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Field Lessons

Strategies to Support California's
Children and Families First Act



Inside Childhood Asthma

- Power of Partnerships
Page 2
- CCFC Asthma Funding
Page 5
- Recommendations
Page 8

Nearly five million U.S. children suffer from asthma.¹

Joining Forces to Fight Childhood Asthma: A Prop 10 Opportunity

Asthma is the most common serious chronic illness in children.²

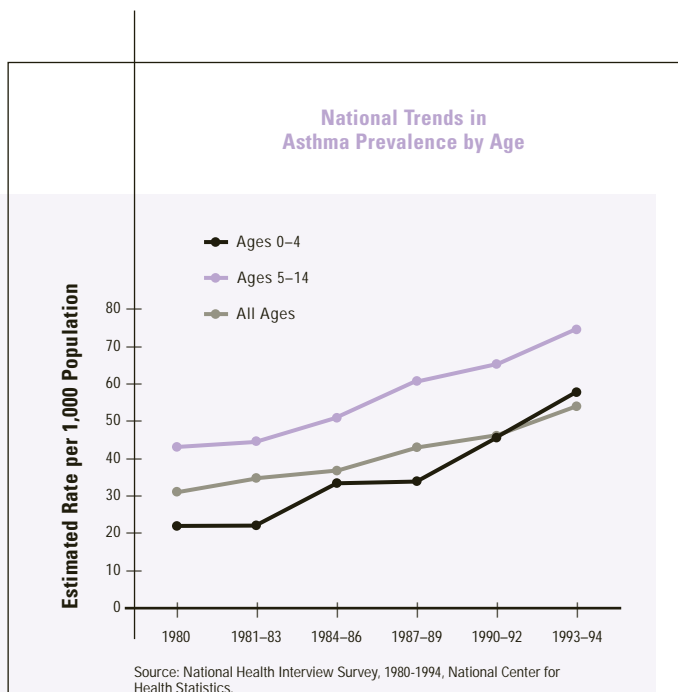
The nation is in the midst of an asthma epidemic, with reported prevalence rates increasing for all age, sex and racial groups. The most dramatic increases, however, have been among the youngest children, for whom the rate rose 160 percent between 1980 and 1994. Children under five now have the second highest prevalence rate in the country.³ In California, estimates indicate that more than 500,000 infants and children currently suffer from asthma.⁴ In 1992, asthma was the most common cause of hospitalization among one- to five-year-old California children.⁵

Although asthma cannot be prevented or cured, it can usually be controlled. Through appropriate use of and access to medications and by limiting exposure to environmental triggers of asthma—

such as dust mites, animal dander, mold, infectious agents, chemical irritants, indoor tobacco smoke and outdoor air pollution—the frequency and severity of asthma “attacks” can be reduced, allowing children with asthma to lead healthier lives. However, effective management is complex, especially for young children who are less able to participate in their own care, and requires effort from multiple community sectors. To address the growing need for community-based asthma management strategies, the state California Children and Families Commission has launched a major two-year initiative. The Childhood Asthma Initiative will focus \$6.1 million on reducing barriers to health services, improving and increasing healthcare provider education, and studying the linkage between asthma and prenatal/early life exposures.

While there are national efforts to conduct further research on the causes and prevention of asthma and to develop improved asthma surveillance systems, community coalitions are a promising strategy for addressing the multi-faceted nature of this epidemic. The U.S. Department of Health and Human Services “Action Against Asthma” strategic plan calls for close collaboration between federal initiatives and the activities of local governments, professional societies, community-based organizations, healthcare providers, universities and others as a way to reduce the burden of asthma. The California Endowment, the Robert Wood Johnson Foundation, and the National Asthma Education and Prevention Program have stimulated coalitions through their funding.

By participating in local asthma coalitions and other partnerships, local Children and Families Commissions can help reduce the burden of asthma in their own communities.



