Environmental Health

Your environment is everything around you—the air you breathe, the water you drink, the community you live in, the places where your food is grown or prepared, your workplace, and your home. When your environment is safe and healthy, you are more likely to stay healthy. But when your environment exposes you to dangerous events or toxic substances, your health can be negatively affected.

CDC is committed to saving lives and protecting people from environmental hazards by responding to natural and man-made disasters, supporting state and city public health programs, educating communities, and providing scientific knowledge. We help maintain and improve the health of Americans by promoting a healthy environment and preventing premature death and avoidable illness caused by environmental and related factors. We also identify how people might be exposed to hazardous substances in the environment and assess exposures to determine if they are hazardous to human health. CDC invests in prevention to improve health and save money by reducing health care costs. We remain committed to maximizing the impact of every dollar entrusted to the agency.

**National Asthma Control Program**

Asthma is a common disease that is on the rise. It has significant health disparities and associated health care costs. CDC has been working with states for more than 10 years to implement and evaluate community-based interventions, build community-based coalitions, and track the disease burden. As a result of CDC’s work, people with asthma control their disease and live healthier, more productive lives.

CDC is the only federal agency working with state health departments to:

- Build state and community-based asthma coalitions that implement interventions. Community-based interventions target what works to control asthma, including:
  - assessment and monitoring of disease severity and control by a doctor,
  - the right medications,
  - self-management education (teaches you how to control your disease outside of the doctor’s office, including when and how to use medications), and
  - environmental control (avoiding irritants and allergens—such as pollution, pollen, and pet dander—in your indoor and outdoor environment that may trigger your asthma).
- Translate asthma disease management guidelines into public health practice.
- Collect and analyze data not available elsewhere on asthma rates, services asthma patients receive, and how doctors treat asthma. These data help show if what CDC and states are doing is working.

The National Asthma Control Program funds 36 states and territories and 4 non-governmental organizations.

While prevalence has increased over the last 10 years, trends show that more people with asthma are controlling their disease:

- 1.7 million fewer people had asthma attacks in 2009
- 1,400 fewer people died in 2007
- $3.96 billion was saved in hospital bills because 233,000 fewer hospitalizations related to asthma occurred in 2008

**Key Asthma Statistics**

- Nearly 26 million people have asthma.
- Asthma is linked to 3,388 deaths a year.
- Asthma is the 3rd leading cause of children’s hospitalization.
- Black Americans are 2–3 times more likely to die from asthma than any other racial or ethnic group.
- Asthma costs the United States an estimated $56 billion each year.
- Medicaid spends more than $9 billion dollars per year treating asthma.

**References**

- [CDC National Asthma Control Program](https://www.cdc.gov/asthma/)
- [CDC Environmental Health](https://www.cdc.gov/environmentalhealth/)

**Note:** The information provided is for educational purposes only and should not replace professional medical advice.
<table>
<thead>
<tr>
<th>Year</th>
<th>Funding Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2010</td>
<td>$30,924,000</td>
</tr>
<tr>
<td>FY 2011</td>
<td>$27,444,000</td>
</tr>
<tr>
<td>FY 2012</td>
<td>$25,298,000</td>
</tr>
</tbody>
</table>

Public Health in Action: Asthma Control in Louisiana, Michigan, and Illinois

**Louisiana**

Three Louisiana school districts have achieved the state’s asthma-friendly designation. The state asthma control program and its partners have educated more than 1,000 school personnel on asthma care and prevention and helped identify hundreds more children living with asthma. As a result, an additional 260 action plans for students with asthma are now on file with their schools. All three school districts adopted indoor and outdoor air policies such as requiring school buses to turn off their engines while idling. The school-based activities are reaching more than 13,000 Louisiana schoolchildren.

**Michigan**

Michigan’s case management program has been shown to reduce asthma hospitalizations by 66% and emergency room visits by 60%, saving more than $2,663 per child per year. More than 250,000 people with asthma now have access to these services; services targeting 250,000 people or more are in development.

A 12-year-old girl had multiple emergency department visits every year since her asthma diagnosis 2 years ago. She missed 32 days of school, and her mother lost her job because she missed too many work days due to her daughter’s asthma. After discharge from the case management service, the girl’s mother reported that her daughter “...did not miss one day of school this winter because of her breathing!” And the mother is again working full-time.

More than 1,000 adults with asthma have been through the Stanford Chronic Disease Self-Management Program. This program significantly reduces emergency department visits by 25% and increases an individual’s ability to manage their chronic disease. Studies have shown the cost-to-savings ratio for this program is approximately 1:4.

**Illinois**

“Because of the Illinois Asthma Program, my son, age 4, now is getting treatment for his asthma. Without education and networking of the Illinois Asthma Partnership, my son’s asthma might have gone untreated. He was seen by his local health care provider and diagnosed with asthma and only placed on rescue medication. After a period of time, he was not getting better. I contacted the Illinois Asthma Program for assistance. He was seen by a health care provider and a certified asthma educator at a family clinic. They did appropriate testing, confirmed the diagnosis, wrote prescriptions, and wrote us an asthma action plan for school and daycare. He continues to do well. Without the awareness of the Asthma Partnership, a child would have fallen through the gaps. I now work as the asthma coordinator for a local asthma coalition.”

For More Information

National Center for Environmental Health
www.cdc.gov/nceh

National Asthma Control Program
www.cdc.gov/asthma