

# CLEARING THE AIR: ADDRESSING Asthma IN AMERICA

Millions of Americans suffer from asthma – a chronic condition which causes episodes of obstructed airflow – and the rates are skyrocketing. In the last two decades alone, the number of people with asthma has increased from 6.7 million in 1980 to more than 17 million in 1998 (CDC 1999). Today, it is the most common chronic disease in children and adolescents, affecting almost 5 million children.

Familiar symptoms of asthma include coughing, wheezing, shortness of breath, and tightness in the chest. While it is treatable, there currently is no cure. More than 5,000 people die each year from the condition.

As with many other health problems, asthma disproportionately affects vulnerable populations, including minorities, the urban poor, and children. Black children are much more likely to be hospitalized than their white counterparts, and are four times as likely to die from asthma (National Academy on an Aging Society 2000).

In addition to the individual costs, asthma exacts a toll on the nation at large. It is the most common reason that children miss school, accountable for more than 10 million lost school days each year (The American Academy of Allergy, Asthma, and Immunology, Inc. 1999). Asthma is also responsible for nearly 500,000 hospitalizations annually, and costs society approximately \$11 billion each year.

Little is known about how and why people develop asthma, although the environment and heredity both play a role. Common determinants of its onset include a family history of asthma or allergies, perinatal exposure to tobacco smoke, low birth weight, and viral respiratory infections.

Once people develop asthma, however, several factors can trigger asthma attacks. Environmental irritants and allergens – tobacco smoke, wood smoke, house-dust mites, cockroaches, and pets – are implicated, as are stress, exercise, viral upper respiratory infections, and other illnesses that are not properly treated. Some research indicates that outdoor air pollution also contributes to asthma.

Despite the lack of a cure, asthma is a treatable condition, and a number of steps can be taken to ensure that people with asthma are able to effectively manage their illness. Proper management requires assessing and monitoring the disease, controlling the factors that make asthma more severe, educating patients, and using medications as needed. Effective management can make a significant difference in

how people experience asthma, cutting down the need for hospitalization and emergency room care.

This Issue Focus is based upon a roundtable session on asthma, cosponsored by the Health and Environmental Funders Network and held during GIH's Annual Meeting on Health Philanthropy, February 28 - March 1, 2001.

## MORE CASES, MORE QUESTIONS

Rising rates of asthma indicate a looming crisis. If rates continue on their current trend, it is estimated that by 2020, 29 million Americans will suffer from asthma. Asthma deaths will have doubled. The annual cost could reach \$18 billion.

## FOUNDATION EFFORTS

Foundations and corporate giving programs with diverse grantmaking programs – from direct delivery of services to environmental policy work to leadership development – are employing a number of different strategies to address rising asthma rates in their communities. These can include asthma prevention, education, and management, along with advocacy work to address the need for increased research and evaluation of asthma control efforts. The following are some examples.

➤ **Improving Care.** The California Endowment's YES WE CAN Urban Asthma Partnership aims to create a new model of care that will work in poor urban communities across the country. A demonstration program, the partnership is a collaborative effort of various groups, including local health care organizations, universities and schools, neighborhood groups, and asthma programs in San Francisco. Health teams, each composed of a doctor, nurse care coordinator and community health worker (CHW), work to effectively manage pediatric asthma cases. Physicians diagnose and prescribe medications, and nurses track progress and educate families regarding medications and prevention. CHWs make home visits to offer guidance on eliminating triggers, from supplying mattress covers to combat dust mites to advising about secondhand smoke exposure. In addition, they help families to navigate the health care system by providing translation, ensuring

that schools are aware of the child's needs, and enrolling families in insurance programs.

➤ **Supporting Community Coalitions.** The Robert Wood Johnson Foundation's Allies Against Asthma program was begun in 1999 to improve community efforts to control pediatric asthma. Through the program, community coalitions receive funding to develop and implement a plan to address asthma in their neighborhoods. Ultimately, the coalitions aim to reduce hospital admissions, emergency room visits, and missed school days; enhance the quality of life for children with asthma; and develop sustainable strategies for managing asthma in their communities. While the foundation only awarded grants to eight communities, more than 250 coalitions submitted letters of intent, and 26 submitted full proposals. Small and local foundations may be able to support nascent or existing coalitions in their communities that were not included in the final foundation grant program.

