of funds for remediation.
- Expand rights of public housing tenants for remediation of complaints.
- Establish a litigation fund to pay for up-front expenses (air testing, data analysis, etc.) for public interest attorneys pursuing legal efforts to force the correction of asthma triggers in housing occupied by low-income tenants.



- Advocate for developing affordable housing with attention to prevention of asthma triggers (e.g., appropriate attention and materials for insulation and air quality).
- Require indoor air quality testing in all schools, child development centers and daycare sites, through mandatory training and implementation of the EPA’s “Indoor Air Quality Tools for Schools Action Kit.”
- Expand school-based air quality task forces, modeled after the task force formed by the Los Angeles Unified School District.
- Advocate for allocation of funds targeted for physical remediation in schools, recreation centers and day care centers.
- Ensure that school construction standards include requirements to reduce asthma triggers.
- Advocate for increased funding for the replacement of dilapidated schools; ensure the equitable distribution of these funds.
- Increase the number of school nurses and nurse consultants; push for the adoption of “Management of Asthma in Schools Standards” drafted by California’s Department of Education.

*Capacity-Building Activities*

**Advance broad public awareness through education campaigns that utilize the media, networks (including civic associations, neighborhood groups and faith institutions) and Internet technology to create an informed, engaged public.**

- Support education campaigns targeting the general public, as well as specific neighborhoods, with demonstrated high levels of environmental hazards and constituencies with high incidences of children with asthma.
- Encourage the development of and support for Web sites with information and targeted applications to increase knowledge about children with asthma and needed steps to halt the epidemic.
- Develop and disseminate targeted information for children with asthma wherever they are served.
- Assist in the formation and development of diverse, community-based coalitions around the state to carry out asthma intervention strategies in their local areas, as well as set up stronger linkages with established organizations like the Allergy and Asthma Association, the Mothers of Asthmatics, the Lung Association and the National Medical Association.
- As part of coalition support efforts, facilitate the involvement of parents of asthmatic children in particular, as a strong constituency to build awareness and leverage resources for improving asthma management strategies and services.
- Support the formation and effective functioning of representative, regional coalitions; foster statewide policy engagement for such coalitions.

3  
2



<sup>1</sup>American Lung Association (ALA), Action on Asthma, updated information, 2001.

<sup>2</sup>Trust for America's Health, "Short of Breath: Our Lack of Response to the Growing Asthma Epidemic and the Need for Nationwide Tracking," July 2001, page 3.

<sup>3</sup>Richard Kreuzter, Michael Lipsett, Julie Von Behren, and Eileen Yamada, "Asthma in California: Laying the Foundation for a Statewide Strategy," California Policy Seminar Brief Series, August 1998, page 1.

<sup>4</sup>ALA, Action on Asthma, "Position Statements: Fact Sheet" section, page 1.

<sup>5</sup>Ibid.

<sup>6</sup>Ibid.

<sup>7</sup>Ibid.

<sup>8</sup>ALA, Action on Asthma, "Background and Strategy, Access to Health Care" section, page 1.

<sup>9</sup>California Department of Health Services, Environmental Health Investigations Branch, California Asthma Hospitalizations Chart Book, 2000.

<sup>10</sup>Ibid.

<sup>11</sup>Ibid.

<sup>12</sup>California Department of Health Services, California Statewide Asthma Strategic Plan (Draft), August 1, 2001, page 3.

<sup>13</sup>Trust for America's Health, page 3.

<sup>14</sup>President's Task Force on Environmental Health Risks and Safety Risks to Children, "Asthma and the Environment: A Strategy to Protect Children," January 1999.

<sup>15</sup>Health Track, "Blindfolding Public Health in the Fight Against Asthma," May 22, 2000. Washington, DC: Georgetown University.

<sup>16</sup>Richard Kreuzter et al., op. cit., page 1.

<sup>17</sup>Ibid.

<sup>18</sup>California Department of Health Services, California Statewide Asthma Strategic Plan (Draft), August 1, 2001, page 24.

<sup>19</sup>Trust for America's Health, page 15.

<sup>20</sup>ALA, Action on Asthma, "Background and Strategy: Access to Health Care" section, page 1.

<sup>21</sup>Interview with Dr. Guillermo Mendoza, Kaiser Permanente Hospital, Vallejo, CA, March 1, 2002.

<sup>22</sup>Joy Shiohita, "Breathing Better, L.A.'s Breathmobile helps inner-city kids fight asthma," *Children's Advocate*, Action Alliance for Children, July–August 1997, page 1. <http://www.4children.org/news/7-97asth.html>.

<sup>23</sup>Interview with Sandra Eaton, Program Director, American Lung Association of Central California, August 16, 2001.

<sup>24</sup>Judith Asch-Goodkin, "Caring for Diverse Populations," *Patient Care*, May 15, 2000, page 15. <http://pc.pdr.net/pc/public.html?path=content/journals/p/data/2000/0515/05a00asthmacare.html>

<sup>25</sup>Recommendation on inhalers: Megan Webb, Regional Asthma Management and Prevention (RAMP) Initiative Director. Three inhalers are recommended so that one would remain at home, one at school, and another should remain with the child. If the child splits parental custody, he/she should keep an inhaler at the home of each parent. RAMP's mission is to decrease death and sickness associated with asthma among adults and children in Alameda, Contra Costa, San Francisco, San Mateo, and Solano counties by the facilitation of diverse organizations, institutions, and community residents that collaborate in the enhancement of clinical and community-based systems.

<sup>26</sup>Interview with Steve Graham, Director, Community Health Partnerships, Kaiser Permanente Medical Center, August 9, 2001.

<sup>27</sup>Interview with Odessa Bolton, Program Manager, Blue Cross of California, October 2, 2001.

<sup>28</sup>Commonwealth of Virginia, Legislative Information System, HB 1012: Statewide asthma management, 2000 (Rep. Harvey B. Morgan). Excerpted from: <http://leg1.state.va.us/cgi-bin/legp504.exe?ses=001&typ=bil&val=hb1012>.

<sup>29</sup>Mansour et al., "Barriers to Asthma Care in Urban Children: Parent Perspectives," *Pediatrics*, Vol. 106, No.3, September 2000: 516.

<sup>30</sup>*Ibid.*, page 515.

<sup>31</sup>J.E. Carillo, A.R. Green, and J.R. Betancourt, "Cross-cultural primary care: a patient-based approach," *Annals of Internal Medicine*, 1999, 130:829–834.

<sup>32</sup>*Patient Care*, page 8.



<sup>33</sup>Interview with Sydney Sawyer, Program Manager, American Lung Association of the East Bay, August 14, 2001.

<sup>34</sup>Interview with Barbara Spark, Indoor Air Program Coordinator, U.S. Environmental Protection Agency, Region IX, August 16, 2001.

<sup>35</sup>Interview with Dr. Guillermo Mendoza, Kaiser Permanente Hospital, Vallejo, CA, March 1, 2002.

<sup>36</sup>Proposition 10 was a measure voted by Californians that increases cigarette taxes by \$0.50 and funds services for children ages 0–5 years.

<sup>37</sup>ALA Fact Sheet on Outdoor Air Pollution – August 2000 Update.

<sup>38</sup>Interview with Connie Musgrove, Deputy Director, Office of Regulatory Enforcement, U.S. EPA, August 30, 2001.

<sup>39</sup>Earthjustice press release, “San Joaquin Valley Medical Community and Environmental Groups Announce Upcoming Lawsuit to Enforce Clean Air Act,” July 17, 2001. (Note: As of October 9, 2001, officials with the San Joaquin Valley Unified Air Pollution Control District agreed to settle this lawsuit. The settlement enables the Air District to avoid further legal action but places it under court supervision to enact and implement six new pollution control measures.)

<sup>40</sup>Musgrove interview, August 30, 2001.

<sup>41</sup>“Catching Your Breath: Strategies to Reduce Environmental Factors That Affect Asthma in Children” Conference held in San Diego, CA, August 7–8, 2001. Sponsored by the Environmental Council of the States (ECOS), Association of State and Territorial Health Officials (ASTHO), and State of California Environmental Protection Agency. Funding provided by the United States Environmental Protection Agency and the Centers for Disease Control and Prevention.

<sup>42</sup>Office of State Senator Martha Escutia, press release. “Escutia Bill Tracking Chronic Disease Link to Environment Moves to the Governor’s Desk,” September 13, 2001.

<sup>43</sup>U.S. Environmental Protection Agency press release, “Local Children to Receive Asthma Care Due to EPA Settlement With S.C. Johnson And Son, Inc.” October 19, 2000.

<sup>44</sup>U.S. Department of Justice, U.S. Environmental Protection Agency, “Fact Sheet: Diesel Engine Settlement,” October 22, 1998.

<sup>45</sup>U.S. Department of Justice, U.S. Environmental Protection Agency, “Clean Air Agreements Reached With Petroleum Refiners,” press release, March 21, 2001.

<sup>46</sup>U.S. Environmental Protection Agency and the U.S. Consumer Product Safety Commission, “The Inside Story, a Guide to Indoor Air Quality,” April 1995.

<sup>47</sup>Title 24, Section 6, of California’s Energy Efficiency Standards for Residential and Nonresidential Buildings now requires new developments to have proper insulation.

<sup>48</sup>Interview with Salem Prouty, General Engineer, San Francisco Housing and Urban Development, March 19, 2002

<sup>49</sup>The Doc4Kids Project, Boston Medical Center Children's Hospital, "Not Safe at Home, How America's Housing Crisis Threatens the Health of Its Children," February 1998, Executive Summary, page 3.

<sup>50</sup>Interview with Paul Wartelle, Esq., West Bay Law, San Francisco, October 5, 2001.

<sup>51</sup>Interview with Ellen Taylor, Senior Industrial Hygienist, Office of Healthy Homes and Lead Hazard Control, U.S. Department of Housing and Urban Development, September 6, 2001.

<sup>52</sup>Steven Schwartzberg Interview, September 4, 2001.

<sup>53</sup>Ellen Taylor Interview, September 6, 2001.

<sup>54</sup>Ibid.

