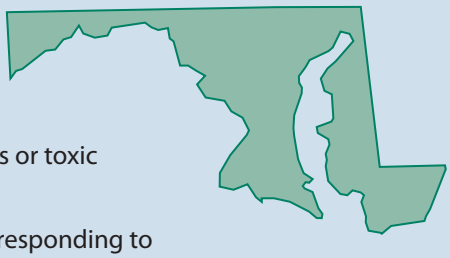
CDC's National Center for Environmental Health: Maryland

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 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.

Asthma

- In 2009 an estimated 389,000 Maryland adults and159,000 children were living with asthma—that's about 9 percent of adults and 12 percent of children.

From: http://www.cdc.gov/asthma/contacts/factsheets/Asthma-Maryland_f.pdf

Funded Activities

National Asthma Control Program

(FY 2013 funding for Maryland—$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 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 Maryland—$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 lead 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 has funded state and local health agencies to

- Support surveillance, training, and technical capacity to 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 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.

Environmental Public Health Tracking Program

(FY 2013 funding for Maryland—$614,000. A new funding announcement has been released; FY 2014 funding information will be available later in the year.)

The World Health Organization (WHO) estimates that nearly 25% of all diseases are caused by environmental exposures. Some of these diseases—such as cancer, asthma, and cardiovascular disease—are the greatest killers today.

CDC's Environmental Public Health Tracking Network (Tracking Network) is a dynamic web-based tool that tracks and reports environmental hazards and the health problems that may be related to them.

The Tracking Network's integrated health, environmental exposure, and hazard information is used to

- Identify interventions and programs to reduce or prevent health effects from environmental exposures.
- Assess and research environmental links to diseases.
- Learn more about health and environmental issues in the communities where we live.

Since 2005, the Tracking Network has led to at least 160 public health interventions that prevent or control potential health effects from environmental exposures.

Lead

- Of children ages 6 and under who were tested for blood lead in Maryland in 2011, 3,228 children had elevated blood lead levels (5 µg/dL or greater).
- *CDC's funding to state lead poisoning prevention programs was eliminated in FY 2012 because of budget reductions.

Climate and Health Program

(FY 2013 funding for Maryland—$238,000. FY 2014 funding information will be available later in the year.)

Changes occurring in the world's climate are affecting our health and well-being, especially among the most vulnerable among us—children, the elderly, the poor, and people with underlying health conditions.

Climate and Health Program funding for CDC represents the dedicated U.S. government investment in preparing our nation to anticipate and adapt to the health consequences of climate events like extreme weather events, wildfires, air pollution, and insects.

CDC efforts support

- Identifying populations most vulnerable to these impacts.
- Anticipating future trends.
- Ensuring that systems are in place to detect and respond to emerging health threats.
- Taking steps to assure

Built Environment and Health Initiative[1]

(FY 2013 funding for Maryland—$155,000. A new funding announcement has been released; FY 2014 funding information will be available later in the year.)

The way we design and build our communities can affect our physical and mental health. Public health challenges like asthma, motor vehicle-related injuries, obesity, and heart disease are directly related to how communities are designed and built.

CDC's Built Environment and Health Initiative is the only source of federal expertise to help states and communities integrate health considerations into transportation and community planning. Strategic community design can increase physical activity, reduce injuries, improve air and water quality, and minimize contributions to climate change.

CDC's Built Environment and Health Initiative

- Helps cities reduce health costs by supporting health impact assessments (HIAs) that recommend proven public health approaches.
- Equips health departments with the tools to efficiently assess their community design and health needs and to build ongoing relationships with local governments or planning commissions.
- Provides scientific expertise to promote important federal priorities like the National Prevention Strategy's focus on safe healthy community environments.
- Provides training and assistance on how proposed projects; policies; and state, tribal, and local decisions can affect community health.
- Tracks key environmental public health indicators related to active transportation and local and state community design data.
- Conducts research to identify the links between health and community design and translates that research into best practices.

1Built Environment and Health Initiative is also known as Healthy Community Design Initiative. www.cdc.gov/healthyplaces

Public Health in Action:

Asthma Control in Maryland

The Maryland Asthma Control Program launched the Asthma Friendly Child Care program in the spring of 2012. Immediately, more than 50 child care providers expressed interest in participating in the program. The voluntary program offers education on how to create healthy environments for children with asthma, such as having asthma action plans on file for each child. The asthma program trains child care providers on how they can achieve an official asthma-friendly designation. By summer of 2013, more than 150 providers have completed the training, which is also available to Head Start and after-school programs.

Lead Poisoning Prevention in Maryland*

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:

From 1992 through 2011, the Maryland Department of the Environment's (MDE) Lead Poisoning Prevention Program used CDC funding for childhood lead poisoning case management and surveillance. In 2011, 452 (0.4%) children younger than age 6 were identified with blood lead levels of 5 µg/dL or greater. Hundreds of children with blood lead levels above 10 µg/dL received medical and environmental case management and dozens of properties received environmental inspections.

