



CONTROLLING ASTHMA IN LOS ANGELES COUNTY: A CALL TO ACTION

Developed by the Asthma Coalition of Los Angeles County and adopted on April 10, 2006

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July 2006*

The following organizations have endorsed the Asthma Call to Action:

Action Now

American Academy of Pediatrics, California Chapter 2

American Lung Association of California

Asthma and Allergy Foundation of America, Southern California Chapter

BREATHE California of Los Angeles County

California Safe Schools

California School Nurses Organization

California School Nurses Organization, Southern Section

California Society for Respiratory Care

Childrens Hospital Los Angeles - Division of Clinical Immunology and Allergy

Coalition for Clean Air

Coalition for Community Health

Community Action to Fight Asthma

Community Clinic Association of Los Angeles County

Coalition for Environmental Health and Justice

Communities for a Better Environment

Crystal Stairs, Inc.

Esperanza Community Housing Corporation

Girls Club of Los Angeles

Global Green, USA

Healthy African American Families

Healthy Homes Collaborative

Housing Long Beach

L.A. Care Health Plan

Long Beach Alliance for Children with Asthma

Los Angeles City Attorney's Office

Los Angeles County Department of Health Services - Public Health

Los Angeles Unified School District

Maternal and Child Health Access

National Association of Pediatric Nurse Practitioners, Los Angeles Chapter

National Latino Research Center at Cal State San Marco

Natural Resources Defense Council

Northeast Valley Health Corporation

Physicians for Social Responsibility - Los Angeles

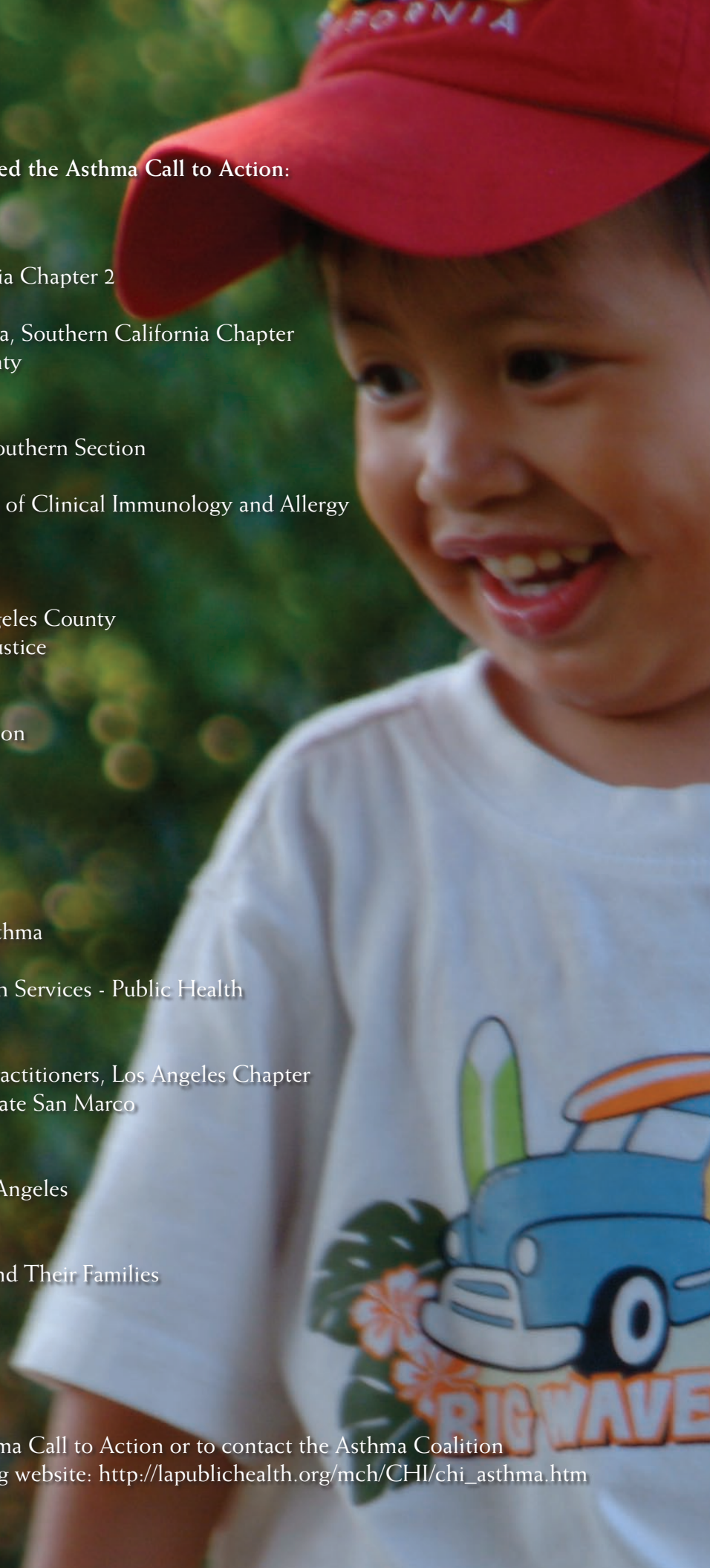
S.A.F.E. Smokefree Air for Everyone

St. John's Well Child and Family Centers

The Children's Clinic, Serving Children and Their Families

Venice Family Clinic

For additional information about the Asthma Call to Action or to contact the Asthma Coalition of Los Angeles County, go to the following website: http://lapublichealth.org/mch/CHI/chi_asthma.htm



Executive Summary

Asthma is a very common condition in Los Angeles County – research among school children in urban Los Angeles indicates that 14% are likely to have asthma. Significantly reducing quality of life, asthma increases emergency room and hospitalization rates, causes missed school and work days, reduces physical activity, and has serious impacts on our health care and economic systems. These negative impacts are largely preventable because asthma is a controllable disease. However, in many cases asthma is not well controlled, indicating that previous efforts to address this problem in Los Angeles County have been insufficient.

Over the course of eighteen months, from fall of 2004 to spring of 2006, the Asthma Coalition of Los Angeles County developed a policy paper about the impact of asthma on Los Angeles County residents, the factors that contribute to this disease, and recommendations for improving asthma outcomes. The coalition formed a committee that analyzed local data on asthma, researched state and national recommendations for controlling asthma, reviewed policy papers published by asthma coalitions in other cities and