<sup>55</sup>Phone interview with Neil Gendel, Project Director, Healthy Children Organizing Project, San Francisco, CA, August 17, 2001.

<sup>56</sup>U.S. Environmental Protection Agency, Indoor Environments Division, Office of Air and Radiation, IAQ Tools for Schools, "Managing Asthma in the School Environment," April 2000.

<sup>57</sup>Asthma programs can benefit from the example set by the scoliosis mandate. Apparently, the orthopedists' lobby succeeded in pushing for a mandate requiring all seventh-grade girls and all eighth-grade boys to undergo a spinal exam for this disease.

<sup>58</sup>Delaine Eastin, Health Advisory, California Department of Education, September 5, 1997.

<sup>59</sup>Kaiser Permanente and American Lung Association National Partnership On Asthma, National Asthma Conference, "Asthma Prevention, Management and Treatment: Community-Based Approaches for the New Millennium" Report, November 16-17, 2000, Washington, DC, under "Module: School-Based Education/Intervention, Key Element 1: Provide appropriate school health services."

<sup>60</sup>ZAP Asthma is a 16-member public-private partnership created to reduce preventable morbidity and mortality from asthma for children living in Atlanta's Empowerment Zone. Utilizing an "action research/participatory research model," known asthma triggers in the home environment of study participants are identified and ameliorated, utilizing the skills of trained community health workers, who assist families in sustaining the environmental interventions. The study will monitor the impact of reductions in exposure to cockroach antigens, dust mites, and environmental tobacco smoke on the severity of the disease, and on cost of care, school days missed, and parent work days missed. [www.sph.emory.edu/zapasthma/overview](http://www.sph.emory.edu/zapasthma/overview).

<sup>61</sup>Interview with Dr. Joyce Essien and Marcia Griffith, ZAP Asthma Program, April 13, 2001.

<sup>62</sup>West Harlem Environmental Action (WE-ACT) Web site. Excerpted from [www.weact.org](http://www.weact.org).

## APPENDIX 1: APPROACH AND METHODOLOGY

This report summarizes the findings of a study conducted by PolicyLink to better understand current and pending policies related to childhood asthma, and to survey the field to learn practitioners' views of needed changes in policies and practices. Under contract with The California Endowment, PolicyLink conducted interviews with experts working in various asthma-related roles. Included were:

- California State health officials: Secretary for Health, State Asthma Coordinator, Environmental Health Investigations
- State Office of Education Health Consultant and State School Nurse Consultant
- Three local school districts: San Francisco, Los Angeles and Oakland Unified
- Asthma coalitions: ZAP Asthma, YES WE CAN, RAMP, San Joaquin Valley Health Consortium
- U.S. Environmental Protection Agency and California EPA
- National Institutes of Health
- Local health officials and health providers, Public Health Director, pediatricians, nurse practitioners
- Environmental Justice Organizations, community organizers
- Health Maintenance Organization representative
- U.S. Department of Housing and Urban Development and local housing authority
- Advocacy and grassroots organizations including American Lung Association, Latino Issues Forum and Healthy Children Organizing Project

Questions were developed and reviewed by an internal asthma working group with experience in policy development, research, evaluation, health systems and advocacy. A series of interview instruments were used, targeted to the specific areas of expertise of those being interviewed. In most instances, two interviewers were present in sessions that lasted about an hour to an hour and a half.

Staff dedicated to the asthma project also conducted extensive research focused on: 1) tracking current asthma legislation both nationally and in California; 2) national foundations funding asthma initiatives; 3) tracking national and local media stories related to asthma; and 4) Department of Health and Human Services asthma programs.

## APPENDIX 2: LIST OF INTERVIEWEES

*For period of July 2, 2001 through March 28, 2002*

Ophelia Basgal  
Director  
Alameda County Housing Authority

Mindy Benson  
Asthma Clinic Coordinator  
Children's Hospital, Oakland

Angelo Bellomo  
Director of Environmental  
Health and Safety,  
Los Angeles Unified School District

Katherine Bishop, Esq.  
National Housing Law Project

Odessa Bolton  
Program Manager  
Blue Cross of California,  
State Sponsored Program

Hariet Charney  
Training and Education Coordinator  
Pharmaceutical and Indigent Care  
Public Health Institute

Tina Cosentino  
Community Organizer  
Communities for a Better Environment

Tim Cromartie  
Housing Policy Analyst  
California Department of Housing  
and Community Development

Linda Davis-Alldritt, R.N., P.H.N.  
School Nurse Consultant  
California Department of Education

Allen Dearry, Ph.D.  
Chief  
National Institute  
of Environmental Health Sciences

Raquel Donoso  
Senior Project Manager—Health  
Latino Issues Forum

Sandra Eaton  
Program Director  
American Lung Association  
of Central California

Justina Felix  
Program Manager  
San Joaquin Valley  
Health Consortium

Carol Flowers  
District Nurse  
Oakland Unified School District

Kimberly Gates  
Assistant Secretary  
California Health and Human  
Services Agency

Brenda Goldstein  
Public Health Ambassador  
Alameda Alliance for Health

Steve Graham  
Director  
Community Health Partnerships  
Kaiser Permanente Medical Center

Michele Greenhouse, M.D.  
Vineyard Family Practice  
Fresno, CA

Jon Gresley  
Executive Director  
Oakland Housing Authority

Kevin Hamilton  
Program Coordinator  
Asthma Education  
and Management Program  
Fresno Community Medical Center

Casey Herget, M.S.W., M.P.H.  
Asthma Program Coordinator  
North Carolina Department  
of Health and Human Services

Marie Hoemke  
School District Nurse  
San Francisco Unified School District

Grantland Johnson  
Secretary  
California Health and  
Human Services Agency

Paul Knepprath  
Vice President  
Government Relations  
American Lung Association of California

Richard Kreuzter, M.D.  
Chief  
Environmental Health Investigations Branch  
California Department of Health Services

Patricia Michael  
Consultant  
California Department of Education

Guillermo Mendoza M.D.  
Kaiser Permanente Hospital  
Vallejo, CA

Connie A. Musgrove  
Deputy Director  
Office of Regulatory Enforcement/OECA  
U.S. Environmental Protection Agency

Poki Stewart Namkung, M.D., M.P.H.  
Health Officer/Director  
of Public Health  
City of Berkeley  
Department of Health

Salem Prouty  
General Engineer  
Housing and Urban Development  
San Francisco, CA  
Human Services

Beth Saiki  
Director of Lung Health Programs  
American Lung Association  
of San Francisco and  
San Mateo Counties

Sydney Sawyer  
Program Manager  
American Lung Association of the  
East Bay

Steven M. Schwartzberg, M.P.H.  
Director  
Lead Poisoning Prevention  
Department  
Alameda County Community  
Development Agency

Pamela Simms-Mackey, M.D.  
Pediatrician  
Children's Hospital, Oakland

Barbara Spark  
Indoor Air Program Coordinator  
U.S. Environmental Protection  
Agency  
Region IX

Ellen Taylor  
Senior Industrial Hygienist  
Office of Healthy Homes and Lead  
Hazard Control  
U.S. Department of Housing and  
Urban Development

Paul Wartelle, Esq.  
West Bay Law, San Francisco

Megan Webb  
Director  
Regional Asthma Management  
and Prevention Initiative

Andrew Villanueva  
15-year-old student  
Lake Forest, California

Eileen Yamada, M.D.  
Prior Chief  
Asthma Program  
California Department of Health Services

*For period prior to July 2, 2001*

Bradley Angel  
Executive Director  
Greenaction

Dee Epps-Miller, M.A.  
Director of Policy  
and Special Projects  
Yes We Can  
Urban Asthma Partnership

Dr. Joyce Essien/Marcia Griffith  
ZAP Asthma

Bahram Fazeli  
Staff Researcher  
Communities for  
a Better Environment

Ani Gupta  
Intern  
Center for  
Environmental Health

Radhika Kunamneni  
Research Associate  
PolicyLink

Terry Lee  
Public Information Officer  
Bay Area Air Quality  
Management District

Martha Olson  
Communications Director  
Urban Habitat Program

Romel Pascual  
Assistant Secretary for  
Environmental Justice  
California Environmental  
Protection Agency

## APPENDIX 3: BIBLIOGRAPHY

- American Lung Association of California, Asthma Summit 2001 – Draft Proceedings, June 27-28, 2001.
- American Lung Association of San Diego and Imperial Counties, Asthma Statistics, September 19, 2001.  
[http://www.lungsandiego.org/asthma/adults\\_stats.asp](http://www.lungsandiego.org/asthma/adults_stats.asp)
- American Lung Association, Action on Asthma, Updated Information, 2001.
- American Lung Association, Fact Sheet: Outdoor Air Pollution, August 2000 Update.  
[http://www.lungusa.org/air/outdoor\\_factsheet99.html](http://www.lungusa.org/air/outdoor_factsheet99.html)
- Asch-Goodkin, Judith, “Caring for Diverse Populations,” Patient Care, May 15, 2000.  
<http://pc.pdr.net/pc/public.html?path=content/journals/p/data/2000/0515/05a00asthmacare.html>
- Asthma and Allergy Foundation of America, Southern California Chapter, The Breathmobile.  
<http://www.aafasocal.com/breath.html>
- California Department of Education, School Health Connections office, Comparison of Statewide Strategic Health Plans for California’s Children and Youth, January 8, 2001.
- California Department of Education, Guidelines and Procedures for Meeting the Specialized Physical Health Care Needs of Students, 1990.
- California Department of Education, Standards for Management of Asthma in School (Draft), July 17, 2001.
- California Department of Health Services, California Statewide Asthma Strategic Plan (Draft), August 1, 2001.
- California Department of Health Services, Environmental Health Investigations Branch, California County Asthma Hospitalization Chart Book, August 2000.

California Department of Health Services, Environmental Health  
Investigations Branch, California County Asthma Mortality Chart Book:  
Data for 1990-1997, April 2000.

Carson, Elizabeth, "Joining Forces to Fight Childhood Asthma:  
A Prop 10 Opportunity," Field Lessons, Vol. 1, No. 5,  
California Center for Health Improvement, December 2000.

