

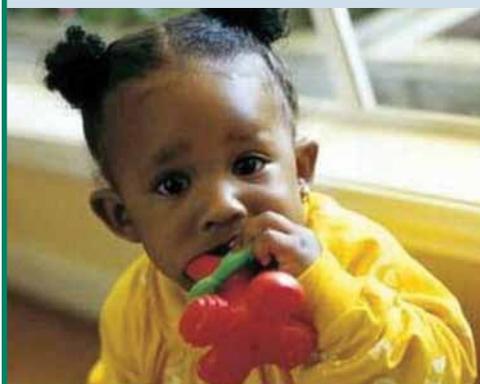
# CDC's Healthy Homes/Lead Poisoning Prevention Program

*CDC 24/7: Saving Lives. Protecting People from Health Threats. Saving Money Through Prevention.*

## 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.



## Healthy Homes and Lead Poisoning Prevention Program

**Reducing children's exposure to lead is one of the greatest environmental health accomplishments in the past 20 years. However, there is no safe level of lead, and children are still being exposed to lead and other environmental hazards in their homes.**

CDC's Healthy Homes and Lead Poisoning Prevention Program protects children from lead exposure. For example, in FY 2011 CDC's program supported:

- Surveillance and technical capacity in 35 state and local health agencies.

With CDC's support, these agencies were able to:

- » detect children who have had harmful exposures to lead,
  - » track incidence and causes,
  - » inspect the home and remove the environmental threat,
  - » connect with clinicians to ensure that the child's health is protected through appropriate case management, and
  - » provide education to the public and health care providers.
- Lead poisoning prevention training to public health professionals through the Healthy Homes Training Center and Network.
  - Childhood Blood Lead Surveillance System through which 34 states and the District of Columbia report data to CDC, providing surveillance coverage of nearly all U.S. states.
  - Expanded public health laboratory capacity in states to analyze blood and environmental samples and to ensure quality, timely, and accurate analysis of results.
  - Targeted screening and case management guidelines that provide health departments and health care providers with standards to identify and manage the most at-risk children with elevated blood-lead levels.

- Today, out of 38 million households with children, at least 4.2 million households (11%) have children living in them that are being exposed to lead at levels that can harm their intellectual development.
- These children who are exposed to lead suffer a \$3,000 to almost \$8,000 loss in lifetime productivity for each 1 µg/dL incremental increase in blood-lead level, and blood-lead levels over 1 are associated with measurable reductions in IQ.
- In 2010, more than 12 million U.S. children had levels above this threshold, and it is estimated that they will suffer a \$45 to \$99 billion loss in lifetime productivity associated with this exposure.
- African-American children are three times more likely than white children to have elevated blood-lead levels.

National Center for Environmental Health  
Agency for Toxic Substances and Disease Registry



These efforts led to enormous success in protecting children from lead exposure:

- Between 2008–2010, CDC and its state programs helped reduce the number of children who have been exposed to lead by nearly 3 million (blood lead levels  $\geq 1 \mu\text{g}/\text{dL}$ ), **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 exposure, such as attention-deficit/hyperactivity disorder, juvenile delinquency, criminal behavior, and an increased need for special education.
- CDC provided technical assistance to support the development of state and local lead-screening plans and abatement laws. By 2009, 27 states had comprehensive laws requiring lead paint abatement (whereas only 3 states had such laws in 1990).

### **For More Information**

National Center for Environmental Health  
[www.cdc.gov/nceh](http://www.cdc.gov/nceh)

Healthy Homes/Lead Poisoning  
Prevention Program  
[www.cdc.gov/nceh/lead](http://www.cdc.gov/nceh/lead)



### **Program Funding: Healthy Homes and Lead Poisoning Prevention Program**

Year	Funding Level
FY 2010	\$34,805,000
FY 2011	\$29,257,000
FY 2012	\$1,995,000

## **Public Health in Action: Lead Poisoning Prevention in Michigan**

Each year, approximately 1,300 children and 750 adults are newly diagnosed with harmful levels of lead exposure in Michigan. State and county health department officials follow up on these cases, inspect the homes, and order repairs to housing units with lead hazards. The Michigan Department of Community Health (MDCH) issued more than 280 abatement or lead-hazard-control orders in 2010, and 1,089 lead-hazard-control activities were completed.

MDCH also maintains a surveillance system to capture and aggregate the results of blood tests for lead. Since January 1, 1998, they have accumulated nearly 2.1 million records. MDCH uses the data to pinpoint high-risk areas for lead poisoning and track patterns over time.

Despite MDCH's aggressive efforts, serious problems persist. While MDCH's prevention efforts have reduced the number of children with harmful exposures to lead, Michigan still ranks fifth worst in the United States in this area. Only 21% of Michigan children under 6 years of age receive testing for lead annually, and a recent study indicates that more than half the kids in the Detroit Public School system have had harmful exposures to lead at some point. Estimates show that dangerous exposures to lead in children cost Michigan between \$3.2 and \$4.85 billion per year for the annual loss of future lifetime earnings of these children. That figure does not include the skyrocketing costs of special education, medical treatment, and law enforcement. More work is needed.

MDCH relies on CDC funding to keep its lead poisoning prevention program running. In 2010, CDC funding paid for seven full-time positions and CLEARCorps projects that focused on Detroit, Pontiac, Grand Rapids, and Muskegon.