states, and sought input from numerous experts, ranging from prevention and clinical care professionals to environmental policy advocates and university researchers. It is the Coalition's hope that this "Call to Action" will not only raise awareness among public officials, community leaders, and people working to improve asthma-related policies and systems of care, but also serve as a catalyst for these same people to come together and jointly implement recommendations proposed in this document.

This policy paper provides evidence-based recommendations in six key areas that, implemented effectively, will improve asthma outcomes countywide. The recommendations are aligned with national and state asthma guidelines for improving the quality of medical care and indoor and outdoor air quality.

Summary of Recommendations:

- 1) **Increase Access to and Improve Quality of Health Care**, including promoting the concept of a medical home; offering professional development opportunities; promoting asthma disease management; providing access to specialists and home-based interventions; and improving reimbursement for asthma care.

- 2) **Improve Indoor Air Quality in Homes and Workplaces**, including educating families and landlords; improving code enforcement by City and County housing inspectors; offering incentives for following green building standards; and requiring landlords to bring all properties up to health and safety standards.
- 3) **Improve Asthma Management in Schools and Child Care Centers**, including obtaining a written Asthma Action Plan for students with asthma; educating school staff on asthma management; improving indoor air quality in schools and child care centers; and enabling children to self-carry asthma medications.
- 4) **Improve Outdoor Air Quality**, including supporting policies that address pollution from ports and industrial facilities; promoting lower emission technologies for cars, buses, and construction equipment; and improving the quality of the public transportation system.
- 5) **Address Race/Ethnic and Socioeconomic Disparities**, including expanding the safety net for low-income, uninsured residents; enhancing the cultural sensitivity of asthma management materials and programs; and prohibiting the disproportionate location of hazardous industries in low-income communities.
- 6) **Strengthen Research Related to Asthma**, including improving data collection related to asthma prevalence, and geographic, race/ethnic and socio-economic disparities; investigating potential causes and risk factors for asthma; and identifying best practices in identification and treatment of children with asthma.

Next Steps

Developing and disseminating this document will not, in and of itself, improve asthma outcomes in Los Angeles County. The Los Angeles Asthma Call to Action calls upon City, County, and State officials, health and environmental organizations, hospitals, community clinics, universities and health care professionals to work together to implement the recommendations in the Call to Action. Only by fostering the synergy that emerges from collaborative work can Los Angeles County effectively control asthma. We look forward to partnering with you.



