

NEW MEXICO

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: New Mexico (2002—2006)

In 2002, the New Mexico Department of Health (NMDOH) received funding from CDC to plan for a statewide Environmental Public Health Tracking Network that will be part of the national tracking network. New Mexico 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 in New Mexico

Arsenic is a naturally occurring element commonly found in the soil in New Mexico and surrounding states. Monitoring has also shown high levels of naturally occurring arsenic in drinking water in some parts of New Mexico. Ingesting inorganic arsenic may increase the risk of skin, liver, bladder, and lung cancer; some evidence also suggests that children with long-term exposure to arsenic may have lower IQ scores.

Knowing this, New Mexico's Tracking Program conducted projects that linked biomonitoring data with drinking water data. Collection and interpretation of data from private wells and urine samples for arsenic and metals allowed tracking program staff to identify populations at risk for arsenic exposure in their drinking water. The program then provided affected residents with a method to treat and remove arsenic at the tap. This example shows how tracking can direct public health officials to affected groups and provide them with actions and tools to protect their health.



"Capacity building may not sound exciting, but it has been one of the most rewarding aspects of this Program," says Judith R. Qualters, Ph.D., chief of CDC's Tracking Branch. "When we started, capacity varied widely in the health departments. But in just three short years, people were doing projects above and beyond what we originally envisioned."

Tracking in Action

What is the problem?

Linking Air Quality to Respiratory Health

Asthma is one of the most common and costly illnesses in the United States. Childhood asthma is a priority health concern in New Mexico.

What did tracking do?

The New Mexico Tracking Program focused on linking hospitalization data to air quality data from San Juan County, New Mexico. The county is mostly rural with a population of about 114,000. San Juan Regional Medical Center's daily emergency room and urgent care visits for respiratory-related diseases were linked to daily measures of air quality collected for three years. The project found a positive association between levels of ozone—an air pollutant in smog—and the number of asthma-related hospital visits.

Improved Public Health:

The San Juan County project has achieved many positive public health outcomes. NMDOH made presentations to community members to share findings and provide health information. The project is also a great example of how environmental health tracking can direct public health resources to specific problem areas.

Understanding Community Information Needs

The Mountain View community has two Superfund sites. The county also faces potential pollution from many small industrial businesses and a shallow aquifer polluted by septic tanks, industrialization, and traditional farming. Disseminating information about environmental health data can be a challenge in itself, but tracking staff had the added challenge of communicating this information to a community with significant environmental justice issues.

A model community education and outreach program about cancer incidence was developed and pilot tested in the Mountain View community. The testing sought to identify and develop a process through which the state tracking program could facilitate and promote collaborative activities and exchanges among New Mexico's health and environmental practitioners. The program's goal was to disseminate environmental health surveillance data at the community level.

The initial outreach effort provided an opportunity for community members to speak to health professionals and to request additional follow-up analyses targeted to particular areas of concern. Tracking provided this forum for a dialogue between the community and the government, giving NMDOH the opportunity to better target its outreach.



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

