



Environmental Public Health Tracking Q&A

What is health tracking and what are the origins of CDC's health tracking program?

The Centers for Disease Control and Prevention (CDC) defines environmental public health tracking as the ongoing collection, integration, analysis, and interpretation of data about environmental hazards, exposure to environmental hazards and the health effects potentially related to exposure to environmental hazards. The goal of health tracking is to provide information to federal, state, and local agencies that will use this information to plan, apply, and evaluate public health actions to prevent and control environmentally related diseases.

The Pew Environmental Health Commission published a report in 2000, detailing an environmental health gap, a lack of information needed to document links between environmental hazards and chronic disease. It recommended the creation of a Nationwide Health Tracking Network for disease and exposures. In response, in 2002, Congress provided the CDC with \$17.5 million to develop a tracking program and network. The program has gone through three phases: building state and local capacity & enhancing infrastructure/data linking; demonstration; and implementation, which began in 2006. The program has received funding from Congress each year since 2002, with FY 2008 funding at \$23.8 million. In 2008, CDC will deploy the national network.

What is biomonitoring and how is it related to health tracking?

For more than 30 years, the Environmental Health Laboratory of the National Center for Environmental Health at the CDC has been performing biomonitoring measurements. Biomonitoring is the direct measurement of people's exposure to toxic substances in the environment by measuring the substances in human the human body. By analyzing blood, urine, and tissues, scientists can measure actual levels of chemicals in people's bodies, investigate exposures, and study the causes of diseases. Health tracking must include data on environmental hazards, human exposure, and health effects. According to the CDC, the most health-relevant method of determining human exposure to such hazards is biomonitoring.

Why is environmental public health tracking important?

There is a connection between our environment and our health, but making that connection is not always easy. It can take years for the symptoms caused by exposure to environmental hazards to appear. However, environmental hazards can cause great harm. Outdoor air pollutants cause an estimated 50,000 – 100,000 premature deaths annually. Illnesses stemming from air pollution alone cost about \$100 billion annually in the U.S. Without a tracking program, it is difficult to identify the precise environmental causes of chronic diseases, which are responsible for 70 percent of deaths in the U.S. and three-quarters of health care spending. With tracking in place, officials can follow amounts and geographic spread of compounds over time and monitor long-term trends. Ultimately, health tracking gives us information that can be used to understand the causes of disease, reduce hazards, improve health and better target prevention dollars.

What states are currently funded through CDC's health tracking program?

In FY 2008, CDC funded 16 states and one city for Network Implementation. Grantees included: California, Connecticut, Florida, Maine, Maryland, Massachusetts, Missouri, New Hampshire, New Jersey, New Mexico, New York City, New York State, Oregon, Pennsylvania, Utah, Washington and Wisconsin. In previous years, during the planning phase, Illinois, Louisiana, Montana, Nevada, Oklahoma, Houston, TX, and Washington, DC received funds. With no recent funding increases, those sites were unable to move to the implementation phase. This program must be expanded to all 50 states in order for a full-fledged tracking program to exist.

What successes have the pilot programs funded by CDC achieved?

The pilot projects have identified environmental health problems and have helped to link sets of existing data with data on environmental hazards. For example, information obtained from Wisconsin's tracking program prompted a factory owner to agree to eliminate emissions of a solvent that can harm the nervous system and cause liver and lung damage. California increased its capacity to provide reliable information on pesticide use and potential exposure and has provided the public with free access to that information. Florida's tracking program results showed that children with elevated lead levels had a higher risk of developmental disabilities. The results were mapped to the county level so that the health department could inform parents, health providers and others about taking steps to eliminate lead poisoning.

Many pilot programs have benefited from improved coordination. One official noted that, "the primary value of the pilot programs has been that they've brought various disciplines together – especially at the state level – to talk and exchange information and ideas".

How can we expand our understanding of the environmental causes of chronic disease?

CDC's pilot projects have served as good testing grounds for the tracking program. The Coordinated Environmental Public Health Network Act of 2007 (S. 2082/H.R. 3643) would expand on this work. Specifically, it would establish a national, secure, web-based public health tracking network and increase funding for CDC's biomonitoring work. The Network would unite smaller networks using standardized data systems. It would collect information from a variety of sources, analyze it and allow public health professionals, policymakers and the public to have access, in a timely manner, to this information so that they can plan, apply, and evaluate actions to prevent and control environmentally related diseases. It would also alert officials when there is a sudden increase in any disease or condition.

To help prevent chronic diseases, we need accurate, reliable information about environmental hazards and the diseases they cause. Establishing a nationwide system to explore the relationship between environmental hazards and chronic disease would keep Americans healthier and save lives.