Effectively controlling asthma ... will require a substantial collaborative approach among all stakeholders, backed by political will and necessary resources.

I. INTRODUCTION

Asthma is a very common condition in Los Angeles County – research among school children in urban Los Angeles indicates that 14% are likely to have asthma.¹ Nationwide, prevalence has increased dramatically in recent decades, with the most prominent increases among children 0 – 14 years.² Asthma significantly reduces quality of life for patients, is responsible for over 12,000 hospitalizations annually in Los Angeles County, and causes more missed school days than any other chronic condition. In addition, asthma is associated with anxiety for patients and family members, reduces physical activity, and has enormous financial impacts on our health care and economic systems. These negative impacts are largely preventable because asthma is a controllable disease. However, in many cases asthma is not effectively controlled, indicating that previous efforts to address this problem in our county have been insufficient.

Effectively controlling asthma and preventing exacerbations in Los Angeles County will require more than the independent efforts of the many concerned individuals and organizations interested in asthma. It will require a substantial collaborative approach among all stakeholders, backed by political will and necessary resources. It will entail strategic efforts that are carefully designed, evidence based, adequately funded, competently executed, and continuously improved. Toward that end, the Asthma Coalition of Los Angeles County – a group of diverse stakeholders involved in asthma prevention and clinical care – presents this Asthma Call to Action.

This policy paper provides evidence-based recommendations in six key areas that, implemented effectively, will improve asthma outcomes countywide. The recommendations address access to and quality of health care; indoor air quality in homes and workplaces; asthma management in schools and childcare centers; outdoor air quality; race/ethnic and socio-economic disparities; and asthma related research. While the data described here address asthma among some of our most vulnerable residents – our children – asthma impacts people of all ages in Los Angeles County and the recommendations in this document are intended to improve asthma outcomes among both adults and children.

Prevalence and disparities

While the prevalence of known childhood asthma in Los Angeles County is 9%³, this likely reflects significant under-diagnosis in many communities. Research conducted among school children in urban Los Angeles estimates prevalence rates of probable asthma at 14%.¹ Asthma strikes hardest among minority and low-income populations.

More than one in four African American school children in urban Los Angeles have probable asthma¹, and hospitalization rates for asthma are three times higher for African American children than for children of other racial and ethnic groups.⁴ Latino children with asthma experience nearly twice as much activity limitation compared to white children with asthma (45% and 23%, respectively). Children with asthma living below the federal poverty level are more likely to visit the emergency room (34%) than are children with asthma living at 200% above the poverty level (19%).³

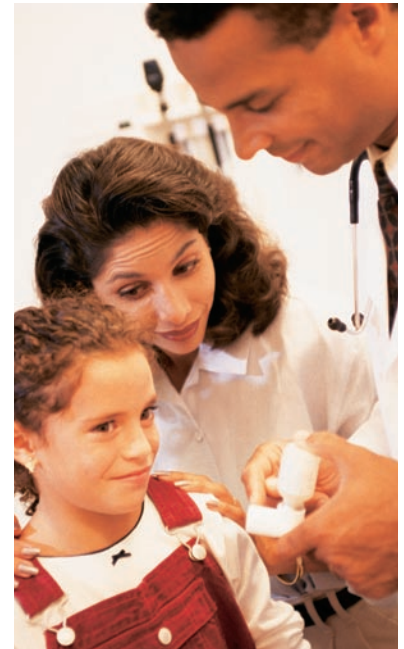
Personal and economic impacts

Most people with asthma should not require emergency room services or hospitalizations and should not have to limit their physical activities if they receive appropriate medical care and measures are taken to avoid exposure to asthma triggers. However data indicate that many people with asthma do not have their disease under control. In 2005, one in four children with asthma (25%) had to visit an emergency room for their asthma, and more than half of these children (66%) had multiple emergency room visits. In 2002, childhood asthma accounted for nearly 5000 hospitalizations in Los Angeles County.⁵ In the same year, 9 children and 119 adults in the county lost their lives due to asthma.⁶

The cost of caring for patients with asthma varies greatly depending on the person's level of asthma control. Data from the National Institutes of Health (NIH) indicate that annual costs are lowest – \$450 – for patients whose asthma is well controlled, compared to \$5,000 annually for patients with more than one hospital admission.⁷ For patients with severe asthma, costs are even higher. A study following patients with severe or difficult-to-treat asthma for two years indicated that the average costs for patients who achieved control were \$6,452, while average costs for patients who remained uncontrolled during the two-year period were \$14,213.⁷ Clearly, helping people with asthma to control their disease would greatly benefit both patients and health care systems.

