NEW HAMPSHIRE

Keeping Track, Promoting Health

Building a Network

Without question environmental contaminants are affecting people's health. Environmental hazards are among parents' top health concerns for their children, according to the American Academy of Pediatrics. Understanding how those contaminants, and other environmental factors are linked to chronic disease, is essential to disease prevention. And, it's the right thing to do to protect the health of our communities.

The Centers for Disease Control and Prevention (CDC) is currently leading the initiative to build the National Environmental Public Health Tracking Network. This Web-based system will integrate health and environmental data and provide information to not only address public health concerns, but also educate the public on ways it can protect itself from possible contamination and disease. The Tracking Network is CDC's response to calls for better understanding of how the environment can affect people's health.

The data generated through tracking are actionable. Today, because of tracking, Washington State can not only think about mercury levels in fish, but can also compile information from many sources and use it to educate citizens faster and more accurately about healthy fish choices. In Maine, tracking has allowed the state to examine high arsenic levels in well water and their effects on reproduction. Consequently, state public health officials can now warn well users about the hazards of exposure to arsenic during pregnancy.

In 2008, CDC will launch the Tracking Network, encouraging communities, health care providers, state and local health departments and others to take control of their health.

The building blocks of this network are grants to state and local health departments and universities around the country to build capacity and demonstrate just what tracking can do.

Building the Foundation: New Hampshire (2002 – 2006)

In 2002, the New Hampshire Department of Health and Human Services received funding from CDC to plan for a statewide Environmental Public Health Tracking Network that will be part of the national tracking network. New Hampshire used the funding to build capacity, enhance infrastructure, and complete data linkage projects. The results range from improving surveillance to enabling faster responses to environmental public health questions and faster action to prevent disease.

Why Tracking Matters to New Hampshire

Tracking programs often help focus the search for the roots of illness by ruling out a suspected environmental cause. In January 2006, a retired physician told the local newspaper that he suspected a cancer cluster in Claremont, a former mill town in the Upper Connecticut River Valley. His comments came amidst an ongoing controversy over air pollution from a large solid waste incinerator operating nearby and sparked a call to look into the health and environmental status of the town.

The New Hampshire Governor asked the state health and environmental services departments to investigate. Because of a pilot tracking program, the investigators had access to 14 years of health and environmental data showing that cancer incidence in Claremont was actually less than expected for similar communities and for the entire state. Tracking Program staff explained the study's results to community members in town meetings and answered their questions about health and the environment. This is an example of how tracking can provide answers to environmental and health questions and help calm community fears.

"So much has changed since the Pew Commission report," says Shelley Hearne, Dr.P.H., founding executive director of Trust for America's Health. "It's phenomenal to see the rapid evolution from concept to implementation, from gap to engagement."

Tracking in Action

	What is the problem?	What did tracking do?	Improved public health
Building Local Environmental Public Health Capacity	About one of every 33 babies is born with a birth defect. For most birth defects, the cause is still unknown; however, environmental factors are suspected to play a role in certain birth defects. New Hampshire did not have a statewide system to track birth defects and environmental hazards.	To determine needs and build birth defects tracking capacity, the New Hampshire Tracking Program staff first conducted a feasibility assessment. For the project, staff geocoded more than 7,000 birth records from Manchester, NH from 1999-2004 and calculated indicators for births outcomes that may be environmentally related, such as prematurity and birth weight.	Tracking staff successfully geocoded 98 percent of the birth records in Manchester, NH. They also standardized their methods and will geocode births for the rest of the state. In future research, Tracking staff will measure environmental impact on birth outcomes throughout the state and will account for socioeconomics and prenatal care quality.
Understanding the Relationship between Radon Gas and Lung Cancer	Radon is a colorless, odorless, naturally occurring, radioactive gas. Only smoking causes more cases of lung cancer than does radon. Exposure to radon is a common concern in New Hampshire because of the state's geological makeup. Radon may enter the home through the basement and residents may also be exposed by groundwater. More than 30 percent of the homes tested for radon in New Hampshire had levels above the U.S. Environmental Protection Agency's action level.	The New Hampshire Tracking Program linked and analyzed radon test data from the New Hampshire Department of Environmental Services, incident cancer cases from the New Hampshire Cancer Registry, and birth records from New Hampshire Vital Records. Tracking staff then conducted a descriptive analysis that included geographic distribution of lung cancer and radon in the state. Staff found that the southeastern and eastern regions had the most communities with homes with elevated radon levels. They also found an association between the distribution of radon in the state and the incidence of lung cancer.	The New Hampshire Tracking Program has taken a proactive role in developing policy for reducing radon exposure and improving radon-resistant building construction.
Developing Surveillance Capabilities for Allergens	Air handling systems distribute pollen, fungi and other allergens throughout indoor areas. These allergens caused respiratory illness in people who were exposed to contaminated central air handling systems that became breeding grounds for mold, mildew, and other sources of biological contaminants. Pollen and other outdoor allergens were not consistently tracked in New Hampshire.	The New Hampshire Tracking Program evaluated existing state-level surveillance capacity for New Hampshire data sets related to hospital asthma exacerbation, outdoor air quality, and indoor air quality. The program supported the development of an allergen/pollen monitoring station located at the University of New Hampshire to track pollen, fungi and other allergens.	Data from this type of system will help identify demographic groups and geographic regions at greatest risk of asthma attacks due to high levels of air pollution, allergens, or other environmental factors. New Hampshire health professionals and residents can determine where certain allergens are concentrated and take the appropriate steps to protect their or their patients' health. This type of tracking information can also lead to the development public health policy recommendations.

Centers for Disease Control and Prevention
1600 Clifton Rd.
Atlanta, Georgia 30333, U.S.A.
Tel: (404) 639-3311
Public Inquiries: (404) 639-3534/ (800) 311-3435
Web: www.cdc.gov

For more information about the National Environmental Public Health Tracking Program please visit: www.cdc.gov/nceh/tracking