Department of Justice and U.S. Environmental Protection Agency  
press release, "Clean Air Agreements Reached with Petroleum Refiners," 03/21/2001.

Doc4Kids Project, Boston Medical Center Children's Hospital,  
Not Safe at Home, How America's Housing Crisis Threatens  
the Health of Its Children, February, 1998.

Earthjustice press release, "San Joaquin Valley Medical Community and  
Environmental Groups Announce Upcoming Lawsuit to Enforce  
Clean Air Act," July 17, 2001.

Eastin, Delaine, Health Advisory,  
California Department of Education, September 5, 1997.

Evans, PhD, David and Robert Mellins, M.D., Katherine Lobach, M.D.,  
Carmen Ramos-Bonoan, M.D., Marcia Pinkett-Heller, M.P.H.,  
Sandra Wiesemann, R.N., M.P.S., Ilene Klein, M.A.,  
Caroline Donahue, R.N., M.A., Deidre Burke, R.N., M.P.H.,  
Moshe Levison, Ph.D., Bruce Levin, Ph.D., Barry Zimmerman, Ph.D.,  
Noreen Clark, Ph.D., "Improving Care for Minority Children With  
Asthma: Professional Education in Public Health Clinics,"  
Pediatrics, Vol. 99, No. 2, February 1997: 157-163.

HealthTrack, Blindfolding Public Health in the Fight Against Asthma,  
May 22, 2000, Washington, DC: Georgetown University.

Kaiser Permanente and American Lung Association National Partnership  
On Asthma, National Asthma Conference, Asthma Prevention,  
Management and Treatment: Community-Based Approaches for the  
New Millennium, Report, November 16-17, 2000, Washington DC.

Kreuzter, Richard and Michael Lipsett, Julie Von Behren, Eileen Yamada,  
Asthma in California: Laying the Foundation for a Statewide Strategy,  
California Policy Seminar Brief Series, August 1998.

Los Angeles County Department of Health Services, Public Health,  
L.A. Health, Issue 6, July 2001.

Mansour, M.D., M.S., Mona E. and Bruce P. Lanphear, M.D., M.P.H., and  
Thomas G. De Witt, M.D., "Barriers to Asthma Care in Urban Children:  
Parent Perspectives," Pediatrics, Vol. 106, No. 3, September 2000: 512-518.

National Institute of Environmental Health Sciences (NIEHS), The Inner-City  
Asthma Study, 2000, National Institutes of Health,  
New York Times, August 7, 2001 edition.



Office of State Senator Martha Escutia, Press Release,  
"Escutia Bill Tracking Chronic Disease Link to Environment Moves to  
the Governor's Desk," September 13, 2001.

Prentice, Robert, Reducing Health Disparities: Community Asthma  
Coalition Initiative, 2001. (Unpublished)

President's Task Force on Environmental Health Risks and Safety Risks to  
Children, Asthma and the Environment: A Strategy to Protect Children,  
January 1999.

Shiohita, Joy, "Breathing Better, L.A.'s Breathmobile helps inner-city kids  
fight asthma," Children's Advocate, Action Alliance for Children,  
July-August 1997.

Taylor, Ellen R., Healthy Homes Initiative Overview, U.S. Department of  
Housing and Urban Development, October 1998.

Trust for America's Health, Short of Breath: Our Lack of Response to the  
Growing Asthma Epidemic and the Need for Nationwide Tracking,  
July 2001.

U.S. Department of Housing and Urban Development, Office of Lead Hazard  
Control, The Healthy Homes Initiative: A Preliminary Plan (Full Report),  
April 1991.

U.S. Environmental Protection Agency and the United States Consumer Product  
Safety Commission, The Inside Story, A Guide to Indoor Air Quality,  
April 1995, Washington, DC: U.S. Government Printing Office.

U.S. Environmental Protection Agency Headquarters Press Release,  
"U.S. Reaches Environmental Settlement with Steel Manufacturer Nucor,"  
December 19, 2000.

U.S. Environmental Protection Agency Headquarters Press Release,  
"Local Children to Receive Asthma Care due to EPA Settlement with  
S.C. Johnson and Son, Inc.," October 19, 2000.

U.S. Environmental Protection Agency, Indoor Environments Division,  
Office of Air and Radiation, "IAQ Tools for Schools, Managing Asthma  
in the School Environment," April 2000.



**APPENDIX 4: FOUNDATION-FUNDED  
ASTHMA PROGRAMS BY CATEGORY  
(A SAMPLE OF PROGRAMS FUNDED BY FOUNDATIONS)**

**MULTIDISCIPLINARY**

**The California Endowment  
Woodland Hills, CA**

*Community Action to Fight Asthma (CAFA)*

A \$12 million, three-year statewide initiative to address the multiple environmental triggers of asthma among school-aged children with asthma. Funding for CAFA supports twelve community-based partnerships across California that work with the public, private and nonprofit sectors to identify and reduce asthma triggers in places where children live, learn and play. The twelve grantees are:

**American Lung Association - Redwood Empire Branch**

**Tulare District HealthCare Systems**

**Mercy Hospital Foundation, Merced**

**American Lung Association of San Diego and Imperial Counties**

**American Lung Association - Kern County Branch**

**Contra Costa County Health Services Department**

**Long Beach Memorial Medical Center**

**American Lung Association of the East Bay**

**American Lung Association of San Francisco and San Mateo Counties**

**El Centro Regional Medical Center**

**Alta Bates Summit Medical Center Foundation**

**St. John's Well Child Center**

*Community Action to Fight Asthma (CAFA)*

A grant to California State University, San Francisco, to support, coordinate and manage the activities of the CAFA coalitions and partners throughout California.

*Community Action to Fight Asthma (CAFA)*

A grant to the Public Health Institute to provide technical assistance in asthma coalition formation in the Bay Area and Northern California.

*Community Action to Fight Asthma (CAFA)*

A grant to the San Joaquin Valley Health Consortium to provide technical assistance to asthma grantees in Central California.

*Central Coast Asthma Coalition*

A grant to the American Lung Association of the Central Coast to develop and implement effective regional strategies for asthma prevention and treatment for children between the ages of three and 12 by collaborating with key stakeholders in Monterey, Santa Cruz, San Luis Obispo, San Benito and Santa Barbara counties.

*Asthma Telemedicine Project*

A grant to the Lucile Salter Packard Children's Hospital at Stanford to support case management, telemedicine consultations and asthma education to underserved children and their parents in the Bayview Hunters Point section of San Francisco.

*California East/North Bay Regional Asthma Management*

A grant to the Public Health Institute to support a collaborative effort of organizations, institutions and community residents of Alameda, Contra Costa and Solano counties to address the causes and impacts of asthma.

*Regional Asthma Management and Prevention Initiative (RAMP)*

A grant to the Public Health Institute to support an asthma management and prevention project in four predominantly African-American communities in the Bay area.

*Central California Asthma Project*

A grant to the San Joaquin Valley Health Consortium to support a multifaceted approach to reducing asthma morbidity and mortality in seven counties; programs to consist of patient/family education and professional education regarding diagnosis and treatment.

**The Robert Wood Johnson Foundation**

**Princeton, NJ**

*Allies Against Asthma*

\$12.5 million program begun in 1999 to improve efforts to control pediatric asthma in up to eight communities nationwide. Through the program, eight local coalitions will receive grants to design an interrelated set of interventions that will bolster prevention, improve access to clinical care and foster patient education. The community coalitions will be composed of local health care providers, health plans, housing and environmental industries, community residents, schools, economic development agencies and public health organizations.

The Allies Against Asthma Web site can be accessed at [www.sph.umich.edu/aaa](http://www.sph.umich.edu/aaa).

## **Improving Diagnosis, Treatment and Management**

### **Aetna Foundation, Inc. Hartford, CT**

#### *Use of Anti-inflammatory Inhalers in Asthma Treatment*

A grant to the University of Michigan to determine whether anti-inflammatory inhalers deliver the benefits theorized in recent guidelines, to study why this therapy is not being used, and to examine which of several interventions is most effective in improving outcomes. To be conducted in collaboration with U.S. Quality Algorithms.

### **The California Endowment Woodland Hills, CA**

#### *Preventive Asthma Care*

A grant to the Asthma & Allergy Foundation to provide four additional mobile asthma clinics providing regular preventive asthma care to high-risk inner-city children.

#### *California Asthma Among the School-Aged Project (CAASA)*

A three-year, \$3.6 million grant to the University of California, San Francisco (UCSF) to improve knowledge and awareness among health care providers and improve the delivery of asthma care in seven California clinics. The Integrating Medicine and Public Health Program (IMAP), in partnership with the California Department of Health Services (DHS) and UCSF, will implement the model program to improve clinical diagnosis, treatment and management of asthma for children between the ages of five and 18. Health care providers will also improve consumer education and coordination of care to reduce asthma triggers.

#### *Community Health Works – Asthma Manuals*

A grant to California State University, San Francisco, to publish two childhood asthma management manuals highlighting a medical/social team model for use by local asthma coalitions in California.

#### *San Bernardino County Asthma Coalition*

A grant to the American Lung Association of the Inland Counties to support the start-up and strategic planning of a local coalition that aims to reduce risk factors for and improve the treatment and management of asthma within underserved communities in San Bernardino County.

#### *Pediatric Asthma Project*

A grant to the American Lung Association of California to support a community collaborative in its efforts to improve asthma control among children and youth in San Joaquin County by reducing barriers to care and providing resources and education.

#### *Yes We Can Urban Asthma Partnership*

A grant to California State University, San Francisco, to develop and test a replicable model for asthma management in urban communities.

#### *Prevention and Care for Inner-City Children with Asthma*

A grant to YES WE CAN Urban Asthma Partnership to support this demonstration program, a collaborative effort of health agencies, community-based organizations, nonprofit hospitals, educators and others. The YES WE CAN Partnership is coordinated by Community Health Works of San Francisco, a community health innovation center sponsored by San Francisco State University and City College of San Francisco. YES WE CAN Partners include the Bayview/Hunters Point Healthy Start Collaborative, the San Francisco Department of Public Health and its Community Health Network, the San Francisco Health Plan, staff of the Kaiser Medical Group, the Mission Neighborhood Health Center, the Regional Asthma Management Program Initiative (RAMP), the Health and Environmental Resource Center (HERC), and the American Lung Association, with others still joining.

