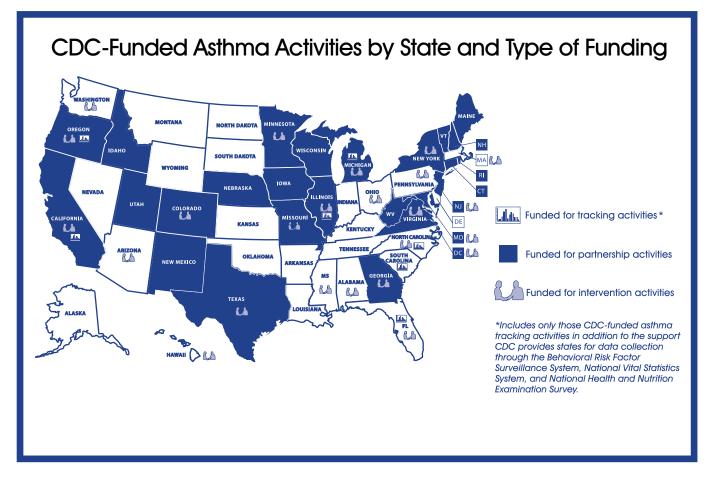


# National Asthma Control Program: Reducing Costs and Improving the Quality of Life 2002



"Asthma steals vitality and well-being both from its victims and from their families, and asthma rates are increasing in the United States. Environmental efforts, good therapy, and careful management can turn around the assault of this disease on our health."

> Richard J. Jackson, MD, MPH Director, CDC's National Center for Environmental Health

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION Safer • Healthier • People

# Asthma Control: Reducing Costs and Improving Quality of Life

Asthma's impact on health, quality of life, and the economy is substantial, and asthma rates are increasing. Although asthma rates differ only slightly by race, severe asthma hits hardest and disproportionately among poor, minority, inner-city populations.

Currently, there is no way to prevent the initial onset of asthma, and there is no cure. However, people who have asthma can still lead quality, productive lives if they control their asthma. Asthma can be controlled by taking medication and by avoiding contact with environmental "triggers." These environmental triggers include cockroaches, dust mites, furry pets, mold, tobacco smoke, and certain chemicals.

#### Asthma's Impact in the United States

- Affected 10 million adults and as many as 5 million children in 2000
- More than 4,600 deaths in 1999
- Between 400,000 and 500,000 hospitalized each year
- 14 million days of school missed each year
- About 100 million days of restricted activity each year
- Collective cost estimated to be \$12.7 billion for 1998

# **CDC's National Asthma Control Program**

In 1999, the Centers for Disease Control and Prevention (CDC) began developing its National Asthma Control Program with funding of \$1.2 million. The program supports the goals and objectives of *Healthy People 2010* for asthma and is based on the following three public health principles:

- **Tracking:** collecting and analyzing data on an ongoing basis to understand when, where, and in whom asthma occurs
- **Interventions:** assuring that scientific information is translated into public health practices and programs to reduce the burden of asthma

• **Partnerships:** making sure that all stakeholders have the opportunity to be involved in developing, implementing, and evaluating local asthma control programs

#### The goals of the program are to reduce the number of deaths, hospitalizations, emergency department visits, school or work days missed, and limitations on activity due to asthma.

With appropriations of \$27.9 million in fiscal year 2001, CDC funded 13 asthma tracking projects, 45 asthma interventions, and 30 asthma partnership

projects under its National Asthma Control Program. CDC also funded six urban school districts and six national nongovernmental organizations to support and address asthma control within a coordinated school health program. With appropriations of about \$35 million in fiscal year 2002, CDC will increase its support for (1) improving the nation's ability to track asthma, conduct interventions, and build partnerships related to asthma control and (2) improving the ability of the nation's schools to prevent asthma attacks and absences.

# **Other CDC Asthma Activities**

CDC is supporting the Americans Breathing Easier Program, which enables the nation's schools to prevent asthma attacks and related absences. In addition to these projects and programs, CDC also supports the collection of data on self-reported lifetime and current asthma rate data for adults through the state-based Behavioral Risk Factor Surveillance System and collects data on asthma rates, mortality, and health care use through various CDC data tracking systems. For a summary of and access to CDC's asthma tracking data, see the "Data" section at http://www.cdc.gov/nceh/airpollution/asthma.



## Tracking

### Population-based models to establish

surveillance for asthma incidence in defined geographic areas. To provide better estimates of asthma rates, CDC is funding the Kaiser Foundation Research Institute (Portland, Oregon) and the Miami-Dade County Health Department (Miami, Florida) to develop models for identifying new asthma cases.

#### Enhanced surveillance of asthma deaths.

To understand the circumstances surrounding asthma deaths and determine if these deaths were preventable, CDC is funding state health departments in California, Illinois, and Michigan to develop, implement, and evaluate a rapid asthma death notification and investigation system.

