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 Montana—$308,000; 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 care 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 interventions, build coalitions, and track the impact of the disease on the U.S. population.

Program activities focus 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 Montana—$492,000; 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 which can harm their intellectual development. No safe blood level in children has been identified.

Asthma

- About 84,000 Montana residents are living with asthma, including 9% of the adult population and 7% of the state’s children.

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 that help identify children with dangerous exposure 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 by nearly 3 million (blood lead levels ≥ 1μg/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.

**Public Health in Action:**

**Asthma Control in Montana**

CDC has supported the implementation of Montana’s resource guide, Creating Asthma Friendly Schools in Montana since 2009. More than 600 school personnel have received hands-on training in creating supportive environments for students with asthma. In a survey conducted in 2011, 60% of school administrators reported receiving a school-based asthma resource guide and 23% reported receiving related training. Schools where administrators have received training are significantly more likely to have asthma friendly policies and practices in place.

In addition, the state asthma program is assisting hospitals to implement the Asthma Hospital Patient Education, Action Plan, and Discharge (AHEAD) Protocol. The AHEAD Protocol promotes the use of evidenced based care and education to empower patients to better manage their asthma after a trip to the emergency department. By August 2012, nine of Montana’s 45 hospitals had adopted the protocol.

**Lead Poisoning Prevention and Healthy Homes in Montana**

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

The purpose of Montana’s Healthy Homes and Lead Poisoning Prevention Program was to

• Reduce or eliminate housing-related health hazards.
• Address hazards in the home.
• Prevent housing-related diseases and/or injuries.

Lead poisoning prevention and healthy homes efforts are important in Montana because

• Montana’s long history of mining and smelting activities contributed to significant ground water and soil contamination.
• Approximately 24% of Montana homes were built before 1950. These older homes may pose lead exposure risks.

*CDC’s funding to states lead poisoning prevention programs was eliminated in FY 2012 because of budget reductions.*