To address lead poisoning more effectively, MDE collected additional data on public health dangers in the home using CDC's Healthy Homes and Lead Poisoning Prevention Surveillance System. In 2011, MDE identified zip codes of children with elevated blood lead levels and recommended state and local actions to increase practices to reduce lead exposure. For example, the state increased its authority to issue abatement orders.

Nine local housing code offices in Maryland are trained in the primary prevention components of lead risk reduction. These offices notify MDE of property owners that cannot demonstrate compliance with MDE's Lead Rental Property Registration and risk reduction treatments for rental units built before 1950. Baltimore trains housing inspectors in lead risk reduction.

Local health departments and the Coalition to End Childhood Lead Poisoning, in conjunction with MDE, regularly provide education to high-risk tenants, residence owners, and the public on how to reduce exposure to lead hazards. MDE posts lead violations on its Lead Poisoning Prevention Program website and also provides informational resources and issues the "The Lead Leader" newsletter that provides updates on legislation concerning lead hazards.

Baltimore's Childhood Lead Poisoning Prevention Program reaches out to and trains pregnant women on healthy housing practices as part of the city's Primary Prevention Initiative (Stork's Nest). As of 2011, the Stork's Nest program had reached 175 high-risk pregnant women. The program will also provide 100 pregnant women with assistance in obtaining lead hazard reduction treatments for their homes.

Baltimore also pilot-tested the Green and Healthy Housing Initiative. This innovative program links weatherizing homes and making them more energy efficient with methods of addressing common health hazards found in housing. It is a model for other programs across the country in integrating lead poisoning prevention into a broader healthy homes approach.

Tracking

- Tracking data are available on several health indicators, including asthma, birth defects, carbon monoxide, childhood blood lead levels, and heart attacks.

From:
http://phpa.dhmh.maryland.gov/OEHFP/EH/tracking

Built Environment/Healthy Community Design

- Communities use CDC's tools to build infrastructure that maximizes good health.
- One third of Baltimore city agencies contributed directly to the health department's HIA activity during the first year of CDC funding. They participated in workshops, analyzed data, or consulted on policy recommendations.

Tracking Environmental Hazards in Maryland

Community concerns about cancer and potential links to environmental hazards occur relatively frequently in Maryland. Before the Maryland Tracking Program began in 2002, the state had no systematic way to respond to frequently asked questions about cancer and the environment.

The Tracking Program, working with the Maryland Cancer Registry, geocoded all residential addresses in the Registry. Now the Maryland Cancer Registry can show cancer data accurately in maps and carry out geospatial analyses of cancer information. Also, for the first time, there is an established process for evaluation of cancer concerns in Maryland, a process that coordinates between the Maryland Cancer Registry, Center for Environmental Health Coordination, Maryland Department of the Environment (MDE), and local health departments. Information and data from this effort are now available on the Maryland Tracking Program's website.

The Tracking Program has worked with the Maryland Cancer Registry on two major cancer investigations. One in Poolesville looked at concerns about cancer and drinking water; another in Frederick involved concerns about cancer in a community. In both cases, the Maryland Tracking Program provided maps showing the geographic distribution of cancer and geostatistical analyses of the cancer cases. The results of these two investigations were presented at community meetings. To date, there is no evidence of the existence of cancer clusters, but experts were able to answer questions from community residents.

Supporting Built Environment and Health in Baltimore

CDC supported the Baltimore City Health Department (BCHD) in promoting health impact assessments (HIA). These allow policy makers and health officials to evaluate the potential health effects of a plan, project, or policy before it is built or implemented. HIAs can provide recommendations to improve public health and minimize negative health effects.

CDC supported BCHD in HIA training for 25 senior leaders from city agencies to kick off the city's capacity building project. BCHD also trained 35 persons involved in its 2012 HIAs. These HIAs were later incorporated into the curriculum of a Johns Hopkins masters' level public health course on HIAs. Three of the city's HIA projects were made possible by CDC funding and technical support to evaluate the possible health effects of

- Creating a mixed-use, mixed income neighborhood around Lexington Market.
- Revising the city's zoning code on alcohol outlet density.
- Transferring large adjacent tracks of vacant properties with market appeal to developers for whole-block redevelopment.

To further the success of the first year of its CDC-funded program, BCHD developed an interagency health and equity impact policy workgroup of mid- to senior-level staff from all major city agencies.

The city used the options provided in its HIA to propose a revision of its zoning code to reduce the number of liquor stores in residential areas. If the legislation passes, the city will phase out about 100 liquor stores that do not meet the new zoning requirements.