# Interventions

Controlling asthma in American cities. To

decrease asthma-related morbidity, CDC is funding grantees in seven states (California, Illinois, Minnesota, Missouri, New York, Pennsylvania, and Virginia) to use innovative collaborative approaches to improve overall asthma management among urban children up to 18 years of age.

*Inner-city asthma intervention.* CDC is funding grantees in 16 states (Alabama, Arizona, California, Florida, Illinois, Massachusetts, Maryland, Minnesota, Missouri, Mississippi, North Carolina, New Jersey, New York, Ohio, Oregon, and Texas) and in Washington, D.C., to provide inner-city families with asthma education and individualized asthma control plans.

**Enabling the nation's schools to prevent asthma attacks and absences.** CDC is funding six urban school districts (Baltimore, Dallas, Detroit, Houston, Los Angeles, and Philadelphia) and six national nongovernmental organizations (American Lung Association, Asthma and Allergy Foundation of America, STARBRIGHT Foundation, National Association of School Nurses, American Academy of Pediatrics, and American Association of School Administrators) to support and address asthma control within a coordinated school health program.

# Replication and implementation of scientifically proven asthma interventions.

CDC is funding grantees to implement the following two scientifically proven asthma interventions shown to decrease acute care visits, decrease hospitalizations, and increase compliance with asthma care plans: the Asthma and Allergy Foundation of America's "Asthma Care Training for Kids" (ACT; grantees in New York, Pennsylvania, Texas, and Washington) and the American Lung Association's "Open Airways for Schools" (OAS; grantees in California, Colorado, Illinois, New Jersey, and New York). The goals for ACT are to increase asthma control compliance behaviors and to decrease emergency room visits and number of days spent in the hospital. The goals for OAS are to increase school performance and selfmanagement behaviors and to decrease the number of asthma episodes.

# Partnerships

Addressing asthma from a public health

*perspective.* CDC is funding state health departments in California, Colorado, Connecticut, Georgia, Idaho, Illinois, Iowa, Maryland, Maine, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, Rhode Island, Texas, Utah, Virginia, Vermont, West Virginia, Wisconsin, and Washington, D.C., to develop comprehensive, statewide asthma control plans that include disease tracking and intervention components. CDC is also funding Michigan, New York, and Oregon to implement their comprehensive asthma control plans.

**General partnerships.** In addition to funding specific partnership projects, CDC participates in and promotes partnerships among government agencies, nonprofit groups, and the private sector, including managed care and health care organizations for controlling asthma. These partners work together to promote asthma control policies, education initiatives, appropriate medical management, and environmental management to eliminate or reduce exposure to asthma triggers.



#### Examples of CDC's Major National Asthma Control Partners

- Allergy and Asthma Network/Mothers of Asthmatics
- American Academy of Allergy, Asthma & Immunology
- American Academy of Pediatrics
- American Association of School Administrators
- American Lung Association
- Asthma and Allergy Foundation of America

## State Activity Highlights

With support from CDC, the Oregon Asthma Network—a statewide coalition of health care providers, health plans, and community and public health

organizations—worked together to develop a comprehensive state asthma plan. Oregon is currently implementing the plan, including instituting key private/public initiatives to improve the quality of health care received by people with asthma, increasing public awareness of asthma, and improving patient education materials and resources for people with asthma. Oregon is also implementing its plan to monitor the burden of asthma in the state and to measure progress in addressing asthma and will focus attention on those areas that are in particular need of asthma interventions.

#### National Association of School Nurses

- National Heart, Lung, and Blood Institute
- National Institute of Allergy & Infectious Diseases
- STARBRIGHT Foundation
- U.S. Environmental Protection Agency



With support from CDC, Michigan developed and is implementing its Michigan Asthma Strategic Plan. A diverse advisory committee made up of Michigan asthma professionals, health

care plans, local public health agencies, schools, and coalitions is guiding the plan's implementation. Current activities address issues such as quality improvement in asthma care (including patient and provider education), access to care, public awareness and communication, asthma tracking, and environmental quality. The state also provides Michigan's 11 local asthma coalitions with ongoing financial and technical support to help them design, conduct, and evaluate asthma interventions in communities throughout the state.

## Future Directions

With continued and increased funding, CDC will (1) work with state and local health departments and other partners to improve asthma tracking, (2) identify and develop population-based and individual solutions for controlling asthma, (3) help more partner

organizations implement and evaluate programs to reduce the incidence and severity of asthma, and (4) build capacity of educational agencies and national nongovernmental organizations to address asthma in schools.

For more information or additional copies of this document, please contact: Centers for Disease Control and Prevention National Center for Environmental Health, MS E19 1600 Clifton Rd, NE, Atlanta, GA 30333 1-800-CDC-INFO; cdcinfo@cdc.gov; http://www.cdc.gov/nceh/airpollution/asthma

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