Role of indoor and outdoor air quality

Indoor environmental triggers such as tobacco smoke, dust mites, cockroaches, mold and animal allergens often increase the frequency of asthma symptoms and many children with asthma are routinely exposed to such triggers. For example, 12% of children with asthma in Los Angeles County are exposed to tobacco smoke in the home on a regular basis.³



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California has the highest levels of air pollution in the nation, with the Los Angeles Metropolitan region having the worst air in the state. Studies in Southern California indicate that growing up in more polluted communities reduces growth of lung function in children—even in children without asthma.⁸ Exposure to air pollution also increases symptoms among children that already have asthma. School absence rates related to acute respiratory illnesses directly correlate with elevated ozone levels.⁹

Exposure to traffic is also linked to asthma. New studies in Southern California show that children who live near busy roads are more likely to have symptoms of asthma than children who do not live close to roads or freeways. One study found that children who lived within 250 feet of major roads had a 50 percent higher risk of having had asthma symptoms in the past year.¹⁰ In addition, a person's genes can make him or her more susceptible to air pollution. One study found that diesel exhaust exposure makes allergy symptoms significantly worse in persons with certain genetic traits. Since half of the population has these genetic characteristics, diesel exhaust may trigger allergies (or even asthma) in a large number of susceptible persons.¹¹



The quality and accessibility of health care for Los Angeles communities affected by asthma can be changed, and the quality of the air we breathe in the places where people live, work, learn, and play can be improved.

II. RECOMMENDATIONS

The causes of asthma are a complex interplay between genetics and environment. While we cannot yet alter our genes, the quality and accessibility of health care for Los Angeles communities affected by asthma can be changed, and the quality of the air we breathe in the places where people live, work, learn, and play can be improved. And we can promote research, understanding, and collaboration that drive continuous improvement.

Just as a capable medical provider sits down with a patient to create a plan for managing his/her asthma, the Asthma Coalition of Los Angeles County has crafted a set of recommendations to address this chronic disease and its impacts on our county. These recommendations—aligned with national and state asthma objectives^{12 13} — are driven by the social, economic and medical impacts of asthma. They provide a “way forward” — a set of actions that can improve prevention and management of asthma in Los Angeles County. The actions fall into six categories that reflect both our current understanding of the causes of asthma and the measures that have proven or are likely effective in managing the disease.

The Los Angeles Asthma Call to Action calls upon City, County, and State elected officials, health and environmental agencies and

organizations, hospitals, community clinics, health care professionals and community-based organizations to join together to implement the recommendations in the Call to Action.

1) Increase Access to and Improve Quality of Health Care

Important strategies for improving asthma management include improving access to high quality asthma care, equipment and medication; providing culturally and linguistically appropriate health education to people with asthma; and providing training opportunities for health care providers including the clinical staff within community health centers, clinics, hospitals, and private provider practices. Health care provider training programs have been demonstrated to increase adherence to the National Asthma Education and Prevention Program (NAEPP) guidelines and to decrease emergency room visits and hospitalizations.^{14 15}

Perhaps most important however, is a sea change in the way we think about asthma care. Rather than accept current reality – which is that many asthma patients receive only episodic, emergency care – we need to promote integrated and systematic approaches that successfully shift patients with asthma from episodic care to preventive care. This sea change would include local case detection efforts linked to effective intervention programs. It would mean coordinating asthma care between systems, so that multiple services can be offered to targeted patients and those that need more intensive care can get it. It would include mechanisms for measuring health status across providers and systems using common measures, and promoting systems that effectively track asthma control. Finally, it would mean providing adequate reimbursement for the full range of asthma preventive care. Key action items include:

- a) Provide a medical home to all people with asthma that includes high quality asthma disease management as well as accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective health care.¹⁶
- b) Support asthma disease management activities including but not limited to planned visits, careful assessments, tracking of patient health status and outcomes, adjustment of treatment plans, ongoing patient education and self management support, and care coordination for high risk patients.¹⁷ This can be achieved through appropriate restructuring in the health care setting.
- c) Provide professional development opportunities to health care providers to increase use of the NAEPP guidelines for appropriate asthma management including the use of written asthma action plans.
- d) Provide professional training for all staff that encounter patients with asthma within community health centers, clinics, hospitals,



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emergency departments, and private provider practices to improve asthma care.