Pediatric ER Visits on the Rise

Asthma, a chronic inflammatory disease of the airways and lungs, is characterized by recurrent episodes of wheezing, coughing, breathlessness and chest tightness. It has a profound impact on many, causing interruption of sleep, limitation of physical activity, disruption of family and caregiver routines, and reduced quality of life not only for children with asthma, but also for their families and caregivers.^{6,7} Costly emergency medical treatment and hospitalization are needed in some cases, accounting for the largest portion of the nearly \$15 billion asthma price tag.⁸ And while the overall rate of asthma hospitalizations nationwide has decreased in recent years, the rate for children has continued to rise, with asthma now accounting for one-third of all pediatric emergency department visits.⁹

The Power of Partnerships

Community coalitions are multi-organizational partnerships developed to bring interested parties from the public, private and nonprofit sectors together in support of common goals. Asthma coalitions generally focus efforts on reducing asthma morbidity and mortality and improving the quality of life for

those affected by asthma. Specific efforts often include education and training of key figures in pediatric asthma management: children and their families, healthcare providers, teachers and childcare workers. The collaborative orientation of community coalitions is well-suited for this broad-based approach, and has recently been implemented in many regions throughout the country. In fact, a survey conducted in the spring of 2000 identified sixty-three such coalitions operating in the U.S., the majority established within the last three years.¹⁰ While a few were statewide coalitions, most were local or regional. Accomplishments were varied, ranging from initial stakeholder identification or convening of first meeting to a comprehensive regional approach, which may include quality improvement, completion of a formal needs assessment, development of educational materials, implementation of school staff training programs, and initiation of screening programs. *A Development Manual for Asthma Coalitions*—a recent publication of the CHEST Foundation and the American College of Chest Physicians—incorporates these survey findings and “lessons learned” into a guidebook for new and developing collaborations.¹¹

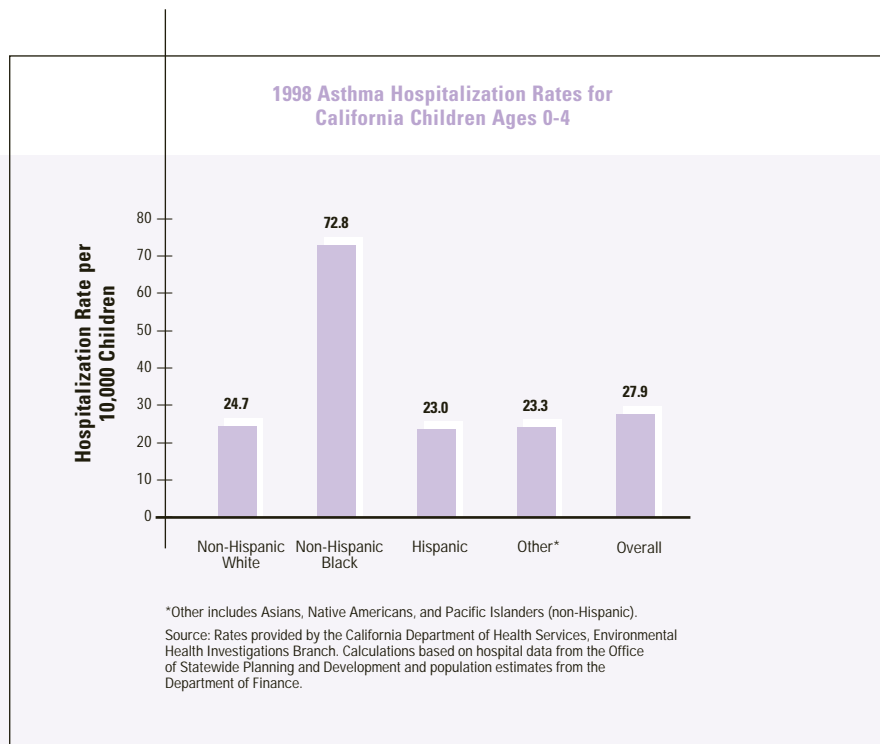
In California, African Americans are nearly **four times as likely** to be hospitalized for asthma as Whites and Latinos.¹²