**The Flinn Foundation**

**Phoenix, AZ**

*Pharmacy-Based Asthma Management*

A grant to the University of Arizona to support a pharmacy-based asthma management program.

*At-Risk Adolescent Males With Asthma*

A grant to Pima County Health Department to support case management for at-risk adolescent males with asthma.

**The Helene Fuld Health Trust**

**New York, NY**

*Asthma Education Program*

A grant to San Francisco State University to partner with a community-based clinic to develop an asthma education program, case management outreach procedures and medical assistant training program.

**The Health Trust**

**San Jose, CA**

*Case Management for Diabetes and Asthma Project*

A grant to Santa Clara Valley Health and Hospital System in conjunction with O'Connor Hospital for a three-year project that provides public health case management to uninsured adults and children with diabetes and/or asthma.

**HMSA Foundation**

**Honolulu, HI**

*Child Health Initiative*

An initiative to improve child health outcomes through projects that lead to a higher quality of care being delivered, or that better shape public policy. Projects funded under this initiative will be provided with grants for up to three years, at \$50,000 to \$150,000 per year. The project began in 2000.

**Jewish Health Care Foundation**

**Pittsburgh, PA**

*Improving Asthma Outcomes Among Children*

A grant to Children's Hospital of Pittsburgh to improve asthma outcomes among children.

**The Robert Wood Johnson Foundation**

**Princeton, NJ**

*Improving Asthma Care for Children*

A \$3.25 million, four-year national initiative with the goal to improve the management of pediatric asthma in high-risk recipients of Medicaid and State Children's Health Insurance Programs (SCHIP). The projects will build collaborations of managed-care organizations, school-based health centers and departments of health to blend: (a) managed-care clinical and administrative practices; (b) patient education and self-management strategies; and (c) community education campaigns about asthma triggers and abatement methods. The grantees will have the capacity to address serious challenges for low-income children, such as low literacy, cultural diversity and higher exposure to environmental allergens in urban settings. Improving Asthma Care for Children will communicate the lessons learned from these programs through a guidebook of collective innovations in asthma care for children.

The program began in 2000.

**The New York Community Trust**

**New York, NY**

*Home Care Services for Children with Asthma*

A grant to the Visiting Nurse Association of Brooklyn to support home care services for children with asthma who are discharged from emergency rooms and hospitals.

**The David and Lucile Packard Foundation**

**Los Altos, CA**

*Helping Improve Pediatric Practice Outcomes*

A grant to Children's Hospital Corporation to support a demonstration project that applies collaborative quality improvement approaches to pediatric asthma care in primary care settings.

**Pfizer, Inc.**

**New York, NY**

*Family Wellness Center*

A grant to Fair Haven Community Health Center to help patients and their families manage chronic conditions, specifically diabetes, asthma and chronic pain.

**QueensCare**

**Los Angeles, CA**

*Health Care for the Uninsured*

A grant to California Hospital Medical Center, Glendale Memorial Hospital, White Memorial Medical Center, Good Samaritan Hospital and St. Vincent Medical Center to provide health care services to low-income, uninsured patients in central Los Angeles. Funding will be dispersed among five nonprofit hospitals and earmarked for the treatment of five diseases with a particularly high incidence (among ethnic minorities) in LA County: cervical cancer, prostate cancer, breast cancer, asthma and diabetes.

**Michael Reese Health Trust**

**Chicago, IL**

*Pediatric Asthma Intervention*

A grant to Sinai Health System to use health educators to provide comprehensive asthma education and support.

*Disadvantaged Children at Risk*

A grant to Jewish Children's Bureau of Chicago to plan the Southeast Chicago Cooperative Health Initiative designed to provide education, prevention, and direct care to 300 disadvantaged children at risk for diabetes, asthma, lead poisoning and failure to be immunized.

**Virginia Health Care Foundation**

**Richmond, VA**

*Asthma in Very Young Children*

A grant to introduce a program to fight asthma in very young children by using home visits to teach families about environmental, lifestyle and disease management changes.

## SCHOOL PROGRAMS

### **The California Endowment Woodland Hills, CA**

#### *Inner City School-Based Mobile Asthma Treatment Unit*

A grant to the Asthma and Allergy Foundation of America – Los Angeles Chapter – to bring care to children with asthma at school sites in greater Los Angeles through a mobile outreach clinic program.

#### *Asthma and Tobacco Prevention Program*

A grant to the University of California, Los Angeles, to support a school-based asthma and tobacco prevention and intervention project in the low-income, predominantly Latino community of Sun Valley.

### **Helen Bader Foundation Milwaukee, WI**

#### *Training Teachers to Respond to Asthma*

A grant to St. Michael Hospital for teacher education designed to reduce the number of pediatric asthma attacks that require emergency treatment.

### **Foundation for Seacoast Health Portsmouth, NH**

#### *"Open Airways for Schools" Program*

A grant to American Lung Association of New Hampshire to support an asthma education program in eight elementary schools in the Seacoast region. The program consists of six 40-minute lessons that teach children how to manage their asthma.

### **Jenkins Foundation Richmond, VA**

#### *Sesame Street Asthma Program*

A grant to American Lung Association of Virginia to support the Sesame Street "A is for Asthma" program for preschool-aged children.

### **The David and Lucile Packard Foundation Los Altos, CA**

#### *"Open Airways for Schools" Program*

A grant to American Lung Association to support local chapters in Daly City and San Jose partner with schools and community volunteers to deliver a program of asthma education to low-income children in elementary schools.

### **Portsmouth General Hospital Foundation Portsmouth, VA**

#### *Asthma Self-Management Program*

A grant to Bon Secours Maryview Medical Center to initiate an asthma program at a middle school.

### **Kate B. Reynolds Charitable Trust Winston-Salem, NC**

#### *Start-Up for "Open Airways for Schools" Curriculum*

A grant to American Lung Association of North Carolina to provide start-up expenses for the "Open Airways for Schools" curriculum, a school-based health education program for children with asthma in south central North Carolina.



*“Open Airways for Schools”*

A grant to American Lung Association of North Carolina to provide operating expenses for the "Open Airways for Schools" curriculum, a school-based health education program for children with asthma, in north central North Carolina and the purchase of medication and equipment for asthma camps.

*Expansion of “Open Airways for Schools” Curriculum*

A grant to American Lung Association of North Carolina for expansion of the Open Airways for Schools curriculum, a school-based health education program for children with asthma, in western North Carolina.

**The San Francisco Foundation**

**San Francisco, CA**

*Project Life Breath*

A grant to Children's Hospital of Oakland to support Project Life Breath, a partnership with the Oakland Unified School District to conduct asthma education and intervention in local elementary schools.

**Sierra Health Foundation**

**Sacramento, CA**

*“Open Airways for Schools”*

A grant to American Lung Association of California, Superior Branch, to support this school-based asthma health education curriculum.

**COMMUNITY EDUCATION**

**The Boston Foundation**

**Boston, MA**

*Clean Buses for Boston*

A grant to Alternatives for Community and Environment to support this campaign by inner city youth to reduce hazardous emissions from idling buses in their neighborhoods, especially related to alarming increases in asthma and other respiratory conditions.

**The California Endowment**

**Woodland Hills, CA**

*Community-Based Asthma Education and Wellness*

A grant to Asthma Education and Resource Council (AERC) to expand a community-based asthma education and wellness program, entitled, “Empowering Communities for Wellness,” for residents in the North Bay Area counties of Marin, Napa, Solano and Sonoma. The program will initially focus on Marin County.

*Children and Asthma – A Documentary*

A grant to KQED, Inc., to develop and broadcast a one-hour bilingual documentary statewide that will investigate the increases in childhood asthma and possible links to environmental factors.

*Empowering Communities for Wellness*

A grant to the Asthma Education and Resource Council to develop a model for empowering communities to achieve asthma wellness through educational outreach, involving stakeholders and initiating policy changes in community systems.

*Asthma Education for Rural Latino Families*

A grant to the Fresno Regional Foundation to develop an asthma education project targeting children from Latino farm worker families in rural Fresno County.

**The David and Lucile Packard Foundation**  
**Los Altos, CA**

*Asthma Prevention and Management Programs*

A grant to the American Lung Association of the Central Coast for comprehensive asthma prevention and management programs in California's Monterey and Santa Cruz counties.

**Sierra Health Foundation**  
**Sacramento, CA**

*Asthma and Environmental Education Project*

A grant to the American Lung Association for an asthma and environmental education project for minority and low-income people in California's Sutter and Yuba counties.

*Family Asthma Fair*

A grant to the Mercy Foundation to support this asthma fair.

**RESEARCH AND POLICY ANALYSIS**

**The California Endowment**  
**Woodland Hills, CA**

*Community Action to Fight Asthma (CAFA)*

A grant to PolicyLink to build consensus among asthma stakeholders on a California asthma policy agenda and to guide the policy, advocacy and communication activities of regional technical assistance providers.

*Asthma – Cost Effectiveness Analysis*

A grant to the University of California, Los Angeles, to conduct a cost-effectiveness analysis of the Continuous Quality Improvement Program in the treatment and management of asthma in school-aged children statewide.

**Fetzer Institute**  
**Kalamzoo, MI**

*Psychosocial Factors and Asthma*

This long-term collaborative project between the Fetzer Institute and the National Heart, Lung, and Blood Institute (NHBLI) is exploring the relevant psychosocial aspects of asthma.

**William T. Grant Foundation**  
**New York, NY**

*Impact of Welfare Reform on Children's Health*

A grant to Boston University School of Medicine to examine health-related effects of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 on children with asthma and sickle-cell anemia.

**Northwest Health Foundation**

**Portland, OR**

*Looking for Causes of an Asthma Epidemic*

A grant to Center for Health Research, Kaiser Foundation Hospitals, to analyze Oregon asthma data collected in 1990 and 1998 studies from the same participants to determine possible causal factors in the asthma epidemic. A joint project with Oregon Health Sciences University.