- e) Ensure access to asthma specialists (e.g. allergists and pulmonologists) for selected asthma patients according to the NAEPP guidelines, and create linkages to facilitate provider access to asthma specialists for phone, email, or "hotline" consultation regarding selected patients.
- f) Promote the establishment of coordinated systems of care that enhance clinical communication regarding asthma visits between acute care facilities (hospitals, emergency rooms, and urgent care facilities), primary care providers, and schools.
- g) Promote provider use of asthma management tools that have been developed by and are widely accepted among clinical experts including asthma action plans, pocket guides, encounter forms, and patient education materials.
- h) Promote provider use of patient assessments including 1) environmental histories/ interventions that identify individual allergic/irritant triggers and support targeted mitigation activities¹⁸; 2) assessment of functional impairment, along with resources to address them; and 3) the development of comprehensive, validated, and user friendly assessment tools for the primary care setting.
- i) Promote continuous quality improvement through data collection efforts that focus on adherence to national standards and improvement of clinical outcomes. Quality improvement projects should emphasize systems change and infrastructure support and be based on effective quality improvement methodologies.¹⁹
- j) Increase health care provider knowledge and use of community resources, including home visitation and community health worker programs; and asthma programs in community based organizations, schools and workplaces.
- k) Realign financial incentives among insurers, health plans, health care systems, clinics, and providers to promote asthma disease management activities by providing adequate reimbursement rates for planned, comprehensive outpatient visits. Financial incentives should include reimbursement for the entire continuum of asthma care including culturally competent patient education and community health worker programs as well as support for information systems infrastructure.
- l) Support local, state, and federal legislation that addresses the need for Medi-Cal and other payers to reimburse for the

comprehensive asthma treatment and management modalities included in the NAEPP guidelines, including all asthma medications, medical devices, and education programs.

- m) Promote policies and budget strategies that shift financial resources from emergency and tertiary care to primary prevention and to management of asthma in the primary care setting.
- n) Support efforts to redefine the billing codes – or relative value units (RVUs) – associated with asthma to make them more reflective of care that is actually provided.

2) Improve Indoor Air Quality in Homes and Workplaces

Poor indoor air quality can be a major trigger of asthma due to substandard housing and workplace conditions, including tobacco smoke, pesticides, household cleaners, allergens, toxins, irritants, and poor ventilation. Because there are many indoor sources of asthma triggers, and because people spend most of their time indoors, indoor exposures can be frequent, prolonged and high, and pose a significant risk to health. Home-based interventions can play an integral role in assisting families with reducing asthma triggers in the home environment and have been shown to decrease asthma symptoms and use of urgent health care services.^{20 21} Key action items include:

- a) Promote home-based interventions such as community health worker programs that provide families with in-home environmental assessments, education and support; deliver resources such as allergy control mattress encasements and cleaning kits; and assist with environmental remediation.²²
- b) Educate homeowners, tenants, landlords, property managers, licensed family child care providers and other home-based child-care providers about asthma triggers and how to reduce them in the home by addressing issues like mold, cockroaches, vermin, dust mites, pet dander, and environmental tobacco smoke.
- c) Ensure community access to smoking cessation services by providing programs in workplaces, health care facilities, community venues, and via toll free lines such as the California Smokers Helpline (1-800-NO-BUTTS).
- d) Conduct public information campaigns to raise awareness about smoking as a trigger for asthma and the dangers of smoking around children.
- e) Support the enforcement of no-smoking regulations in restaurants, bars, and workplaces and encourage efforts to provide smoke-free apartment units as well as non-smoking common areas in apartment buildings and condos.



Because there are many indoor sources of asthma triggers, and because people spend most of their time indoors, indoor exposures can be frequent, prolonged and high, and pose a significant risk to health.

