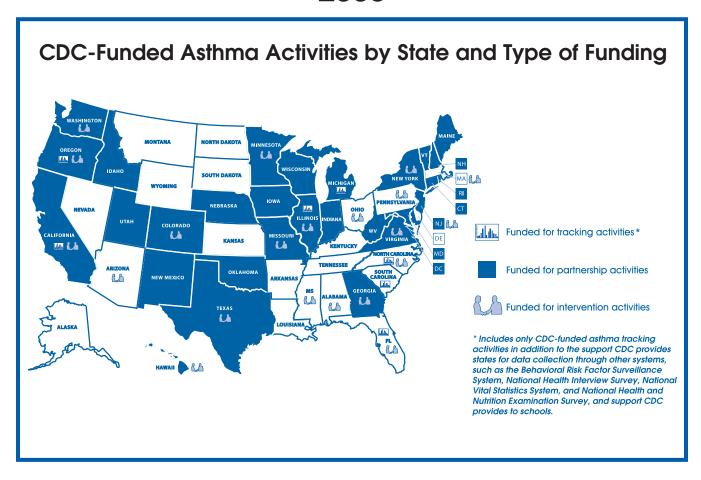


# National Asthma Control Program: Improving Quality of Life and Reducing Costs 2003



"Much of what is known about controlling asthma is not being applied. This is the challenge that we have taken on. CDC is supporting asthma data tracking, interventions, and partnerships nationwide in order to bridge this gap and to help people with asthma live symptom-free."

Julie Louise Gerberding, MD, MPH Director, Centers for Disease Control and Prevention

## **Asthma Control: Improving Quality of Life and Reducing Costs**

Despite evidence that asthma death rates are leveling off and asthma hospitalization rates are declining, asthma's impact on health, quality of life, and the economy remain substantial. Rates of severe asthma continue to disproportionately affect poor, minority, inner-city populations. For example, African Americans visit emergency departments, are hospitalized, and die due to asthma at rates three times higher than rates for white Americans.

The initial onset of asthma cannot yet be prevented or cured. However, asthma can be controlled, and people who have asthma still can lead quality, productive lives. Asthma can be controlled by following a medical management plan 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 on the U.S. Population

#### In 2001, an estimated

- 31.3 million people had been diagnosed with asthma during their lifetime
- 20.3 million people currently were diagnosed with asthma
- 12 million people experienced an asthma attack in the previous year

#### In 2000, asthma accounted for

- 10.4 million outpatient visits
- 1.8 million emergency department visits
- 465,000 hospitalizations
- 4.487 deaths

**Source: CDC National Center for Health Statistics** http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma/asthma.htm

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

CDC created the National Asthma Control Program in 1999. 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 the "who, what, and where" of asthma
- **Interventions:** ensuring that scientific information is translated into public health practices and programs to reduce the burden of asthma
- **Partnerships:** ensuring 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 \$35.2 million in fiscal year 2002, CDC funded 11 asthma tracking projects, 48 asthma interventions, and 33 asthma partnership projects under its National Asthma Control Program

for activities to be conducted in 2003. CDC also funded six urban school districts, one state education agency, and six national nongovernment organizations to support and address asthma control within a coordinated school health program.

## **Major Data Collection Systems**

CDC supports a number of major asthma data collection efforts, including (1) collection of state-level adult asthma prevalence rates for detailed subgroups in 50 states, 3 territories (Puerto Rico, Guam, and the Virgin Islands), and Washington, D.C., through the Behavioral Risk Factor Surveillance System Survey; (2) collection of data on days of restricted activity, days in bed, days of work or school lost, physician visits, and hospitalizations due to asthma through the National Health Interview Survey; and (3) collection of in-depth state and local asthma data through development and testing of a National Asthma Survey module in Alabama, California, Illinois, New York, and Texas. See the "Data" section at http://www.cdc.gov/asthma for more information.

## **Asthma Control Program Highlights**

### **Tracking**

#### Enhanced surveillance of asthma deaths.

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

Population-based models to establish surveillance for asthma incidence in defined geographic areas. To better estimate 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.