One advantage of local coalitions is that they promote the mobilization of appropriate resources in response to unique community needs. Nationwide, minority—particularly African American—and low-income populations are more likely to suffer the burden of asthma. Although minorities tend to have asthma prevalence rates similar to those for Whites, asthma-related rates of emergency room visits, hospitalization and death are substantially higher.¹³ This may be because these populations often face additional barriers, including limited access to medical insurance and quality healthcare, a lack of culturally and linguistically appropriate asthma education materials, and residence in areas with poor indoor and outdoor air quality. Some of these disparities are especially pronounced in California. For example, in Fresno, Kings and San Francisco counties, the disparity in asthma hospitalization rates between non-Hispanic Whites and African Americans is more than fifty percent.¹⁴ Fortunately, coalitions can often reduce some of these barriers.

The Central California Asthma Project, an outgrowth of one of the oldest asthma coalitions in the country, successfully completed a baseline asthma needs assessment, which is an example of local tailoring. This effort allowed better identification of the local communities most in need of services: low-income and rural groups with language and cultural barriers, such as Hispanics and Southeast Asians. The project subsequently developed appropriate strategies, including both patient education, and continuing education for primary care and emergency physicians, nurses, school nurses, respiratory therapists, pharmacists, and emergency medical technicians, particularly those serving low-income African American, Hispanic, and Southeast Asian patients.

Similarly, the Sonoma County Asthma Coalition has designed several programs to help “fill in the gaps” for the many low-income farming families residing there. Targeted efforts include screening programs to combat asthma under diagnosis, as well as programs to provide asthma treatment and monitoring equipment to people who cannot afford these devices.



RAMPing Up to Fight Disparities

Although national asthma statistics are collected, detailed regional and local surveillance data are rarely available. To overcome this obstacle the Regional Asthma Management and Prevention (RAMP) Initiative, a four-county collaboration working under the auspices of the Public Health Institute, took matters into its own hands. Through the coordinated efforts of public health officials, managed care plans, community-based organizations and others in the San Francisco Bay Area, RAMP analyzed actual hospitalization data for its counties in order to better understand the local asthma problem. These efforts were instrumental in identifying sub-populations disproportionately affected by asthma. For instance, even in the two counties that had met the Healthy People 2000 asthma hospitalization objectives, the RAMP analysis found African-American children and persons living in low-income zip codes had disproportionately higher rates of asthma hospitalization, a fact obscured by the aggregated, county-level statistics otherwise available. This project opened the door for development of interventions targeted specifically to these high-risk communities.

Effective partnerships are the key to success in such efforts, and RAMP hopes to serve as a model for other regional collaboration efforts focused on chronic diseases. A report evaluating potential sources of county and sub-county level data for use in disease surveillance is available through the RAMP Web site, <http://www.rampasthma.org>.

Barriers to Effective Treatment and Management of Pediatric Asthma

- Inadequate access to primary healthcare services
- Under diagnosis and misdiagnosis
- Complexity of asthma management plans and the need for cooperation among multiple caregivers
- Institutional policies (e.g., bans on asthma inhalers in prescription-free schools)
- Poor understanding of asthma by teachers and childcare workers
- Fear of medications
- Difficulty controlling exposure to factors that cause or worsen asthma symptoms, including secondhand tobacco smoke and outdoor air pollution
- Insufficient asthma counseling education and training for children, families and caregivers of diverse backgrounds and literacy levels
- Embarrassment over asthma symptoms and use of treatment

The Need for Education and Training

While successful management of pediatric asthma requires coordinated efforts between children with asthma, their families, and their physicians, teachers and childcare providers, these parties are often hampered by inadequate knowledge of how to identify, prevent and treat asthma attacks. For this reason, most pediatric asthma initiatives provide specialized education and training programs targeted specifically to these groups.