- f) Require landlords to bring all properties up to health and safety standards, including the Los Angeles Housing Authority, and educate tenants about which City and County departments to call to report sub-standard conditions.
- g) Educate families with asthma living in rental housing about their legal rights for reasonable accommodations and modifications when a particular asthma trigger in the housing environment impacts their disability and provide families with access to legal resources.²³
- h) Support improved code enforcement by City and County housing inspectors regarding leaky plumbing, other moisture-causing problems, and vermin infestation.
- i) Ensure that City and County public housing complies with the integrated pest management guidelines adopted by the U.S. Department of Housing and Urban Development (HUD) as a safer alternative to pesticides.
- j) Improve consumer awareness that pesticides and household cleaners can be a trigger for people with asthma and promote the use of alternative pest control methods and non-toxic cleaners in the home.
- k) Promote the use of integrated pest management practices in all public buildings and educate City and County agencies that common industrial cleaners and pesticides may trigger asthma.
- l) Partner with unions and employers to promote workplace education and surveillance regarding occupational asthma.
- m) Encourage developers to incorporate green building standards into new developments and provide incentives to do so.



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3) Improve Asthma Management in Schools, Child Care Centers, and Child Care Homes

Asthma-friendly schools and childcare centers are those that create safe and supportive learning environments for students and young children with asthma. They have policies and procedures that help young children learn about asthma and eventually allow students to successfully manage their asthma. In addition, they provide guidelines and resources to assist school personnel in creating an asthma friendly environment,²⁴ and they evaluate their asthma programs annually and make needed improvements.^{25 26} Many school districts in LA County, including the Los Angeles Unified School District, have already taken significant steps to reduce environmental asthma triggers. Additional steps would ensure a safer place for children to learn and play. Key action items for the school and child care communities include:

- a) Obtain and support the implementation of a written Asthma Action Plan for all students with asthma from their medical provider that includes an individualized emergency protocol, medications, peak flow or symptom monitoring, and emergency contact information.
- b) Promote policies and programs that will increase the number of school nurses so that every school has a school nurse every day.
- c) Ensure that students have access at all times to medications as prescribed by their health care provider and approved by parents, as authorized by state law, and remove barriers in the school so that students with proper authorization may self-carry and self-administer their own asthma medications.
- d) Promote improved self-management skills among children with asthma and their families by providing asthma education programs such as Open Airways and Power Breathing.
- e) Provide education on asthma management, triggers, use of inhalers, and emergency procedures to all relevant school personnel, students, parents, caregivers, and community staff that work with children, such as Parks and Recreation staff and sports coaches.
- f) Develop systems and collaborative projects that promote ongoing communication between schools/child care centers and medical providers to ensure that children's asthma is well managed.
- g) Encourage school districts to provide a healthy school environment by 1) implementing an indoor air quality program such as the U.S. Environmental Protection Agency's Indoor Air Quality Tools for Schools²⁷; 2) ensuring that all school buildings meet the California State regulations related to operation and maintenance; and 3) having school maintenance personnel conduct regular self-assessments of environmental health conditions using the Healthy School Environments Assessment Tool (HealthySEAT) developed by the U.S. Environmental Protection Agency²⁸.
- h) Promote the use of integrated pest management techniques to control pests. Encourage all school districts and child care centers to adopt integrated pest management policies similar to those developed by Los Angeles Unified School District.
- i) Incorporate green building standards, such as those developed by the Collaborative for High Performance Schools (CHPS), into all new school and childcare facilities being constructed.
- j) Site new schools as far as possible from sources of outdoor pollution such as freeways, busy roads and stationary pollution sources, in accordance with state law,²⁹ and promote similar

siting regulations for new childcare centers, playgrounds and parks using research-based health recommendations on required distances³⁰.

- k) Support regulations, standards and policies that protect small children in child care facilities from environmental hazards.
- l) Ensure that childcare center staff serving young children with asthma are knowledgeable about when and how to administer medications prescribed by the child's health care provider, approved, and made available by parents.
- m) Work with Child Care Resource and Referral agencies to provide trainings and educational materials to child care centers countywide about emergency procedures (such as viewing the video Emergency Asthma Care Training for Childcare Providers³¹) and how to reduce asthma triggers in the childcare center environment.
- n) Support policy efforts that protect youth from tobacco addiction, including the adoption of strong local tobacco retail licensing ordinances.