**The Pew Charitable Trusts**

**Philadelphia, PA**

*Health-Track*

A grant to Georgetown University for Health-Track, an organization dedicated to educating the informed public and key federal policymakers about the need for a well-coordinated, national approach to environmental health tracking and monitoring, with a particular focus on asthma.

*Pew Environmental Health Commission*

A grant to establish a commission at the Johns Hopkins School of Hygiene and Public Health for the purposes of alerting the public to inadequacies in the nation's public health system and developing policy recommendations for addressing some of the country's most threatening environmental health problems.

**The Fan Fox and Leslie R. Samuels Foundation, Inc.**

**New York, NY**

*The Asthma Passport Program*

A grant to Albert Einstein College of Medicine to support an evaluation of an intensive education and follow-up program to reduce asthma morbidity in inner-city children.

5  
5

**Capacity Building**

**The California Endowment**

**Woodland Hills, CA**

*Central California Asthma Project*

A grant to the San Joaquin Valley Health Consortium to support the expansion of a project that will develop, strengthen and support the efforts of five asthma coalitions in central California, and to promote inter- and intra-coalition collaborations.

*This information was referenced from the Resource Center at Grantmakers in Health (GIH) a nonprofit, educational organization dedicated to helping foundations and corporate giving programs improve the nation's health.*



**APPENDIX 5:  
ASTHMA BILL TRACKING**

**CALIFORNIA BILLS (PRIOR SESSION 1999-2000)**

State	Bill No.	Theme	Author	Key themes	Current Status
California	SB 25	Environmental Health Protection: Children	Escutia (Principal Coauthors: Assembly members Kuehl and Villaraigosa; Coauthors: Alarcon, Figueroa, Ortiz, Perata, Polanco, Sher, Solis and Speier; Assembly Coauthors: Alquist, Aroner, Firebaugh, Honda, Jackson, Knox, Lempert, Mazzone, Romero, Shelley, Steinberg, Thomson, Vincent, Washington, and Wildman)	Requires the state to review public health standards for air pollutants to ensure they are set at science-based levels that protect children. It also increases air pollution monitoring around schools and daycare centers.	10/99: Chaptered by Secretary of State. Status - inactive, did not pass as amended.
California	SB 1111	Comprehensive State Asthma Program	Sher (Principal coauthor: Solis; Principal Assembly Coauthor: Cardenas) (Coauthors: Alpert, Baca, Bowen, Escutia, Figueroa, Hayden, Karmette, McPherson, O'Connell, Ortiz, Perata, Speier and Vasconcellos; Assembly Coauthors: Alquist, Aroner, Calderon, Cedillo, Firebaugh, Havice, Honda, House, Jackson, Kuehl, Lempert, Migden, Romero, Scott, Shelley, Strom-Martin, Villaraigosa, Washington and Wayne)	Would require the Department of Health Services to take specified actions relating to the establishment of a comprehensive state assessment, intervention and evaluation program for the control of asthma.	1999: Held indefinitely in Appropriations Committee.

**CALIFORNIA BILLS (CURRENT SESSION 2001-2002, AS OF AUGUST 2002)**  
**SENATE BILLS**

State	Bill No.	Theme	Author	Key themes	Current Status
California	<b>SB 35</b>	Tobacco Settlement Allocations	Escutia (Principal Coauthor: Burton; Principal Assembly Coauthor: Hertzberg); (Coauthors: Alpert, Kuehl, Murray, Ortiz, and Vasconcellos; Assembly Coauthors: Bates, Chavez, Diaz, Jackson, Keeley, Koretz, Richman, Shelley, and Washington)	Would create the Tobacco Settlement Fund. It is the stated intent of the agreement that funds be used to reduce tobacco consumption and to diminish the public costs of tobacco-related diseases, such as asthma.	6/18/01: Passed in Senate, in Assembly. Sent to Committees on Governmental Organizations and Health
California	<b>SB 391</b>	Education: Consulting Nurse	McPherson (Coauthors: Figueroa, Johannessen, and Torlakson; Assembly Coauthors: Florez and Maldonado)	Requires every county office of education to employ a credentialed school nurse as a consultant and to provide leadership and health services to pupils. The nurses shall provide assistance in setting up programs and procedures for tobacco products prevention and the management of asthma.	8/22/01: Passed Senate, in Assembly. In Committee on Appropriations, set first hearing.
California	<b>SB 702</b>	Chronic Disease: Environmental Determinants	Escutia (Coauthors: Romero and Vasconcellos; Assembly Coauthors: Diaz, Firebaugh, Jackson, Koretz, Strom-Martin, and Washington)	Requires the Office of Environmental Health Hazard Assessment to establish an Environmental Health Surveillance System (EHSS) for ongoing surveillance of environmental exposures and the diseases afflicting Californians. Requires state government agencies and universities to examine whether, and the extent to which, past environmental exposures might increase the risk of asthma.	10/5/01: Chaptered by Secretary of State.
California	<b>SB 859</b>	Disease Management	Ortiz	Requires the State Department of Health Services to provide disease management programs by developing a strategy and guidelines for Medi-Cal participants with disease management services that will improve patient outcomes and reduce health care costs. The task force shall pay special attention to asthma.	8/30/01: Joint Rule 61(a) (10) & (11) suspended.
California	<b>SB 1890</b>	Tobacco Use Reduction and Compensation Fund	Ortiz	Would create the Tobacco Use Reduction and Compensation Fund, into which would be deposited funds from surtaxes imposed on the sale and distribution of cigarettes and tobacco products. Funds would be used for tobacco use prevention and control, education and research, disease prevention (with a portion of funds dedicated to asthma), the provision of medical and preventative health services for low-income and uninsured individuals, and the expansion of medical insurance coverage for the uninsured.	4/10/02: Set first hearing. Further hearing to be set.

**CALIFORNIA BILLS (CURRENT SESSION 2001-2002, AS OF AUGUST 2002)  
ASSEMBLY BILLS**

State	Bill No.	Theme	Author	Key themes	Current Status
California	<b>AB 163</b>	School Nurses	Florez (Coauthors: Alquist and Vargas; Senate Coauthor: McPherson)	Discusses the appropriation of tobacco settlement funds to increase the number of school nurses. Requires Superintendent of Public Instruction to appoint a State School Health Advisory Council to make recommendations on model health services programs and practices.	2/7/02: Died pursuant to Art. IV Sec. 10 (c) of the Constitution.
California	<b>AB 178</b>	Housing Standards: Mold	Cox	Would require landlords who knew or should have known that mold is or has been present in the building, the heating, ventilation or air conditioning system, or the surrounding environments to provide a specified notice to current tenants and prospective tenants or lessees if the mold exceeds specified standards.	2/7/02: Died pursuant to Art. IV Sec. 10 (c) of the Constitution.
California	<b>AB 188</b>	Playgrounds: Smoking	Vargas (Principal Coauthor: Koretz) (Coauthors: Chan and Washington)	Would prohibit the smoking of any cigarette, cigar, or other tobacco-related product within a playground or tot lot sandbox area.	8/6/02: Chaptered by Secretary of State.
California	<b>AB 284</b>	Public Health: Mold	Jackson	Requires Department of Health Services to establish a mold surveillance, monitoring and education program to address the potential human health effects of indoor exposure to mold.	10/7/01: Chaptered by Secretary of State.
California	<b>AB 1390</b>	Zero-Emission Vehicles	Firebaugh	Requires the state board to develop and administer a program to provide grants to individuals, local governments, state agencies, nonprofit organizations, and private businesses, to encourage the purchase or lease of a new zero-emission vehicle.	10/12/01: Chaptered by Secretary of State.
California	<b>AB 1420</b>	Diesel-Powered School Buses	Cardenas	Requires that the State Air Resources Board shall allocate funds to school districts to assist school districts in the replacement of diesel-powered school buses with alternative fuel buses, or in retrofitting diesel-powered school buses with technologies to reduce harmful emissions.	7/2/01: In Committee on Transportation, set first hearing. Hearing cancelled at the request of the author.

State	Bill No.	Theme	Author	Key themes	Current Status
California	AB 1493	Vehicular Emissions	Pavley (Principal Coauthor: Simitian; Principal Senate Coauthor: Burton); (Coauthors: Aroner, Chu, Cohn, Diaz, Firebaugh, Frommer, Jackson, Keeley, Kehoe, Koretz, Longville, Nation, Shelley, and Strom-Martin; Senate Coauthors: Bowen, Escutia, Kuehl, Perata, and Romero)	Establishes the California Climate Action Registry, and requires the registry to perform various functions relating to the provision of technical assistance for emissions reductions. The bill would require the registry to adopt procedures and protocols for the reporting and certification of reductions in greenhouse gas emissions from mobile sources for use by the state board in granting the emission reduction credits.	7/22/02: Chaptered by Secretary of State.
California	AB 1528	Emissions Increases	Wyman	Would eliminate the requirement for the approval by resolution of the upwind and downwind districts when increases in emissions of air pollutants from a source are offset by emission deductions credited to a source located in another district.	2/7/02: Died pursuant to Art. IV, Sec. 10 (c) of the Constitution
California	AB 2223	Schools: Indoor Air Quality	Keeley	Would require that the Secretary of the State and Consumer Services Agency, in consultation with various entities, develop and distribute a list of voluntary guidelines for public school construction or modernization projects to protect and enhance indoor air quality.	6/19/02: Amended and re-referred to Committee on Appropriations.
California	AB 2332	Indoor Air Pollution	Keely	Would require the California Air Resources Board to establish air pollution emission standards for high-risk categories of products used indoors having a scientifically recognized potential for damaging public health.	5/30/02: Read third time, passage refused.
California	AB 2637	Outdoor Air Pollution: Bay Area Motor Vehicle Inspection and Maintenance Program	Cardoza (Principal Coauthors: Cox and Matthews); (Coauthors: Ashburn, Briggs, Cogdill, Florez, Pescetti, Reyes, and Steinberg; Senate Coauthors: Costa, Machado, Monteith, and Ortiz)	This bill would establish an enhanced motor vehicle inspection and maintenance program (smog check II) in the San Francisco Bay Area Basin.	5/24/2002: Read second time and re-referred to Committee on Transportation.
California	AB 2650	Diesel Emissions	Lowenthal (Principal Coauthor: Firebaugh); (Coauthors: Briggs, Cedillo, Correa, Frommer, Harman, Koretz, Longville, Negrete McLeod, and Rod Pacheco)	Would require each marine terminal in the state to operate in a manner that does not cause the engines on trucks to idle for more than 30 minutes while waiting to load or unload at the terminal, and would charge the district with geographical jurisdiction over that marine terminal with enforcing the requirement.	6/27/02: Passed Assembly, in Senate. Amended, and re-referred to Committee on Local Government.



