

Improving the Quality of Life

Reducing Deaths and Costs

Every year almost 4,000 Americans die from asthma. Asthma's impact on health, quality of life, and the economy is substantial.

The initial onset of asthma cannot be prevented and asthma cannot be cured, but it can be controlled. People who have asthma can lead high-quality, productive lives by following a medical management plan and avoiding contact with environmental triggers.

Asthma Control

Impact on the U. S. Population

Asthma's effects on the U. S. population are substantial. A 2007 Centers for Disease Control and Prevention (CDC) study showed 34 million people had been diagnosed with asthma during their lifetimes:

- Of the 34 million, 22.9 million people still had asthma, and
- Of the 34 million, 12.3 million people had experienced an asthma attack in the previous year.

In 2006, asthma accounted for 3,613 deaths and an estimated

- 10.6 million doctor visits,
- 1.1 million non-emergency hospital outpatient visits,
- 1.6 million emergency departments visits, and
- 440,000 hospitalizations.

Source: CDC National Center for Health Statistics
<http://www.cdc.gov/nchs/fastats/asthma.htm>

CDC's National Asthma Control Program

The CDC National Asthma Control Program aims to reduce the number of deaths, hospitalizations, emergency department visits, school or work days missed, and limitations on activities due to asthma. The program supports the goals and objectives of *Healthy People 2010* and *Healthy People 2020* for asthma. The program does this by developing and implementing evidence-based best practices that reduce asthma-related morbidity and mortality, and continually enhancing our surveillance systems to monitor our progress. During Fiscal Year 2009, CDC funded grantees in 34 states, the District of Columbia and Puerto Rico for 5 years to help CDC meet these goals and objectives.

CDC's National Asthma Control Program Funding

CDC created the National Asthma Control Program in 1999 to launch a public health response to control asthma. While the rate of asthma deaths increased from 1980 to 1995, the rate of deaths has decreased each year since 2000.

CDC's National Asthma Control Program Funding
Fiscal Years 1999–2009



* Approximate funding level under CDC's budget structure.

Asthma costs the United States more than \$30 billion every year.

The costs include the direct expenditure of treating asthma.



Asthma Control Program Highlights

Meeting the Healthy People 2010 and Healthy People 2020 goals and objectives means knowing the scale of the problem and supporting programs to help manage it.

Surveillance

Surveillance is collecting and analyzing data continually to understand when, where, and among whom asthma occurs. This information is used to plan, target, implement, and evaluate interventions.

CDC developed and tested a National Asthma Survey (NAS) which was piloted in four states and a national sample in 2003. In 2005, CDC implemented this asthma data collection effort as a call-back survey subsequent to the Behavioral Risk Factor Surveillance Survey (BRFSS) in three states. By 2009, participation in the Asthma Call-back Survey (ACBS) had expanded to 35 states, the District of Columbia and Puerto Rico. In 2010, 40 states will use the ACBS to collect data. The survey asks questions about the health and experiences of persons with asthma and provides detailed state and local data. Before CDC initiated the NAS and ACBS, none of this information was available at the state level. The ACBS data are used by the states to track *Healthy People* goals, evaluate programs, and plan future activities at the state level. These data will be used to direct policy and evaluate effectiveness of state programs.

CDC's asthma program funds the following data and systems:

- state-level adult asthma prevalence rates for detailed subgroups in 50 states, 3 territories (Puerto Rico, Guam, and the Virgin Islands), and the District of Columbia, through the BRFSS; and
- national-level data on asthma attacks, asthma management, days of work or school lost, emergency room visits, and hospitalizations due to asthma through the National Health Interview Survey.

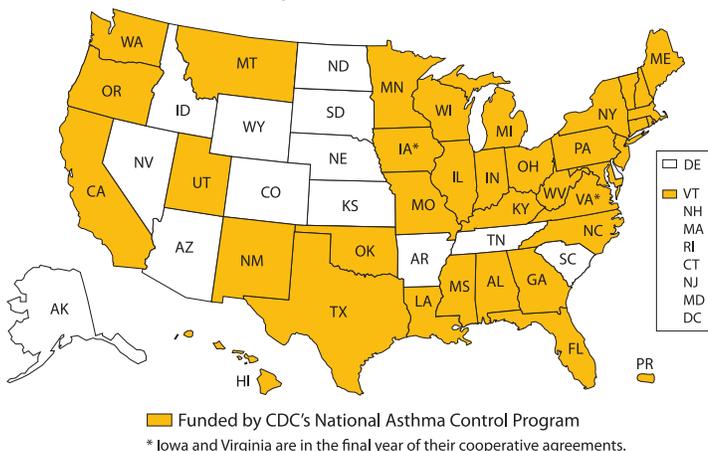
For more information on collected asthma data, visit <http://www.cdc.gov/asthma/asthmadata.htm>.