Patient/Family Education The ability of a child and his/her family to appropriately “self-manage” asthma is a key factor in asthma outcomes, yet self-management can be complicated. It involves reduction of exposure to asthma triggers—including secondhand tobacco smoke in the home—proper use of medications, and the procurement of and adherence to an asthma “action plan” developed in concert with the child’s physician. Medication misuse is common, with self-discontinuation, faulty technique, and overuse seen frequently. Despite these difficulties, patient/family education has been shown to be cost-effective in improving self-management skills¹⁵ and decreasing use of emergency rooms.

Efforts to increase patient/family knowledge of asthma care have taken varied forms. The Wisconsin Community-based Asthma Intervention Project in Madison, for instance, works to reduce children’s exposure to indoor allergens. Programs have also addressed technical issues, such as the proper use of asthma inhalers.

For a broader approach to education, several general asthma training programs have been developed specifically for young children. The American Lung Association (ALA)—a partner in many California asthma coalitions—provides the *A is for Asthma* curriculum, targeted to preschoolers and their caregivers. Similarly, the *Wee Wheezers* program, developed through the support of the National Heart, Lung, and Blood Institute, has shown to be effective in improving parental asthma management of children aged zero to seven.¹⁶ The Central Coast Asthma Coalition has integrated ALA curricula into its comprehensive early childhood asthma education program. In addition to its parent support groups and education programs, this three-county effort prepares parent mentors to teach others about asthma management. Parents of young children are also trained to facilitate the ALA’s school-age program, *Open Airways for Schools*, so that they will later carry appropriate asthma messages to elementary school teachers and primary care providers.

Professional Education Diagnosing and treating asthma in infants and young children can be especially difficult. Despite the fact that an estimated fifty to eighty percent of children who are later found to have asthma actually exhibit symptoms before age five, many young children are undiagnosed or misdiagnosed, and therefore do not receive adequate therapy.¹⁷ In addition, the quality of care received by those who are diagnosed with asthma varies, and studies suggest many physicians do not follow the published National Institutes of Health (NIH) guidelines. A study in the Washington, DC area, for example, found that one child in five with asthma received the wrong treatment or no treatment.¹⁸

Based on feedback that traditional medical training on asthma was too specialized for most general practice physicians, a coalition in Tucson, Arizona has implemented a physician education program that resembles an education program designed for patients, ensuring that patient and provider receive similar messages.¹⁹ The coalition also utilizes an interactive, small group format for trainings. Although labor intensive, the approach has reported success in increasing retention of asthma information.

Closer to home, the Central California Asthma Project has developed a comprehensive series of professional education sessions. In addition to continuing education conferences for physicians, respiratory therapists, nurses and pharmacists and in-service educational offerings for allied health professionals, they also sponsor workshops for school nurses, teachers, coaches and support staff. Sessions cover issues such as diagnosis and treatment, the NIH guidelines, how to teach asthma self-management, working with diverse populations, development of asthma action plans, pharmacology, and hands-on training in the proper use of inhalers and peak flow meters.

Teacher/Childcare Provider Education The quickly rising prevalence of asthma in this youngest group of children necessitates that all childcare providers and preschool teachers receive adequate asthma education. Many children under five spend significant portions of their days in institutional settings such as preschools or childcare centers. However, staff at these sites are often unprepared to manage pediatric asthma. While the 1998 passage of Senate Bill 1663 has allowed interested childcare centers—with parental approval and physician instruction—to administer inhaled medication to children, facilities are not required to do so. In addition, the required training is considered by some to be too narrow in scope, focusing on nebulizers/inhalers and excluding general asthma and asthma management information.

In Chicago, for instance, severe asthma was found to be the most common health problem affecting HeadStart preschoolers. Recognizing that HeadStart teachers were not equipped to manage asthma in their classrooms, program personnel developed special training to enable staff to better identify, prevent and control asthma in their young students. In a similar effort, the Maryland chapter of the Asthma and Allergy Foundation of America has developed a curriculum for training childcare workers about asthma. After successful pilot testing within Maryland, the *Asthma and Allergy Essentials for Childcare Providers* course has since been launched in other locations nationwide.