## NATIONAL BILLS IN STATE LEGISLATURES: BY THEME (AS OF AUGUST 2002)

Themes	Bills
<i>School health programs/ evaluation related to asthma</i>	<b>AK:</b> HR 25; <b>CT:</b> AB 7505, SB 214, SB 172; SB 1265; <b>GA:</b> HB 1242; <b>IN:</b> SB 1337; <b>NJ:</b> SB 2214, SB 118; SB 137, AB 3318; <b>NY:</b> HB 8672, AB 2265, AB 4815, AB 127; <b>OK:</b> HB 2208; <b>TX:</b> HB 3154; <b>VA:</b> HR 43
<i>Use of prescription asthma medication on campus</i>	<b>GA:</b> SB 472; <b>IL:</b> SB 979, SB 898; <b>KY:</b> HB 335; <b>MA:</b> HB 4411, HB 3072; <b>MN:</b> SB 1706; <b>NJ:</b> SB 1372; <b>NY:</b> HB 9907; <b>PA:</b> HB 19; <b>TX:</b> HB 1688; <b>VA:</b> HB 1012, HB 1386
<i>Indoor air quality</i>	<b>AK:</b> HR 25; <b>CT:</b> SB 1038, SB 1265; <b>DE:</b> SB 99; <b>GA:</b> HB 1242; <b>NJ:</b> SB 444, SB 1210, SB 137; <b>NY:</b> HB 10610, HB 8672; <b>PA:</b> HR 171, HR 3342; <b>TX:</b> HB 3154; <b>WA:</b> SB 5933, SR 8426
<i>Smoking or tobacco and asthma</i>	<b>AK:</b> HR 25; <b>DE:</b> SB 99; <b>HI:</b> SR 88, HB 2741, HB 138; <b>MI:</b> SR 72; <b>NJ:</b> HR 205, SB 444, SB 1210
<i>Outdoor air quality</i>	<b>GA:</b> HR 1613; <b>IL:</b> HB 827; <b>MA:</b> SB 1115; <b>MI:</b> SR 215; <b>NE:</b> SR 373; <b>NY:</b> HB 9642
<i>Establishing asthma study/assessment/incidence registry</i>	<b>CT:</b> SB 172; <b>CT:</b> SB 1265; <b>CT:</b> SB 432; <b>MA:</b> SB 511, HB 3930; <b>MI:</b> HB 333; <b>MN:</b> HB 3095, SB 2996; <b>NJ:</b> AB 2000, AB 1866; <b>NY:</b> HB 10243, HB 9642, AB 7767; <b>PA:</b> HB 2638; <b>TX:</b> HB 342
<i>Race-based disparities</i>	<b>CT:</b> HB 6063; <b>NJ:</b> AB 2204, HR 17; <b>OR:</b> SB 692
<i>Health care access or treatment related to asthma</i>	<b>CO:</b> SB 21; <b>GA:</b> HB 638; <b>LA:</b> SB 502; <b>ME:</b> HB 1265, HB 742; <b>MI:</b> HB 333; <b>OK:</b> SB 1233; <b>RI:</b> HB 7495; <b>TN:</b> SB 2481
<i>Managed care</i>	<b>CT:</b> SB 162
<i>Medicaid</i>	<b>CT:</b> SB 1038; <b>IN:</b> SB 137; <b>LA:</b> SB 117; <b>MS:</b> HB 1200; <b>TX:</b> SB 616
<i>Comprehensive statewide asthma management/control program, eg., with community participation</i>	<b>IL:</b> SB 1716, SB 552; <b>ME:</b> HB 1495; <b>MD:</b> HB 420; <b>MI:</b> HB 4254, SB 1101; <b>MS:</b> HB 1888, SB 2189, SB 3221; <b>NY:</b> AB 7562; <b>NC:</b> HB 692; <b>OR:</b> SB 692; <b>VA:</b> SB 490

## NATIONAL BILLS IN STATE LEGISLATURES (AS OF AUGUST 2002)\*

State	Bill No.	Author	Key themes	Status
ALASKA	HR 25	Cissna	States that the legislature intends to continue its support for smoking cessation programs and encourages schools to help minimize asthma triggers through improving the air quality in school facilities.	2/02 - Enacted
COLORADO	SB 21	Reeves	Defines an extraordinary medical expense to include asthma treatments.	4/02 - Enacted
CONNECTICUT	SB 1038	Crisco	Requires the Commissioner of Social Services to provide an environmental assessment of the dwelling units of children eligible for or receiving Medicaid. This may include environmental causes of illnesses such as asthma.	5/01 - Pending
CONNECTICUT	AB 7505	Lyons	Requires that the Board of Education mandate each child to have a health assessment prior to public school enrollment. The assessment shall include asthma diagnosis. Also requires that each school board shall report annually the number of students diagnosed with asthma.	7/01 - Enacted
CONNECTICUT	AB 7507	Lyons	Monetary appropriation for Easy Breathing Asthma Initiative.	7/01 - Enacted
CONNECTICUT	SB 214	Caruso	Establishes a pilot program to screen students in grades five and six for asthma.	3/02 - Not Enacted
CONNECTICUT	AB 5672	Christ	Expands the pilot program for the early identification and treatment of pediatric asthma.	3/01 - Enacted
CONNECTICUT	SB 172	Harp	Established an Asthma Tracking System; tracks asthma rates with respect to school-age children.	3/01 - Pending
CONNECTICUT	AB 6063	Dillon	Concerning funds to be distributed to municipalities and used for the elimination of race-based health disparities including poor birth outcomes, asthma prevention and treatment and other health issues.	1/01 - Pending
CONNECTICUT	AB 5565	Demarinis	Eliminates sales tax on medically needed hypo-allergenic bedding products for people suffering from asthma.	6/01 - Enacted
CONNECTICUT	SB 162	Harp	Requires managed care organizations to provide coverage for a comprehensive allergy evaluation, aeroallergen barrier devices or pillow and mattress encasements, spacer devices and peak flow meters needed to treat persons with allergies/asthma.	1/01 - Pending

\*Source: National Conference of State Legislatures ([www.ncsl.org/programs/ESNR/ehdatabases.html](http://www.ncsl.org/programs/ESNR/ehdatabases.html))

State	Bill No.	Author	Key themes	Status
CONNECTICUT	SB 1265	Gafey	Provides funding to schools that undertake projects to improve indoor environmental quality of their facilities. Requires schools to identify programs relating to indoor environmental quality in their facilities and to create an asthma tracking program.	9/01 - Pending
CONNECTICUT	SB 432	Handley	Requires Department of Public Health to track incidence of asthma, particularly in children, in the state of Connecticut in order to determine case distribution and investigate causes of disease.	1/01 - Pending
DELAWARE	SB 99	McBride	Relating to the Clean Indoor Act, states that exposure to second-hand smoke by children leads to asthma.	5/01 - Pending
DELAWARE	HB 9	Cohen	Concerns school children and the administration of certain asthma medications.	2/02 - Not Enacted
GEORGIA	HB 638	Holmes	Intending to amend Title 31 of the Official Code of Georgia Annotated relating to health definitions, legislative intent, etc. Provides that "increasingly private insurers seek to avoid risk, rather than to spread it, by using underwriting and risk rating procedures to deny coverage or charge high premiums for people with conditions such as asthma."	2/01 - Not Enacted
GEORGIA	HR 1613	Orrock	Urging the Governor and the General Assembly to order the closing of the Live Oak Landfill; whereas in the areas surrounding the landfill, there has been a verifiable increase in the number of people seeking medical treatment for such health problems as asthma and other breathing difficulties.	4/02 - Not Enacted
GEORGIA	HB 1242	Ashe	Amends the Georgia Safe Schools Act to create a school integrated pest management advisory board whereas numerous scientific studies have linked both cancer and asthma to pesticide exposure.	2/02 - Not Enacted
GEORGIA	SB 472	Butler	Provides for self-administration of asthma medication by students and allows for an exemption from liability related to school administration. States that "each public school in this state shall permit the self-administration of asthma medication by a student who has asthma, subject to the local policy adopted pursuant to subsection (b) of this Code section; and the school district and its employees and agents shall incur no liability other than for willful or wanton misconduct for any injury to a student caused by his or her self-administration of asthma medication."	3/02 - Enacted
HAWAII	SR 88	Chun	Designates all areas of the state capitol a smoke-free place; states that smoking by parents is also associated with a wide range of adverse effects in their children, including exacerbation of asthma.	4/02 - Not Enacted
HAWAII	HB 2741	Oshiro	Relating to the cigarette and tobacco tax. HI legislature finds and declares that smoking by parents is also associated with a wide range of adverse effects on their children, including exacerbation of asthma.	4/02 - Not Enacted
HAWAII	HB 138	Lee	Urging the designation of all areas of the state capitol as a smoke-free workplace; whereas smoking by parents is also associated with a wide range of adverse effects in their children, including exacerbation of asthma.	4/02 - Enacted