Partnerships

Together, CDC's asthma program and its many partners make up the public health response to asthma. That response is a complex web of national, state, and local activities and partnerships. Through funding and technical guidance, CDC provides critical support to state health departments to ensure that asthma control and management programs are available to those in need. CDC's work in supporting state health departments and partners includes:

- Funding for health departments in 34 states, the District of Columbia, and Puerto Rico to conduct asthma surveillance, maintain and expand partnerships, implement statewide comprehensive asthma plans with their partners, implement interventions to reduce the burden of asthma, and develop and implement an evaluation plan. CDC also funds the state health departments in California, Michigan, Minnesota, Mississippi, Missouri, New York, Oregon, Rhode Island and Washington to conduct in-depth surveillance projects (three of them using Medicaid data), disparities assessments, and interventions, implementation and evaluation. A complete list of program grantees and their activities is available at <http://www.cdc.gov/asthma/contacts/default.htm>.
- In partnership with the Environmental Protection Agency, CDC presented a series of Webinars on program evaluation, based on the CDC *Framework for Program Evaluation in Public Health*, to guide asthma programs through the essential elements of program evaluation.
- CDC collaborates with such non-government organizations as the Allergy and Asthma Network/Mothers of Asthmatics, American Lung Association, and Asthma and Allergy Foundation of America. Effective asthma tools and programs developed by these organizations are now being implemented by CDC grantees—including large hospital systems, urban hospitals, city health departments, school systems, and local chapters of national asthma organizations.

CDC's National Asthma Control Program Currently Funded Grantees



Asthma Control Program Highlights

Scientifically Proven Interventions

CDC ensures that scientific information is translated into public health practices and programs to reduce the burden of asthma. CDC has partnered with organizations on the following activities:

- CDC and the Task Force on Community Preventive Services conducted systematic reviews of the effectiveness of commonly implemented community-based asthma interventions, including home-based multi-trigger, multi-component environmental interventions, in improving asthma-related morbidity. CDC is working with state and local asthma control programs to implement this recommendation and evaluate its impact.
- CDC provided guidance and leadership to produce the *Guidelines Implementation Panel Report for Expert Panel Report 3 – Guidelines for the Diagnosis and Management of Asthma*. The report presents recommendations and strategies for overcoming barriers in accepting and using its six key messages for diagnosing and managing asthma. These messages address those issues considered to be the most likely ones to result in significant impact on asthma care processes and outcomes if the broader asthma community were to focus its attention and resources on them.

Public Health Research

CDC conducts basic research to help target asthma control efforts and provide technical support for research activities, in collaboration with partners in state, local, and private health care-delivery settings.

The specific areas of investigation include

- asthma in the elderly;
- complementary and alternative medicines use among people with asthma;
- influenza immunization rates among people with asthma;
- urban-rural disparities in asthma prevalence;
- factors related to adult-onset asthma;
- asthma and severe psychological distress; and
- racial and ethnic disparities among persons with asthma.

Communication and Education

CDC provides ongoing asthma training and educational activities and resources for state programs and other partners. The agency hosts periodic national meetings and monthly Webinars that give attendees opportunities to learn, discuss asthma activities and issues, and share lessons learned.

The program also works with partners to produce and disseminate training materials, such as *Asthma: A Presentation on Asthma Management and Prevention* and *National Asthma Training Curriculum* to increase the skills and knowledge of the public health workforce.

*Working together,
we can alleviate the
burden of asthma
and keep America
breathing easier.*



Future Directions



CDC plays a critical role in helping America breathe easier by learning more about asthma and how to control it. The program is focused on determining who has asthma and why, what triggers an asthma episode, and what interventions and programs work best.

With continued and increased funding, CDC will

1. focus on asthma-related activity within the states;
2. increase the understanding of asthma-related data and their applications to program planning and evaluation by developing an ongoing asthma surveillance system;
3. increase the use of a public health approach to reduce the burden of asthma;
4. establish and maintain partnerships among state health departments, national organizations, and non-government organizations that address asthma in the population; and
5. implement interventions to achieve positive health effects, such as reducing the number of deaths, hospitalizations, emergency department visits, school or work days missed, and limitations on activity due to asthma.