In California, one coalition is taking another approach to provider training. In partnership with Sonoma State University, the Sonoma County Asthma Coalition has successfully integrated an asthma education module into the university's early childhood education degree program requirements, so that graduating teachers will enter the workforce well equipped to manage asthma in the classroom.

State Children and Families Commission and Asthma Funding

In January 2000 the California Children and Families Commission announced a \$6.1 million award to the Department of Health Services (DHS) to administer a two-year program focusing on asthma in children under five years of age. Referred to as the Childhood Asthma Initiative (CAI), this joint project of the Chronic Disease Control Branch, the Children's Medical Services Branch, and the Environmental Health Investigations Branch will include four primary components.

- Multifaceted community interventions—Approximately \$2.8 million in funding is available for approximately six community interventions, especially those targeted to high need populations, such as those facing language/cultural barriers, poor access to healthcare services, or high asthma morbidity. Funded interventions may also target those who provide services to these young children, such as healthcare providers, childcare workers, and community agencies.
- Asthma treatment services for uninsured children with persistent asthma—An anticipated \$750,000 is available for the “safety net” providers to provide drug subsidies and deliver outpatient services to children who either have no healthcare coverage, or for whom necessary asthma treatment services are not covered. A CAI-funded asthma treatment services component must also include community intervention components.
- Healthcare provider education—The purpose of this component is to promote educational programs that improve the quality of pediatric asthma healthcare services and management.
- Epidemiological studies—Surveys of childcare facility asthma practices and policies will be conducted and used to direct DHS in the development of educational materials for childcare providers, and data on the relationship between asthma and prenatal/early life exposures will be reviewed.

To promote collaborative approaches within communities, CAI-funded programs are required to involve five groups: community organizations and individuals; healthcare delivery organizations; preschools and childcare centers; local health departments; and the California County Children and Families Commissions.

Partnerships have also been effective in addressing institutional policies and facilities that are not “asthma friendly.” In one of the most well known coalition successes, the Chicago Asthma Consortium affected a change in the prescription-free/drug-free public school policy, allowing students who have asthma to carry their inhalers on campus. Using the *Tools for Schools* kits provided by the ALA, in partnership with the Environmental Protection Agency (EPA), officials can identify indoor air quality problems in schools.

Indoor and Outdoor Air Quality

Children may be particularly vulnerable to the environmental factors that appear to play a major role in the development and severity of asthma.²⁰ Environmental tobacco smoke, or secondhand smoke, has been shown to be a major trigger of asthma symptoms. Other indoor exposures such as allergens and viruses also play a strong role, as do outdoor pollutants like ozone. The ability to effectively manage asthma depends greatly on reducing exposure to the many environmental triggers to which children may be exposed every day.

Significant air pollution in many counties poses a serious threat to numerous children. In fact, an ALA study found that sixty-one percent of pediatric asthma cases occur in those living in areas that do not meet these air quality standards.²¹ In the ALA's "State of the Air 2000" report, nearly two-thirds of California's counties received failing grades in terms of the number of days with unhealthy levels of ozone, a pollutant often associated with asthma.²² Community groups and coalitions can serve as strong advocates for improved outdoor air quality.

Community coalitions can also have a great impact on indoor air quality. The "K.I.C.K. Asthma" community education project in the Los Angeles area, for example, focused specifically on environmental factors affecting asthma. Not only did they provide family education seminars, but they conducted free in-home air quality surveys as well. Other community efforts, such as the ZAP Asthma project in Atlanta, Georgia, have utilized community health workers to aid families in sustaining environmental interventions.

In addition, coalitions can also help people obtain the supplies necessary to reduce exposures to common asthma triggers. Community Action Against Asthma in Detroit, Michigan, for instance, is providing families of asthmatic children with state-of-the-art vacuum cleaners, plastic mattress covers and other household items. Funded by the EPA and the National Institute of Environmental Health Sciences, this study is designed to reduce exposure to common household allergens.

