

## CONNECTICUT

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 these contaminants and other environmental factors are linked to chronic disease is essential to disease prevention—and to protecting the health of our communities.

The Centers for Disease Control and Prevention (CDC) is leading the initiative to build the National Environmental Public Health Tracking Network. The Tracking Network is being developed in response to calls for better understanding of how the environment can affect people's health. This Web-based system will integrate health and environmental data and provide information to address public health concerns, educating the public about ways to protect themselves from possible contamination and disease.

States and communities can act upon data generated through tracking. Today, because of tracking, public health officials in Washington State can do more than determine mercury levels in fish. They can also compile information from many sources and use the data to educate citizens about healthy fish choices with greater speed and accuracy. In Maine, tracking has allowed researchers to examine high arsenic levels in well water and its effects on reproduction. Consequently, state public health officials can now warn well users about the hazards of exposure to arsenic during pregnancy.

The Tracking Network will enable and encourage 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: Connecticut (2002 — 2006)

In 2002, the Connecticut Department of Health, in collaboration with the Connecticut Department of Environmental Protection, received funding from CDC to begin developing a statewide Environmental Public Health Tracking Network. Shortly after, program participants started laying the foundation of the Tracking Network by fostering collaborations between people and agencies able to exchange critical data essential to protecting the public's health. The results of this collaboration range from building workforce capacity to improving health surveillance.

### Why Tracking Matters to Connecticut

Effective disease surveillance hinges on the availability of data. However, because of technical and staffing limitations, the Connecticut Department of Public Health struggled to access and share hospitalization and emergency department data. This difficulty in accessing information hindered surveillance efforts at both the state and community levels. Connecticut's Tracking Program worked to make hospitalization and emergency department data accessible through the state's electronic disease surveillance system. This change has a positive effect on all surveillance programs needing access to hospitalization and emergency department data.



*“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:

### Improving Occupational Disease Surveillance

For more than 10 years, Connecticut has collected occupationally related disease data as part of its surveillance efforts. The Occupational Disease Surveillance System (ODSS) was a stand-alone, provincial system that was not Web-based. The ODSS was largely a paper-based system providing reports for both the state health department and the Department of Labor.

The Connecticut Tracking Program integrated the occupational disease data and the data collection form into the Connecticut Electronic Disease Surveillance System (CEDSS). CEDSS is a Web-based reportable disease surveillance system. ODSS now takes advantage of the increased functionality CEDSS provides, including a Master Patient Index, data de-duplication, geocoding, and mapping.

This small, but important integration effort underscored how the Tracking Program tackled administrative and financial barriers in order to assist occupational disease surveillance in Connecticut. Tracking helped the state health department eliminate its “home-grown” system and migrate to a state-of-the-art Web-based system at a very low cost.

### Creating Tools to Improve Data Use

Most of the data sets necessary to develop a tracking network are already collected by state environmental and health agencies. Unfortunately, most of the data are kept in many different databases rather than in one central location.

Connecticut's Tracking Program conducted an inventory of 16 health outcomes and 20 environmental health databases. The program then used this information to develop a Web-based metadata tool for on-line data entry, queries, and reports.

This tool is available to all programs in the health and environmental protection departments via the Internet. Public health and environmental practitioners can now see available databases, the fields of data they contain, and how they might be linked with other databases. In the future, policymakers and the general public will be able to query these data.

### Training Connecticut's Workforce

Mapping data is a key to effective public health surveillance and tracking. However, data mapping requires technical expertise. Technical expertise is also necessary for conducting analysis and data management.

Tracking Staff developed a three-day Geographic Information Systems (GIS) training course. They taught users the fundamentals of GIS and how it can be used for public health surveillance. One of the course's highlights included a full day dedicated to helping students use their program data to conduct analyses and make maps. Four sessions of this course have been completed and more than 20 users have been trained.

Connecticut Tracking Staff also serve as SAS and Microsoft Access mentors for state health department personnel. During a recent training session, Tracking Staff participated in training and mentoring approximately 80 state health department staff members in both SAS and Access.

The Connecticut Tracking Program seeks to not only improve access to and quality of existing data, but also enhance the use of existing data. Training data stewards in mapping applications, statistical applications, and data management applications help disease surveillance programs use data from other programs to identify and address their public health concerns and better serve the public.



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

