



Environmental Health Activities in Kentucky



NCEH in Partnership With Kentucky

NCEH is the National Center for Environmental Health (NCEH), a part of the Centers for Disease Control and Prevention (CDC). NCEH's work focuses on three program areas: identifying environmental hazards, measuring exposure to environmental chemicals, and preventing health effects from environmental hazards. NCEH has more than 450 employees and an annual budget for 2003 of approximately **\$182 million**; its mission is to promote health and quality of life by preventing or controlling those diseases or deaths that result from interactions between people and their environment.

NCEH and partners throughout Kentucky have teamed up on a variety of environmental health projects throughout the state. From **fiscal years 2001 through 2003**, NCEH awarded more than **\$3.7 million** in direct funds and services to **Kentucky** for various projects. In addition, Kentucky also benefits from national-level prevention and response activities conducted by NCEH or NCEH-funded partners.

Identifying Environmental Hazards

NCEH identifies, investigates, and tracks environmental hazards and their effects on people's health. Examples of these kinds of activities include asthma surveillance and environmental public health tracking. NCEH has not recently conducted or supported any such activities in **Kentucky**.

Measuring Exposure to Environmental Chemicals

NCEH measures environmental chemicals in people to determine how to protect people and improve their health. Following are examples of such activities that NCEH has conducted or supported in **Kentucky**.

Funding

- **Antiterrorism Funding to Increase State Chemical Laboratory Capacity**— In fiscal year 2003, CDC provided \$237,086 to assist **Kentucky** in expanding its chemical laboratory

capacity to prepare and respond to chemical terrorism incidents and other chemical emergencies.

This program expansion will allow for full participation of chemical-terrorism response laboratories in the Laboratory Response Network.

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Services

- **Lipid Standardization Program (LSP)**—NCEH provides standardization support to one lipid research laboratory in **Kentucky** that is involved in epidemiologic studies or clinical trials investigating risk factors for and complications of cardiovascular disease. LSP, supported by CDC's Lipid Reference Laboratory (the cornerstone of the National Reference System for Cholesterol to which these lipid measurements are traceable), provides quarterly analytical performance challenges and statistical assessment reports to allow program participants to monitor performance over time and thus ensure the accuracy and comparability of study results and findings.

Preventing Health Effects From Environmental Hazards

NCEH promotes safe environmental public health practices to minimize exposure to environmental hazards and prevent adverse health effects. Following are examples of such activities that NCEH has conducted or supported in **Kentucky**.

- **Childhood Lead-Poisoning Prevention**—The **Louisville/Jefferson County Department of Health** has received funding from NCEH for its Childhood Lead-Poisoning Prevention Program (CLPPP) since 1992. The Jefferson County Department of Health houses the National Lead Training Resource Center, the only facility of its kind to provide training on the fundamentals

of childhood lead poisoning to public health professionals across the country. The Louisville-Jefferson County CLPPP intends to continue supporting the screening, education, and outreach services necessary to reduce blood lead levels of children in Jefferson County. In collaboration with CDC, the Louisville-Jefferson County CLPPP used geographic information system technology to conduct a descriptive study of the blood lead levels and residential location of at-risk children screened for lead exposure. This study showed that 79 houses in the area were home to 187 children—35% of all children identified with lead poisoning between 1994 and 1998.

In 2000, the **Kentucky Department of Public Health** was awarded a cooperative agreement to ensure that children at risk for lead poisoning are screened and that children with elevated blood lead levels receive medical and environmental follow-up services. The state was funded to develop and implement a statewide surveillance system to monitor screening and follow-up services, determine the prevalence and distribution of lead poisoning, and identify populations at high risk for lead exposure. In 2000, 15,844 children younger than 6 years of age were tested in Kentucky. Of those children tested, 142 had elevated blood lead levels (10 micrograms per deciliter [$\mu\text{g}/\text{dL}$]). In 2000–2002, 6% (range 0%–20.5%) of all children younger than 6 years of age and 10% (range 0%–36.4%) of all children aged 1–2 years of age, respectively, received a lead test in Kentucky.