An Improved Medical Care Delivery System

Given the chronic nature of asthma and the difficulties in effectively managing it, continuity and coordination of efforts between various health personnel are especially important. However, for many children the current healthcare system makes it difficult to receive the continuous and comprehensive asthma care and education they need.

System changes are needed to support the delivery of sustained, high quality asthma care by healthcare providers. The Continuous Quality Improvement (CQI) model, recommended by the National Asthma Education and Prevention Program's Task Force on the Cost Effectiveness, Quality of Care, and Financing of Asthma Care, identifies current factors that influence the delivery of asthma care.²³ In the CQI model, a multidisciplinary team defines goals, characterizes processes, and defines specific measures to improve the delivery and processes of patient care. After the implementation, outcomes are evaluated and examined to determine if further changes are needed.

In California, over half of the costs associated with pediatric asthma hospitalizations are covered by Medi-Cal.²⁴ With the recent shift of many Medi-Cal beneficiaries into commercial managed care plans, new opportunities exist for improved, comprehensive asthma care among this population. Existing communication networks—between pediatricians, nurses, respiratory therapists, pharmacists and other providers, as well as hospital and health plan administrators—can be strengthened to better promote comprehensive clinical care. These networks can also adopt standards of practice for asthma management that more effectively meet the needs of young children. Local managed care plans can also participate as partners in community-based efforts. In Solano County, Kaiser Permanente works closely with the Vallejo School District, providing schools with written asthma action plans for children, accepting referrals for case management, and offering asthma training for school personnel.

The California Children's Services (CCS) program assures that low-income, program-eligible children receive needed healthcare services, including children who have asthma with chronic lung disease. CCS case manages services for the eligible condition for the Medi-Cal and Healthy Families programs. To assure access to needed healthcare services, CCS expanded its financial eligibility criteria, so that it would still include all children in Healthy Families, when Healthy Families recently liberalized its income limits to 250 percent of Federal Poverty Levels.

About the Author

Elizabeth Carson is an independent consultant who has written about child and family issues. She holds a Masters of Public Health degree from Johns Hopkins University, and has expertise in health services research and evaluation. She formerly served as program coordinator for the CCHI Prop 10 Technical Assistance Center.

Resources

- Asthma Management Model System, National Heart, Lung, and Blood Institute, 301.592.8573 or <http://www.nhlbisupport.com/asthma>
- Childhood Asthma Initiative, California Department of Health Services, 916.445.8566 or <http://www.dhs.ca.gov/cdic/cdcb/Medicine/Asthma/html/CAI.htm>
- American Lung Association. For assistance in locating your local branch call 800.LUNG.USA or visit <http://www.californialung.org>
- National Center for Environmental Health, 770.488.7020 or <http://www.cdc.gov/nceh>
- American Academy of Allergy, Asthma and Immunology, 877.922.4666 or <http://www.aaaai.org>
- Asthma and Allergy Foundation of America, 800.7.ASTHMA or <http://www.aafa.org>
- Environmental Protection Agency, Indoor Environments Division, 202.564.9370 or <http://www.epa.gov/iaq/asthma/index.html>
- The CHEST Foundation and the American College of Chest Physicians, 847.498.1400 or <http://www.chestnet.org>
- The *Wee Wheezers* program. Palo Alto Medical Foundation Research Institute, Jeanette McNicol, 650.853.6072

Content Advisors

Harriet Charney, MPH, Director of Programs, American Lung Association of California

Joseph M. Hafey, MPA, President and CEO, Public Health Institute

Jane I. Henderson, PhD, Executive Director, California Children and Families Commission

Paul Knepprath, Vice President, Governmental Relations, American Lung Association of California

Bob Prentice, PhD, Partnership for the Public's Health

Megan Webb, Director, Regional Asthma Management and Prevention Initiative, a collaboration of the Public Health Institute

Sandra R. Wilson, PhD, Senior Staff Scientist and Chair, Department of Health Services Research, Palo Alto Medical Foundation Research Institute