➤ **School Programs.** A number of health foundations support implementation of the American Lung Association's *Open Airways for Schools* program. This school-based curriculum is designed to educate children about how to best manage their asthma. Foundations that have provided start-up, implementation, and expansion grants for the program include the Foundation for Seacoast Health, Jenkins Foundation, The David and Lucile Packard Foundation, and Kate B. Reynolds Charitable Trust. *Open Airways* is an effective model of funding for smaller foundations that have limited resources but want to work towards reducing the burden of asthma in their communities.

➤ **Research.** Health grantmakers can provide funding to support scientific or policy research related to asthma. In conjunction with Oregon Health Sciences University, the Northwest Health Foundation supported a study to analyze data to illuminate possible causal factors in the asthma epidemic. On the policy side, the William T. Grant Foundation provided funding to Boston University's School of Medicine to examine the health-related effects of welfare reform on children with asthma and sickle-cell anemia.

➤ **Addressing the Root Causes.** Many foundations have designed, implemented, or funded programs that seek to limit the factors that contribute to the increasing numbers of asthma sufferers, and the worsening of symptoms for those already affected. While some of these programs are specifically targeted towards asthma reduction, others have wider aims. The Boston Foundation has supported Clean Buses for Boston, a campaign by inner-city young people to reduce hazardous emissions from idling buses in their neighborhoods. The Kansas Health Foundation's Take It Outside campaign is designed to promote awareness of the dangers of second-hand tobacco smoke, and to encourage people to smoke outside the home to limit harmful effects on their children.

#### TWELVE WAYS TO REDUCE MORBIDITY AND MORTALITY FROM ASTHMA IN YOUR COMMUNITY:

- improve substandard housing in poor neighborhoods
- educate smokers about the dangers faced by children from secondhand smoke
- ensure access to high quality, affordable, and convenient primary care
- support development and expansion of public transportation
- monitor and respond to pollution levels in neighborhoods
- ensure that teachers, childcare workers, and parents know how to handle children's asthma attacks
- provide community education about household allergens and how to avoid them
- support effective patient education for treating asthma with medication
- create spaces for children to play in healthy air
- support evaluation of asthma prevention and management programs
- implement or enhance cockroach management and eradication programs in poor neighborhoods
- provide funding to enhance surveillance of asthma in your community

## SOURCES

The American Academy of Allergy, Asthma, and Immunology, Inc. *Pediatric Asthma: Promoting Best Practice* (Rochester, NY: 1999).

National Academy on an Aging Society, *Childhood Asthma: The Most Common Chronic Disease Among Children* (Washington, DC: 2000).

National Center for Environmental Health, Centers for Disease Control and Prevention. *Asthma Prevention Program of the National Center for Environmental Health, Centers for Disease Control and Prevention: At-A-Glance 1999*. Available at [www.cdc.gov/nceh/asthma/ataglance.asthmamaag2.htm](http://www.cdc.gov/nceh/asthma/ataglance.asthmamaag2.htm)

## RESOURCES

Allies Against Asthma  
734.615.3312  
[www.sph.umich.edu/aaa](http://www.sph.umich.edu/aaa)

American Lung Association  
[www.lungusa.org](http://www.lungusa.org)  
212.315.8700

The California Endowment  
818.703.3311  
[www.calendow.org](http://www.calendow.org)

Health and Environmental Funders Network (HEFN)  
[www.hefn.org](http://www.hefn.org)

Hegner, Richard E., *The Asthma Epidemic: Prospects for Controlling an Escalating Public Health Crisis* (Washington, DC: National Health Policy Forum, 2000).

National Institute of Allergy and Infectious Disease  
National Institutes of Health  
[www.niaid.nih.gov](http://www.niaid.nih.gov)

The Pew Environmental Health Commission, *Attack Asthma: Why America Needs a Public Health Defense System to Battle Environmental Threats* (Baltimore: 2000).

For more information or to download a list of grants and initiatives in asthma, visit our Web site at [www.gih.org](http://www.gih.org) or contact us at 202.452.8331.