



Environmental Health Activities in Connecticut



NCEH in Partnership with Connecticut

The National Center for Environmental Health (NCEH) is 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 that result from environmental hazards. NCEH has approximately 450 employees and a budget for 2004 of approximately \$189 million; its mission is to promote health and quality of life by preventing or controlling diseases and deaths that result from interactions between people and their environment.

NCEH and partners in **Connecticut** collaborate on a variety of environmental health projects throughout the state. In **fiscal years 2001–2004**, NCEH awarded more than **\$4 million** in direct funds and services to Connecticut for various projects. These projects include activities related to national environmental public health tracking, biomonitoring, and childhood lead poisoning prevention. In addition, Connecticut 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. Following are examples of such activities that NCEH conducted or supported in **Connecticut**.

- **Addressing Asthma from a Public Health Perspective**—NCEH is funding the **Connecticut Department of Public Health (CT DPH)** to develop asthma-control plans that include disease tracking, science-based interventions, and statewide partnerships to reduce the burden of asthma in home, school, and occupational environments. Funding began in fiscal year 2000 and continues through fiscal year 2004.

- **National Environmental Public Health Tracking Program: Planning and Capacity-Building**—NCEH is funding **CT DPH** to develop

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a comprehensive plan for a coordinated and integrated environmental public health tracking network (EPHTN). EPHTN will link reporting of health-effects data with human exposure and environmental data. The **Connecticut Department of Environmental Protection (CT DEP)** will partner with CT DPH to develop this program. CT DEP and CT DPH have several surveillance systems and databases that will be explored for linkage opportunities. The planning process will include a more complete inventory and summary of databases and information streams. Funding began in fiscal year 2001 and ends in fiscal year 2005.

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 conducted or supported in **Connecticut**.

Funding

- **Antiterrorism Funding to Increase State Chemical Laboratory Capacity**—In fiscal year 2003, CDC provided more than \$1.1 million to **Connecticut** to help expand chemical laboratory capacity to prepare for and respond to chemical-terrorism incidents and other chemical emergencies. This expansion will allow full participation of chemical-terrorism response laboratories in the Laboratory Response Network.

In addition, NCEH funds laboratory development and the purchase of state-of-the-art equipment in Connecticut's public health laboratory to develop a network of chemical laboratories and transfer technology to measure chemical agents.

- **Biomonitoring Grants**—In fiscal years 2001 and 2002, NCEH awarded planning grants to **Connecticut** to develop an implementation plan for a state biomonitoring program. In this way, the state could make decisions about which environmental chemicals within its borders were of health concern and could make plans for measuring levels of those chemicals in the Connecticut population.

Services

- **Helping State Public Health Laboratories Respond to Chemical Terrorism**—NCEH is working with **Connecticut**'s public health laboratory to prepare state laboratory scientists to measure chemical terrorism agents or their metabolites in people's blood or urine. NCEH is transferring analytic methods for measuring chemical-terrorism agents (including cyanide-based compounds and other chemicals) to Connecticut. In addition, NCEH instituted a proficiency-testing program to measure the compatibility of the state's analytic results with results from the NCEH laboratory.
- **Newborn Screening Quality Assurance Program**—NCEH provides proficiency-testing services and dried-blood-spot, quality-control materials to monitor and help assure the quality of screening program operations for newborns in **Connecticut**. The importance of accurate screening tests for genetic metabolic diseases cannot be overestimated. Testing of blood spots collected from newborns is mandated by law in almost every state to promote early intervention that can prevent mental retardation, severe illness, and premature death.
- **Lipid Standardization Program (LSP)**—NCEH provides a lipid research laboratory in **Connecticut** with accuracy-based standardization support for analytic measurement. This laboratory is involved in one or more ongoing lipid metabolism longitudinal studies or clinical trials that investigate risk

factors and complications associated with cardiovascular disease. The LSP, supported by NCEH's Lipid Reference Laboratory, provides quarterly analytic performance challenges and statistical assessment reports that allow program participants to monitor performance over time and thus ensure the accuracy and comparability of study results and findings.

Preventing Health Effects That Result 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 conducted or supported in **Connecticut**.

- **Childhood Lead Poisoning Prevention Program**—The **Connecticut Childhood Lead Poisoning Prevention Program (CT CLPPP)** has received NCEH funding since 1991. In 2001, the program screened 66,333 children for lead poisoning. The number of children under age 6 years with elevated blood lead levels has decreased from 3,000 in 1997 to 1,977 in 2001. These decreases in blood lead levels are due to state program efforts funded in part by NCEH. CT CLPPP is using NCEH funds to upgrade its statewide surveillance system and promote blood lead screening and follow-up among children receiving Medicaid. Funds are also being used to increase primary prevention of childhood lead poisoning to children under 6 years of age and to pregnant women.
- **Environmental Health Specialists Network (EHS-Net)**—EHS-Net is an NCEH-funded cooperative agreement with eight partner states, including **Connecticut**. As part of this program, Connecticut has participated in the prioritization, development, and implementation of several research projects including a study of egg-handling practices in restaurants published in the July 2004 *Journal of Food Protection*. Connecticut helped develop a new environmental outbreak evaluation instrument and participated in a study of policies and food-handling practices linked to foodborne outbreaks in restaurants. Several areas were identified in which further emphasis might reduce egg-associated *Salmonella enterica*

serotype Enteritidis infections in accordance with Healthy People 2010 goals.

Connecticut is participating in a beef-handling study and a hand-hygiene study. These studies help food safety program managers and policymakers develop, implement, and evaluate strategies to prevent foodborne disease at the retail level.

Resources

NCEH develops materials that public health professionals, medical-care providers, emergency responders, decision makers, and the public can use to identify and track environmental hazards that threaten human health and to prevent or mitigate exposure to those hazards. NCEH's resources cover a range of environmental public health issues. These issues include air pollution and respiratory health (e.g., asthma, carbon monoxide poisoning, and mold exposures), biomonitoring to determine whether selected chemicals in the environment get into people and to what extent, childhood lead poisoning, emergency preparedness for and response to 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 disposal of chemical weapons, specific health studies, vessel sanitation, and veterans' health.

For more information about NCEH programs, activities, and publications as well as 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.

