Environmental Health

Your environment is everything around you—the air you breathe, the water you drink, the community around you, 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 affected negatively.

CDC is committed to saving lives and protecting people from environmental hazards by responding to natural and man-made disasters, supporting public health workers, 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 healthcare costs. We remain committed to maximizing the impact of every dollar entrusted to the agency.

Funded Activities

National Asthma Control Program
(FY 2013 funding for Illinois—$348,000. A new funding announcement has been released; FY 2014 funding information will be available later in the year.)

Asthma is a common disease on the rise, with significant health disparities and associated healthcare costs. Nearly 1 in 12 Americans (26 million) have asthma. In the last decade, the proportion of people with asthma, grew by nearly 15%.

CDC has been working with states for more than 10 years to implement community-based interventions, build local coalitions, and track the impact of the disease on the U.S. population.

The program focuses on what works to control asthma: assessing and measuring changes in disease severity and control, using the right medications, educating people to manage their conditions, and controlling environmental irritants and allergens.

Even though the number of people with asthma has increased over the last 10 years, trends show that more are controlling their disease:

- 1.7 million fewer people had asthma attacks in 2009.
- 233,000 fewer asthma-related hospitalizations occurred in 2008, leading to $3.96 billion in savings in hospital bills.
- 1,400 fewer people died of asthma in 2007.

Lead Poisoning Prevention Program
(FY 2011 funding for Illinois—$594,000; because of funding reductions, the program was discontinued in 2012. Some funding was restored in FY 2014. States will be recompeting for funding and more information will be available later in the year.)

More than 12 million U.S. children are exposed to lead in their homes at levels that can harm their intellectual development. No safe blood level in children has been identified.
Reducing children’s lead exposure is perhaps the greatest environmental health accomplishment in the past 20 years.

For more than 20 years, CDC funded state and local health agencies to:

- Support surveillance, training, and technical capacity to help identify children with dangerous exposures to lead.
- Connect these families and children to appropriate healthcare and case management.
- Inspect and remediate unsafe homes.

Children who are exposed to lead lose $3,000 to almost $8,000 in lifetime productivity for each 1 microgram per deciliter (μg/dL) increase in blood lead level. Blood lead levels over 1 μg/dL are associated with measurable reductions in IQ.

Between 2007–2008 and 2009–2010, interventions that control or eliminate lead hazards before children are exposed (primary prevention) helped reduce the number of children exposed to lead (blood lead levels ≥ 1μg/dL) by nearly 3 million, saving $26–57 billion in lifetime productivity earnings alone. These estimates do not account for behavioral and other adverse effects on lifetime productivity linked to lead.

Public Health in Action:

**Asthma Hospitalizations and Death Rates Reduced in Illinois**

During the past 20 years, Illinois has had one of the highest asthma death rates in the nation, and the number of people living with asthma in the state has increased. CDC’s partnership with Illinois health departments helps people control their asthma symptoms, stay out of the hospital, and lead healthier, more productive lives. The Illinois Health Department’s Asthma Program started in 1999 with CDC funding. Since then, the rate of hospitalizations for asthma has declined by almost 18%. In 2007, though the number of people living with asthma continued to increase, asthma death rates hit their lowest levels ever. The program also has realized many other successes such as developing a statewide, 140-member asthma coalition structure; partnering with the Girl Scout Association to help Girl Scouts earn an asthma badge; increasing use of asthma action plans in schools; and providing educational asthma toolkits for workplaces, child-care facilities, and coaches.

One mother’s story helps illustrate the work of the program:

“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 healthcare 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 healthcare 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.”

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**Lead**

- In 2011, 13,035, or 8.7% of children ages 6 and under who were tested for blood lead in Illinois, had elevated blood lead levels (≥5μg/dL or greater).
- *CDC’s funding to state lead poisoning prevention programs was eliminated in FY 2012 because of budget reductions.*
Lead Poisoning Prevention in Illinois*

The following is a description of activities carried out in previous years with the support of CDC’s Lead Poisoning Prevention Program when it was fully funded:

CDC funding supported the Illinois Department of Public Health’s Lead Program in its efforts to

- improve public awareness of childhood lead poisoning,
- promote lead-safe housing choices, conduct surveillance to identify areas of highest concern and risk,
- improve screening practices for at-risk children,
- conduct medical and environmental interventions in cases of lead exposure, and
- provide data analysis and evaluation of outcomes of program interventions.

State legislation was enacted in 1993 that requires all children within the state to be tested for blood lead levels before age 6. Before children enter day care, preschool, or kindergarten, they are required to be assessed for lead exposure. Illinois’ Lead Program compiled and evaluated test results, identified children requiring medical treatment, and referred children with elevated blood levels to programs offering case management. In 2011, 13,035 Illinois children were identified with blood lead levels of 5 µg/dL or greater and more than 1,900 children with blood lead levels of 10 mg/dL received case management services. Local health departments and regional nurse consultants followed up with children with elevated blood lead levels, conducting education sessions on lead exposure prevention and presenting treatment options.

Regional and local health department staff inspected 2,756 homes and common play areas for lead hazards in 2010. Homes with lead-based paint and other hazards require mitigation by lead abatement professionals. The Lead Program licensed lead inspectors, lead risk assessors, abatement contractors, lead supervisors, and lead workers and provided ongoing education to lead professionals. In addition, the program approved lead training course providers.

Illinois’ Lead Program sent out quarterly newsletters highlighting program activities, and operated a website that provided information about lead prevention and updates to rules and regulations. The program also provided educational materials to health care providers, parents, schools, day care facilities, real estate agents, contractors, and the public.