Reducing emissions from cars, trucks, ports, trains, construction equipment and refineries is essential to combating the asthma epidemic in Los Angeles County.

4) Improve Outdoor Air Quality

Elevated levels of particulate matter and ozone in the outdoor air can be a major trigger for asthma. This problem is particularly acute in Los Angeles County where unhealthy levels for sensitive groups are registered on average approximately one out of every three days. Particulate matter from motor vehicle exhaust such as from diesel-powered engines causes or exacerbates asthma and bronchitis and leads to an estimated 1400 premature deaths annually in Los Angeles County.³² Ozone, a main contributor to smog, is known to contribute to respiratory illness and decreased lung function. Reducing emissions from mobile sources (cars, trucks, trains, ships, planes, buses, construction equipment, etc.) and stationary sources (refineries, power plants, drycleaners, factories, etc.) is essential to combating the asthma epidemic in Los Angeles County. Key action items include:

- a) Support legislation and policy that addresses the growing pollution from the Ports of Los Angeles and Long Beach; supports the reduction of emissions from the ports to 2001 levels at least, and levies charges for goods movement on those who benefit directly from it, via container or other fees, in order to pay for environmental and health mitigation.
- b) Support efforts of locally impacted communities to reduce the health and environmental impact of the goods movement industry, including emissions from ships, trains, trucks and

yard equipment at ports, rail yards, distribution centers and on heavily-trafficked freeways, by ensuring meaningful community participation and transparent decision making related to transportation infrastructure.

- c) Reduce diesel emissions in LA County and promote the best available control technologies. Support and fund policy efforts that call for stronger emission standards, emission reduction regulations, retrofit regulations, early engine retirement, incentive programs, diesel reduction goals, and emission controls near sensitive community locations such as schools, child care centers and hospitals.^{32 33}
- d) Enforce State regulations prohibiting school bus idling within 100 feet of schools. Require contracted school bus providers to convert buses to ultra low-sulfur diesel or other lower emission technologies, and install the best available pollution control devices. New buses should be fueled with compressed natural gas or other low-polluting fuels.
- e) Support legislation and policy that addresses industrial pollution from refineries, manufacturing facilities and other high-risk nonvehicular sources of air pollution; encourages industries to comply with environmental laws; and addresses the fact that some communities are disproportionately affected by emissions due to their proximity to industrial sources of air pollution.
- f) Work with local media outlets to raise awareness of underlying causes and implications of Los Angeles County's air quality by disseminating air quality data and advocating the use of U.S. EPA's Air Quality Index and Ozone Action Day alerts in their broadcasts, print or web-based media.
- g) Promote use of public transportation by improving the quality of the current public transportation system and further expanding the public transportation infrastructure, with an emphasis on building a clean, efficient bus and metro/rail system.
- h) Promote and provide incentives for ridesharing, vanpooling, use of public transportation, and telecommuting among County and City employees and encourage private employers to implement similar programs.
- i) Reduce the negative air quality impacts of large-scale demolition and temporary construction activities in the region by ensuring dust control measures are adequate during construction.³⁴
- j) Promote the inclusion of specific requirements for clean construction equipment in city and county construction contracts, and support city and county governments, private



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companies, and individuals in giving preference to contractors that use clean construction equipment for their projects.³⁴

- k) Implement least toxic pest control measures, modeled after Los Angeles Unified School District's integrated pest management policy, and promote the adoption of local government goals for reduction of pesticide use.
- l) Promote the use and availability of environmentally friendly equipment for gardening and recreation and eliminate the use of environmentally harmful ones (e.g. leaf blowers, lawnmowers, jet skis, all-terrain vehicles). Encourage regulatory agencies to require clean technologies for these uses.
- m) Encourage the adoption of policies that create smoke-free outdoor areas (e.g. parks, beaches, restaurant patios, bus stops, entryways, and service lines for movies, concerts etc) throughout Los Angeles County.