State	Bill No.	Author	Key themes	Status
<i>ILLINOIS</i>	HB 827	Hoffman	Quality public transit in Illinois would support working families and businesses by providing effective options for connecting workers to jobs and by reducing traffic congestion, which would reduce the air pollution that has contributed to skyrocketing asthma rates; calls upon the Congress and the Administration to strongly support any proposals to increase the level of funding for public transportation in the reauthorization.	5/02 - Enacted
<i>ILLINOIS</i>	SB 1716	Del Valle	Amends Department of Public Health Powers and Duties Law by adding a comprehensive statewide asthma management plan to reduce the rate of hospitalizations due to asthma and to facilitate effective management of asthma in persons with asthma.	2/02 - Pending
<i>ILLINOIS</i>	SB 979	Parker	Requires schools to permit the self-administration of prescribed asthma medication by students.	8/01 - Enacted
<i>ILLINOIS</i>	SB 552	Myers	Requires the Department of Public Health to develop a comprehensive statewide asthma management plan; provides for the use of moneys from the Tobacco Settlement Recovery Fund to implement the statewide asthma management plan.	3/01 - Pending
<i>ILLINOIS</i>	SB 898	O'Brien	Requires the School Board to permit the self-administration of prescribed asthma medication by a pupil; requires information concerning the medication to be kept on file; contains provisions concerning liability; adds an exception for willful or wanton conduct to the provisions concerning liability.	8/01 - Enacted
<i>INDIANA</i>	SB 137	Miller	Requires a division of the State Department of Health to implement and emphasize a disease management program for Medicaid recipients with asthma.	1/02 - Enacted
<i>INDIANA</i>	SB 1337	Robertson	Requires the governing body of a school corporation to administer an asthma screening program for children enrolled in first grade and other children suspected of having asthma. These screenings must be forwarded annually to the State Department of Health and the school board in order to improve the health of schoolchildren.	1/02 - Pending
<i>KENTUCKY</i>	HB 335	Marzian	Relates to access to asthma medications in schools.	3/02 - Enacted
<i>LOUISIANA</i>	SB 117	Schedler	Directs the secretary of the Department of Health to expedite the identification and implementation of those Models of Excellence programs in the state Medicaid program which are projected to bring current year cost savings. Whereas, the Senate states that asthma disease management has potential for cost savings which can be realized quickly.	5/01 - Enacted
<i>LOUISIANA</i>	SB 502	Schedler	Relates to the state medical assistance drug program stating that the Department of Health and Hospitals shall not require prior approval of any drug listed in the act. This includes asthma medication.	6/01 - Enacted

State	Bill No.	Author	Key themes	Status
LOUISIANA	HB 1398	Clarkson	Defines "extraordinary medical expenses" as uninsured expenses over one hundred dollars for a single illness and includes asthma treatment as an example.	6/01 - Enacted
MAINE	HB 1265	Nass	Improves child support services by including asthma treatment as an extraordinary medical expense and requires that these expenses be divided between the parties in proportion to their adjusted gross incomes.	3/01 - Enacted
MAINE	HB 742	Dudley	Provides low-cost drugs and medications for asthma for the elderly.	2/01 - Not Enacted
MAINE	SB 552	Goldthwait	Allocates money for state program funds. Includes funds to support biomedical research with priority given to research conditions that are either caused by or related to tobacco use, such as asthma.	3/01 - Enacted
MAINE	HB 1495	Fuller	Defines stipulations and requirements for the Asthma Prevention and Control Program. Includes the following: The Bureau of Health shall establish an asthma prevention and control program to provide leadership for and coordination of asthma prevention and intervention activities.	1/02 - Enacted
MAINE	HB 1522	O'Brien	Transfers responsibility for determining eligibility for the elderly low-cost drug program from the Department of Administrative and Financial Services to the Department of Human Services. Describes the program by which the basic component of it must be to provide drugs and medications for asthma at cost-effective prices.	4/02 - Enacted
MARYLAND	SB 380	Baker	Relates to family concerning child support guidelines. States that any "extraordinary medical expenses" include asthma treatments and must be included in the alteration of the definition of "actual income" of parental income.	2/01 - Not Enacted
MARYLAND	HB 420	Hubbard	Creates an Asthma Control Program in the Department of Health and Mental Hygiene. This program includes but is not limited to a plan for the prevention and control of asthma to reduce the impact of asthma on the population of the state.	5/02 - Enacted
MASSACHUSETTS	HB 4411	Demakis	States that no school district shall prohibit students from possessing and using asthma medication.	7/01 - Enacted
MASSACHUSETTS	SB 1115	Resor	Establishes a commission to protect child health and development. Legislative findings include the realization that "the failure to adequately consider the unique susceptibility of children to environmental contamination has resulted in known impacts from substances such as lead, mercury and some pesticides. Toxicological and epidemiological evidence has provided strong evidence of the links between children's exposure to environmental pollution and asthma."	1/01 - Pending

State	Bill No.	Author	Key themes	Status
<i>MASSACHUSETTS</i>	HB 3072	Demakis	Requires the Department of Public Health and Department of Education to make known regulations mandating all school districts to permit the use of prescription inhalers on school property.	10/01 - Pending
<i>MASSACHUSETTS</i>	SB 511	Lynch	An act to establish a statewide asthma incidence registry.	7/01 - Pending
<i>MASSACHUSETTS</i>	HB 3930	Rogers	Establishes a legislative committee to study asthma in certain cities.	1/01 - Pending
<i>MICHIGAN</i>	HB 4254	Mortimer	Appropriations of the epidemiology administration to be allocated for an asthma intervention program; including surveillance, community-based programs and awareness and education.	7/01 - Enacted
<i>MICHIGAN</i>	SR 72	Hammerstrom	Recognizes May 31, 2001 as World No Tobacco Day. States that the health risks of tobacco use include exacerbation of asthma.	5/01 - Pending
<i>MICHIGAN</i>	HB 333	Vander	A resolution to urge the Department of Community Health to create a blue ribbon panel to determine best practice protocols for the treatment of chronic diseases, including asthma.	2/02 - Pending
<i>MICHIGAN</i>	SR 215	Smith	A resolution to memorialize the President and Congress of the United States and the Environmental Protection Agency to maintain the existing regulations regarding new source review standards. Whereas, scientific research has established a well-defined link between power plant air emissions and human health impacts, including the exacerbation of symptoms for those with asthma.	5/02 - Pending
<i>MICHIGAN</i>	SB 1101	Gougeon	Appropriations shall be allocated for an asthma intervention program, including surveillance, community-based programs and awareness and education. The department shall seek federal funds as they are made available for asthma programs.	3/02 - Enacted
<i>MINNESOTA</i>	SR 1431	Moe	Appropriating money from tobacco settlement towards medical education endowment funds and creating Healthy Kids Learn endowment fund which deals with asthma-related concerns.	4/01 - Enacted
<i>MINNESOTA</i>	HB 3095	Tingelstad	Relates to the establishment of an asthma surveillance system and appropriates money for it. Includes collection of asthma data, measuring prevalence of childhood asthma, identifying factors that exacerbate asthma and identifying effective methods of intervention to prevent or minimize the severity of asthma.	2/02 - Not Enacted
<i>MINNESOTA</i>	SB 2996	Krentz	Relates to the establishment of an asthma surveillance system and appropriates money for it. Includes collection of asthma data, measuring prevalence of childhood asthma, identifying factors that cause or exacerbate asthma and identifying effective methods of intervention to prevent or minimize the severity of asthma.	2/02 - Not Enacted

State	Bill No.	Author	Key themes	Status
MINNESOTA	SB 1706	Wiger	Allows public elementary and secondary school students to possess and use asthma medications.	5/01 - Enacted
MISSISSIPPI	HB 1200	Moody	Requires the Division of Medicaid to develop and implement disease management programs statewide for individuals with asthma.	1/02 - Not Enacted
MISSISSIPPI	HB 1888	Moody	Requires that the State Department of Health shall develop and implement disease management programs statewide for individuals with asthma.	4/02 - Enacted
MISSISSIPPI	SB 2189	Huggins	Requires that the State Department of Health shall develop and implement disease management programs statewide for individuals with asthma.	4/02 - Not Enacted
MISSISSIPPI	SB 3221	Huggins	Requires that the State Department of Health shall develop and implement disease management programs statewide for individuals with asthma.	4/02 - Enacted
MISSISSIPPI	HCR 27	Fleming	A resolution to recognize February as African-American Asthma Awareness month for the State of Mississippi.	4/01 - Not Enacted
MONTANA	HB 161	Lee	Revises the definition of "child with a disability" to include asthma as an "other health impairment" which means limited strength, vitality or alertness because of chronic or acute health problems.	1/01 - Not Enacted
NEBRASKA	SR 373	Priester	Requires the Department of Health and Human Services to develop legislation to reduce air emissions from power plants and to require power generators to pay the true cost of air emissions, whereas power plants account for over seventy-five percent of the state's total air emissions. Public health effects from these emissions include respiratory illnesses such as asthma.	4/02 - Not Enacted
NEW JERSEY	HR 205	Blee	Designates May 31, 2001 as World No Tobacco Day in New Jersey. States that short-term health risks of tobacco use include the exacerbation of asthma.	5/01 - Enacted
NEW JERSEY	AB 2000	Lance	Appropriations for Asthma Surveillance and Coalitions and Pediatric Asthma Reduction.	5/01 - Pending
NEW JERSEY	AB 2204	Blee	Concerns minority and multicultural health. Legislature findings includes wide persistent disparities in the incidence of asthma.	8/01 - Enacted