Kentucky provides free lead testing to children in all of its counties. Kentucky leads in Lead-Safe Work Practices Training, targeting more than 380 environmental and housing professionals such as abatement contractors, landlords, property owners, and housing personnel. Kentucky has a longstanding partnership with the U.S. Department of Housing and Urban Development and several community-based primary prevention programs with a major focus on in-house one-on-one education visits with parents of children identified as at-risk because of one or two blood lead levels of 15–19 $\mu\text{g}/\text{dL}$.

2002–2003, NCEH provided funding and technical assistance to develop and conduct the **Louisville Metro Community-Based Emergency Response Program**, which offers public health practitioners and emergency response personnel the opportunity to experience firsthand one of the nation's most successfully integrated community public health/emergency response systems. The training program is a joint partnership of the **Louisville Metro Health Department**, the **Louisville Metro Crisis Group**, and CDC. This program is moving into its second year of providing monthly all-hazards preparedness assistance to state, local, tribal, and international public health agencies.

In 2003, NCEH provided funding to support a joint partnership with the Louisville Metro Health Department to develop and staff an Environmental Public Health Training Institute that brings together the best of environmental health leadership, practitioners, and evidence-based science to train the environmental health leaders and scientists of tomorrow.

During 2003, the **Kentucky Department of Health** received technical assistance from NCEH to design, plan, conduct, and evaluate two public health preparedness exercises in **Paducah** and **Hazard**. Public health emergency response technical assistance, support services, and training exercises are available to state, local, and tribal health authorities. The NCEH program provides technical assistance that includes helping community public health authorities establish and maintain a comprehensive emergency response exercise program, develop and facilitate emergency response exercises, create a design team for a community emergency response exercise, and give other related technical support.

- **Louisville Metro Community-Based Emergency Response Program**—During

- **Environmental Public Health Leadership Institute (EPHLI)**—A priority goal in implementing CDC's National Strategy to Revitalize Environmental Health Services is to foster leadership by providing guidance, training, and assistance to building and enhancing leadership capabilities. In fiscal year 2003, CDC awarded more than \$900,000 to **Kentucky** for the development of an **Environmental Public Health Leadership Institute** in **Louisville**.

The EHPLI goals are to develop the leadership competencies needed to address the environmental health challenges of the 21st century and to improve environmental health practice within state, tribal, and local organizations.

In October 2003, a workgroup met in Louisville to kick off development of a national EPHLI. The workgroup, which includes representatives from the National Environmental Health Association, National Public Health Leadership Development Network, University of South Carolina School of Public Health, **University of Kentucky Public Health Leadership Institute, Eastern Kentucky University**, University of Denver, Oklahoma State Health Department, University of Oklahoma, and University of Washington, is developing a curriculum and a framework for full implementation of EPHLI.

Resources

NCEH develops materials that public health professionals, medical care providers, emergency responders, decision makers, and the public can use to identify and track hazards in the environment that pose a threat to human health and to prevent or mitigate exposure to those hazards. NCEH's resources cover a range of environmental public health issues, including air pollution and respiratory health (e.g., asthma, carbon monoxide, and mold issues), biomonitoring to determine whether and how much of substances in the environment are getting into people, childhood lead poisoning, emergency preparedness and response for chemicals and radiation, environmental health services, environmental public health tracking, international emergency and refugee health, laboratory sciences as applied to environmental health, radiation studies, safe chemical weapons disposal, specific health studies, vessel sanitation, and veterans' health.

For more information about NCEH programs, activities, and publications and other resources, contact the NCEH Health Line toll-free at 1-888-232-6789, e-mail NCEHinfo@cdc.gov, or visit the NCEH Web site at www.cdc.gov/nceh.