5) Address Race/Ethnic and Socioeconomic Disparities

Although asthma affects people of all races/ethnicities and income levels in Los Angeles County, low-income and some non-white populations experience significantly higher rates of hospitalizations, emergency room visits, and activity limitations due to asthma. Many factors contribute to this disparate impact including lack of access to quality health care, substandard housing and living in close proximity to freeways and industrial polluters. A multi-pronged approach is necessary to decrease disparities, but of utmost importance is ensuring access to quality medical care, including care for low-income patients with asthma. The asthma community must work together to reduce asthma countywide, paying special attention to decreasing differences in asthma outcomes due to race, ethnicity, and socioeconomic status. Key actions include:

- a) Expand the safety net for provision of care to low-income, uninsured residents, for whom access to quality care and appropriate medications are barriers to seeking treatment.
- b) Enhance the cultural sensitivity and language accessibility of asthma management materials and programs and offer provider education to maximize the effectiveness of such resources.
- c) Increase the number of high quality healthcare providers working in low-income neighborhoods who promote asthma management according to national guidelines, and have access to asthma specialists, as needed.
- d) Increase the number of high quality community health workers in low-income communities who are linked to and coordinate with primary care providers.

- e) Provide educational programs on asthma for low-income patients with asthma, with a particular focus on accessing regular preventive care.³⁵
- f) Develop and fund interventions that strive to reduce disparities and emphasize culturally competent, community driven, and linguistically appropriate approaches, including use of materials for low-literacy or illiterate audiences, such as audio and audiovisual materials, and increased use of graphics in printed materials.
- g) Promote policies for hazardous industries that prohibit disproportionate siting of these industries in low-income communities.
- h) Decrease exposure to and increase awareness about hazardous occupational toxins that disproportionately affect low-income people.
- i) Conduct public awareness campaigns, especially in underserved communities, to: increase awareness that asthma can be controlled; educate about asthma triggers and symptoms; promote access to effective medications; and increase the number of people who access medical care and other resources for their asthma.



6) Strengthen Research Related to Asthma

The role of research is crucial to develop effective asthma interventions and evaluate their impact. Further research is needed for the development of effective primary prevention strategies, to better understand the distribution of risk factors for asthma incidence and exacerbations in different sub-populations,¹¹ and to more fully examine the link between asthma and the environment. In particular, additional studies are critical to identify the factors contributing to the high asthma prevalence rates among specific race/ethnic and socioeconomic groups, especially African-American children in Los Angeles County.³ Key action items include:

- a) Strengthen our understanding of asthma by improving surveillance by City, County and State health officials on asthma prevalence, case and cluster identification, and the management and treatment of asthma.
- b) Investigate potential causes as well as protective and risk factors for asthma, including indoor and outdoor environmental triggers, and exposure to detrimental social and physical risk factors, and disseminate findings to community organizations.¹³
- c) Conduct research on race/ethnic and cultural differences in asthma morbidity and mortality and response to diagnosis and therapy.^{35 36} Improve data collection at the local community level to increase

We need to investigate the potential causes as well as protective and risk factors for asthma, including indoor and outdoor environmental triggers and exposure to detrimental social and physical risk factors.

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information about geographic, race/ethnic and socio-economic disparities relating to asthma, and to improve our understanding of under diagnosis in many communities.

- d) Promote the use of practice-based research networks (PBRNs) among providers in LA County to develop more effective approaches to treat patients with asthma.
- e) Work with insurers, health plans, medical groups, independent practice associations, health care providers, pharmacists and patients to assess prescription refill patterns, health care utilization patterns (e.g. emergency department visits, urgent care visits, hospitalizations, etc.) and health plan asthma benefits.¹³
- f) Collect data on school absenteeism due to asthma, including the financial cost to the schools, by conducting pilot projects at specific schools in Los Angeles County.
- g) Conduct pilot studies in specific schools in Los Angeles County to assess the feasibility, effectiveness and cost-effectiveness of school-based asthma case detection programs, including identifying a mechanism to transition families to preventive care.
- h) Promote data collection to better assess and improve clinical control and patient disease management processes and outcomes.
- i) Promote the evaluation of model programs in asthma care, such as home-based interventions using community health workers.

Asthma Coalition of Los Angeles County members providing key committee support in the development of this document include: American Lung Association; BREATHE California of Los Angeles County; Coalition for Community Health; Community Clinic Association of Los Angeles County; Esperanza Community Housing Corporation; Long Beach Alliance for Children with Asthma; Los Angeles County Maternal, Child, and Adolescent Health Programs; Los Angeles Unified School District; Physicians for Social Responsibility - Los Angeles; QueensCare Family Clinics; St. John's Well Child and Family Centers; Venice Family Clinics.

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(Endnotes)

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