#### Interventions

#### Controlling asthma in American cities.

To decrease asthma-related morbidity, CDC is funding grantees in seven urban communities (New York City, Philadelphia, Chicago, Richmond, Oakland, St. Louis, and Minneapolis/St. Paul) to use innovative collaborative approaches to improve overall asthma management among urban children up to 18 years of age.

Enabling the nation's schools to prevent asthma attacks and absences. CDC will fund six urban school districts and one state education agency in 2003 to develop or implement exemplary local education agency policies and programs to reduce asthma episodes and related absences. CDC also is funding six national nongovernment 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. For updates on school-related asthma activities, go to http://www.cdc.gov/healthyyouth/healthtopics/asthma.

*Inner-city asthma intervention.* CDC is funding 23 sites in 15 states (Alabama, Arizona, California, Florida, Illinois, Massachusetts, Minnesota, Missouri, Mississippi, North Carolina, New Jersey, New York, Ohio, Oregon, and Texas) to provide inner-city families

with asthma education and individualized asthma control plans.

# Replication and implementation of scientifically proven asthma interventions.

CDC is funding grantees to implement the following two scientifically evaluated 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 Illinois [two sites], New York, Pennsylvania, Texas, and Washington) and the American Lung Association's "Open Airways for Schools" ([OAS], grantees in California [two sites], Colorado, Illinois, New Jersey [two sites], and New York). The goals for ACT are to increase asthma control compliance behaviors and to decrease emergency department visits and number of days spent in the hospital. The goals for OAS are to improve school performance and self-management behaviors and to decrease the number of asthma episodes.

### **Partnerships**

Addressing asthma from a public health perspective. CDC is funding state health departments in Colorado, Connecticut, Georgia, Hawaii, Idaho, Indiana, Iowa, Maine, Maryland, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, Oklahoma, Rhode Island, Texas, Utah, Virginia, Vermont, Washington, West Virginia, Wisconsin, and Washington, D.C., to develop asthma control plans that include disease tracking, intervention, and occupational components. CDC also is funding California, Illinois, Michigan, Minnesota, New York, and Oregon to implement the states' comprehensive asthma control plans.

National asthma health education enhancement program. CDC is funding the Allergy and Asthma Network/Mothers of Asthmatics, American Lung Association, and Asthma and Allergy Foundation of America to conduct activities related to asthma education. These activities range from identifying effective educational programs for adults that can be adapted for nationwide use to educating children with asthma and their families and caregivers.

#### **Examples of CDC's 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

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

# **State Activity Highlights**

#### California

With support from CDC, the California
Department of Health Services has worked
with leading asthma organizations, agencies,
and public interest groups throughout the
state to develop an integrated plan (*The*Strategic Plan for Asthma in California)

to address the asthma epidemic in California. A diverse advisory committee, consisting of California asthma professionals, coalitions, local public health agencies, educational agencies and schools, and health-care plans, is guiding the plan's implementation in the state. Major components of the strategic plan include epidemiology and evaluation, public education, asthma treatment and management, secondary prevention of asthma, and policy. California will support and expand its asthma partnerships and provide technical assistance to local coalitions and public health departments in monitoring and reducing the asthma burden.

#### New York

the OAS program.

In collaboration with several community health centers and after-school programs, the Bronx Lebanon Hospital Center is implementing two asthma interventions for children aged 8 to 12 who have persistent asthma problems. Through the Asthma Care Training for Kids (ACT) intervention, children and their families will be taught asthma-management skills that can help reduce the frequency and severity of asthma episodes. Through the Open Airways for School (OAS) intervention, children will be taught to detect warning signs of and identify environmental factors that can trigger an attack. The program has been shown to significantly increase asthma management skills, reduce symptoms of asthma, and improve academic performance. In 2003, 160 children and their parents are expected to complete the ACT program and 160 children are expected to complete

## **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 nongovernment 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 F52
4770 Buford Hwy, Atlanta, GA 30341
1-888-232-6789; EHHEinq@cdc.gov; http://www.cdc.gov/asthma

NCEH Pub. No. 02-0748 June 2003