State	Bill No.	Author	Key themes	Status
NEW JERSEY	SB 444	Turner	A local or regional Board of Health may enact an ordinance, as it deems appropriate and necessary, to protect the public health, to prohibit any person from smoking inside any place of public accommodation that is subject to the provisions of chapter 3D or chapter 3E of Title 26 of the Revised Statutes.	5/02 - Enacted
NEW JERSEY	SB 1210	Bagger	Permits local governments to restrict smoking in public places. Establishes that well-documented, detrimental health effects of exposure to environmental tobacco smoke include lung cancer and coronary heart disease among adults, low birth weight and sudden infant death syndrome from exposure during and after pregnancy, asthma, bronchitis, inner ear infection and pneumonia in children.	2/02 - Pending
NEW JERSEY	SB 2214	Bennett	Establishes a School Asthma Protocol Task Force, which shall be responsible for developing guidelines for the most appropriate and effective means of implementing the Pediatric Asthma Reduction Effort (PARE) school asthma protocol on a statewide basis.	5/02 - Not Enacted
NEW JERSEY	SB 118	Bennett	Establishes the School Asthma Protocol Task Force appropriations.	1/02 - Pending
NEW JERSEY	SB 137	Buono	Requires local educational agencies and schools to implement integrated pest management systems to minimize the use of pesticides.	1/02 - Pending
NEW JERSEY	HR 17	Conners	Designates September as Minority Health Month and states that research indicates a widening gap between African Americans and others in the incidences of asthma.	1/02 - Pending
NEW JERSEY	SB 1372	Bennett	Allows the self-administration of medication for potentially life-threatening illnesses by pupils.	4/01 - Enacted
NEW JERSEY	AB 1866	Jones	Establishes a Task Force on Asthma in schools to develop guidelines on the most effective and appropriate means of providing for the needs of students with asthma in schools.	1/01 - Pending
NEW JERSEY	AB 3318	DiGaetano	Establishes School Asthma Protocol Task Force to implement the Pediatric Asthma Reduction Effort (PARE) school asthma protocol on statewide basis. Identical bill S2214 (Bennett).	3/01 - Pending
NEW YORK	SB 6551	DeFrancisco	Amends the public health law and the state finance law, in relation to creating the New York state governor's council on physical fitness, sports and health and making an appropriation. Legislature finds that medical research has consistently associated obesity with numerous health problems and increased risk for hypertension, heart disease, cancer, and asthma.	3/02 - Pending
NEW YORK	HB 10610	Koon	Amends the public health law, in relation to enacting the toxic mold protection act. The legislature finds that indoor toxins, specifically toxic mold, have been an under-recognized health problem. Health care professionals now know that molds can cause allergies and trigger asthma attacks.	3/02 - Pending



State	Bill No.	Author	Key themes	Status
NEW YORK	HB 1036	Brodsky	Amends the Public Health Law and the Family Court Act, in relation to children with special health care needs. Includes children with disabilities and defines chronic asthma as a disability.	3/02 - Pending
NEW YORK	HB 8672	DiNapoli	Amends the state finance law in relation to establishing the children's health incentive fund. States that dangerous chemicals are being used in and around the state's schools and exposure to environmental chemicals at school during critical developmental periods has been linked to childhood asthma.	1/02 - Pending
NEW YORK	HB 9907	Ortiz	Amends the Education Law, in relation to the use of inhalers and nebulizers. Allows students afflicted with asthma to self-administer their medication. Provides for specifics including parental and doctor consent.	2/02 - Pending
NEW YORK	HB 10243	Koon	Amends the Public Health Law, the Environmental Conservation Law and the Labor Law, in relation to enacting the environmental health tracking system act. Requires the appropriate agencies to examine whether and the extent to which past environmental exposures might increase the risk of chronic diseases including asthma.	3/02 - Pending
NEW YORK	HB 9642	Labriola	Creates the MTBE Public Health and Environmental Protection Task Force which requires a comparison of the incidence of asthma before and after the level of MTBE was increased in New York gasoline.	1/02 - Pending
NEW YORK	AB 2265	Klein	Requires teachers in public and non-public school systems to be trained in identifying and responding to asthma emergencies in accordance with standards to be prescribed by the Commissioner of Education and Health.	1/02 - Pending
NEW YORK	AB 4815	Diaz	Requires schools to have adequate asthma emergency equipment and pharmaceuticals on the premises, e.g. oxygen pumps and back up nebulizers.	1/02 - Pending
NEW YORK	AB 127	Jacobs	Requires that the Board of Education or trustees of each school district and Board of Cooperative Educational Services develop for each school within such district an asthma management program.	1/02 - Pending
NEW YORK	AB 7562	Klein	To establish a comprehensive statewide asthma disease management and control program to coordinate the efforts of individuals, families, health care providers, schools and community-based organizations.	3/02 - Pending
NEW YORK	AB 7767	Brodsky	Defines asthma as a reportable disease that physicians, hospitals and other facilities are required to report to the Department of Public Health.	1/02 - Pending
NORTH CAROLINA	HB 692	Wright	Appropriates funds for establishing and maintaining statewide asthma management and control activities.	6/01 - Pending
OKLAHOMA	HB 2208	Staggs	Requires schools to provide chronic disease awareness training for school employees. Includes asthma as a chronic disease.	2/02 - Not Enacted

State	Bill No.	Author	Key themes	Status
<i>OKLAHOMA</i>	SB 1233	Morgan	Health Insurance High Risk Pool Act. Implements disease management programs, at the Board's discretion to improve health status for congestive heart failure, diabetes, asthma, coronary artery disease, chronic renal failure and other diseases as appropriate.	6/02 - Enacted
<i>OREGON</i>	SB 692	Gordly	Requires Asthma Program of Health Division to promote community involvement and develop community resources to increase availability of asthma prevention and care services in communities of color.	2/01 - Pending
<i>PENNSYLVANIA</i>	HR 171	Greenleaf, etc.	Urging the Department of Health to develop a task force to investigate the health effects of toxic mold. Health professionals have investigated possible relationships between mold contamination and outbreaks of allergies and asthma attacks.	3/02 - Pending
<i>PENNSYLVANIA</i>	HR 3342	Wansacz	Urges the Department of Health to establish a task force to investigate toxic mold in homes and schools.	2/02 - Pending
<i>PENNSYLVANIA</i>	HB 2638	Sturla	Provides for the comprehensive tracking of information concerning asthma.	5/02 - Pending
<i>PENNSYLVANIA</i>	HB 19	Cohen	Directs school district to establish policies regarding student possession and self-administration of certain asthma medications. It directs the school district to develop a written policy to allow for the possession and self-administration of an asthma inhaler by a student.	4/02 - Pending
<i>RHODE ISLAND</i>	HB 7495	Levesque	Relates to public assistance authorizing the providence of medical coverage to a person who is uninsured and not eligible for federal medial assistance coverage. Includes asthma treatment.	2/02 - Not Enacted
<i>RHODE ISLAND</i>	SB 2985	Izzo	Proclaims 05/07 as World Asthma Day.	5/02 - Enacted
<i>SOUTH CAROLINA</i>	HB 4055	Smith	Proclaims May 3, 2001, Asthma Day in the state.	5/01 - Enacted
<i>SOUTH DAKOTA</i>	SB 147	McIntyre	Provides for a bill of rights for children in the care of the state which includes next day visitations with their parents after any significant asthma attack.	1/02 - Not Enacted
<i>TENNESSEE</i>	SB 2481	Harper	Creates a program that shall provide drugs and medications for asthma sufferers.	1/02 - Not Enacted
<i>TEXAS</i>	HB 342	McClendon	Establishes a pilot study in six areas of the state to compare preventative disease management methods for treating children's asthma with traditional methods.	6/01 - Enacted

State	Bill No.	Author	Key themes	Status
TEXAS	SB 616	Van de Putte	Establishes a medical assistant pilot program that provides care, case management and asthma education to Medicaid recipients under 19 years who have been hospitalized or received emergency care for asthma. Also provides health care provider education to ensure the appropriate use of specialized asthma treatments.	6/01 - Enacted
TEXAS	HB 1688	McClendon	Allows the self-administration of prescription asthma medication by public school students on school property or at a school-related event/activity.	6/01 - Enacted
TEXAS	HB 3154	Capelo	Requires the Commissioner of Public Health to establish a nine-member Asthma and Allergy Research Advisory Committee that will tackle asthma/allergy education, indoor air quality and public school capacity to handle asthma and other related issues.	5/01 - Pending
TEXAS	HCR 287	Lewis	Requests the Lieutenant Governor and Speaker of the House of Representatives to create a joint interim committee on asthma.	5/01 - Pending
VIRGINIA	HR 145	Baskerville	Encouraging employers to recognize the benefits of breast-feeding and set aside appropriate space for such activities; whereas, research studies show that children who are not breast-fed have higher rates of mortality, meningitis, some types of cancers, asthma and other respiratory illnesses.	2/02 - Enacted
VIRGINIA	HR 43	O'Bannon	Directs the Joint Commission on Health Care to study the delivery of emergency medical services and emergency mental health services in the public schools. Stipulates that school personnel are required to provide assistance to students with asthma.	2/02 - Enacted
VIRGINIA	SB 20	Miller	Relates to medical and related nonprofit civic and community service, which may be exempt from taxes, tangibles which are for the purpose of eliminating all lung disease including asthma.	2/02 - Not Enacted
VIRGINIA	HB 1012	Morgan	Directs school boards to develop and implement policies to permit students who have a diagnosis of asthma to possess and self-administer inhaled asthma medications during the school day.	4/00 - Enacted
VIRGINIA	HB 1386	Baskerville	Allows school principals, after certain conditions have been satisfied, to permit students who have a diagnosis of asthma and approval from a parent and appropriate medical professionals to possess and self-administer inhaled asthma medications.	1/01 - Pending
VIRGINIA	SB 490	Lambert	Requires the Commissioner of the Department of Health to develop a statewide comprehensive asthma management strategy. In addition, the Commissioner shall implement programs to meet the objectives of the statewide asthma management plan (also called HB 1012).	03/00 - Enacted
WASHINGTON	SB 5933	Kohl-Welles	States that the legislature finds that that the connection between indoor air pollutants and some common childhood diseases and injuries such as asthma, allergies, lead poisoning and other disease and conditions have been well-established. The Health Department shall develop informational materials that address methods of reducing exposure to indoor air pollutants--such as smoke, dust mites, mold, pesticides and carcinogens--in the home environment.	1/02 - Pending
WASHINGTON	SR 8426	Kohl-Welles	Stating that indoor mold has been associated with adverse health effects, particularly among people with asthma.	1/02 - Enacted

**POLICYLINK**  
**101 BROADWAY**  
**OAKLAND, CA 94607**  
**510.663.2333**

**NEW YORK OFFICE**  
**1350 BROADWAY / SUITE 1901**  
**NEW YORK, NY 10018**  
**212.629.9570**

**WWW.POLICYLINK.ORG**

**THE CALIFORNIA ENDOWMENT**  
**21650 OXNARD STREET / SUITE 1200**  
**WOODLAND HILLS, CA 91367**  
**800.449.4149**

**WWW.CALENDOW.ORG**

**ESTABLISHED BY BLUE CROSS OF CALIFORNIA**