Eileen G. Yamada, MD, MPH, Public Health Medical Officer, California Department of Health Services, Medicine and Public Health Section

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Endnotes

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Joining Forces to Fight Childhood Asthma: Recommendations

Community asthma coalitions represent one of the most promising approaches to achieving the sort of broad-based cooperation necessary to successfully control asthma. County Children and Families Commissions interested in addressing childhood asthma should consider partnering with existing asthma coalitions, which will be familiar with the community's needs and opportunities for action. Commissions can strengthen existing asthma coalitions by encouraging further participation of community groups serving young children and families. In areas in which formal coalitions do not exist, Commissions can approach other organizations involved in asthma services to develop new partnerships. Working in conjunction with others, Commissions can contribute to a range of asthma programs and strategies targeted to children under five, such as the following:

1. Conduct a needs assessment to determine the availability of pediatric asthma resources locally.
2. Identify and analyze locally available data to determine sub-populations most impacted by asthma.
3. Promote healthcare provider education on the best practices in pediatric asthma diagnosis and treatment using multi-modal and interactive learning sessions.
4. Advocate for the use of clinical quality improvement to strengthen systems of healthcare delivery.
5. Promote and/or provide patient/family/caregiver education on asthma self-management and reduction of exposures, including secondhand smoke.
6. Conduct indoor air quality screening for personal homes, childcare and daycare homes and preschools, and provide assistance and supplies (e.g., mattress covers) to fix problems that are detected.
7. Train childcare center/preschool staff to recognize and assist children with asthma, and help them develop asthma-friendly institutional policies (e.g., require asthma action plans from children's physicians).
8. Provide free or low-cost asthma treatment and monitoring equipment (e.g., inhalers, nebulizers and peak flow meters) to low-income children with asthma.
9. Advocate for improved outdoor air quality.

California Asthma Coalitions

Additional coalitions are being formed in several counties. If your county is not represented below, contact your local branch of the American Lung Association to inquire about the status of regional asthma collaboration. Please also note that in some counties multiple collaborative efforts are underway, so be sure to inquire about additional ongoing efforts.

Action on Asthma, 805.963.1426

http://www.lungusa.org/santabarbara_ventura/index.html

Santa Barbara County

American Lung Association of Sacramento-Emigrant Trails Asthma Collaborative, 916.444.5864 <http://www.saclung.org>

Alpine, Amador, Colusa, El Dorado, Nevada, Placer, Sacramento, Sierra and Yolo counties

Central California Asthma Project, 559.446.2323

<http://www.sjvhc.org/asthma.htm>

Fresno-Madera, Kings, Merced-Mariposa and Tulare counties

Central Coast Asthma Coalition, 831.373.7306

Monterey, San Luis Obispo and Santa Cruz counties

Los Angeles Asthma Coalition, 323.935.5864

<http://www.lalung.org>

Los Angeles County

Regional Asthma Management and Prevention Initiative, 510.883.9980

<http://www.rampasthma.org>

Alameda, Contra Costa, San Francisco and Solano counties

San Diego Allies Against Asthma Coalition, 619.297.3901

San Diego County

San Francisco Asthma Collaborative, 415.338.6573

San Francisco County

Sonoma County Asthma Coalition, 707.527.5864

<http://www.lungusa.org/redwoodempire/index.html>

Sonoma County



1321 Garden Highway, Suite 210

Sacramento, CA 95833-9754

Phone: 916.646.2149 916.329.9009

Fax: 916.646.2151 E-mail: www.cchi.org

The California Center for Health Improvement (CCHI) is a non-profit, non-partisan health policy and education center. CCHI's Prop 10 Technical Assistance Center supports local planning and implementation of the California Children and Families First Act.

Karen A. Bodenhorn, RN, MPH

Vonnie Madigan, MFA

Cynthia Keltner

Cristina Quontamatteo

President & CEO

Prop 10 TA Center Director

Team Leader

Project Associate

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