

# COLORADO

*Keeping Track, Promoting Health*



*"CDC's National Environmental Public Health Tracking Network is the most important accomplishment of the past decade."*

**Thomas A. Burke, Ph.D., M.P.H.**

Associate Dean for Public Health Practice and Training  
Professor, Department of Health Policy and Management  
Johns Hopkins Bloomberg School of Public Health

For decades, the United States has faced a fundamental gap in understanding how environmental contaminants affect people's health. The Centers for Disease Control and Prevention (CDC) is working to close this gap by improving surveillance through the National Environmental Public Health Tracking Network (Tracking Network). The Tracking Network is a dynamic Web-based tool that, for the first time, provides health and environment data in one easy to find location.

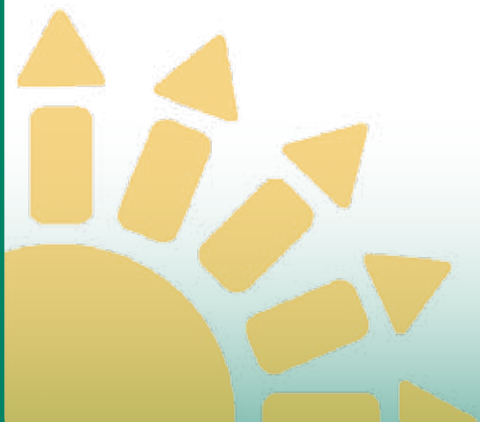
Policy makers and public health officials can use the Tracking Network to make critical decisions about where to target environmental public health resources and interventions. Health practitioners and researchers can use the Tracking Network to learn more about health conditions related to the environment, and improve treatment plans. Anyone can use the Tracking Network to find out how the environment may be affecting them, their family's or community's health.

The building blocks of the national network are state and local health departments around the country that are funded to build local tracking systems. These systems supply data to the National Tracking Network and address local environmental public health concerns. The tracking programs use their networks every day to improve the health of their communities.

## Why Tracking Matters in Colorado

Colorado's environmental public health concerns affect rural, suburban, and urban communities across the state. The state's geology, topography and industries shape many of these concerns. For example, uranium, radium and radon all occur naturally in Colorado. Exposure to these can lead to increased risk of cancer or other health problems. Mining has always been an important industry in the state, yet mining waste can contribute to high blood lead levels. And Colorado's rapidly changing elevations and weather can lead to temperature inversions—that is, layers of air near the earth that are cooler than overlying layers—that can trap air pollutants near the ground.

In 2009, the Colorado Department of Public Health and Environment received funding from CDC for a statewide environmental public health tracking program. The Colorado Tracking Network's Web site was launched in 2011, making environmental public health data readily available. Colorado Environmental Public Health Tracking expands and improves how the state provides environmental public health data. Improving access to these kinds of data can help public health researchers, policymakers, communities and others better understand environmental public health risks and ways to lower those risks.



# TRACKING IN ACTION

	The Problem	Tracking in Action	Improved Public Health
<p><b>Improved data quality</b></p>	<p>Hospital discharge data are critical to monitoring community health problems. In Colorado, the geographic location of patient hospital stays, documenting where the patient lives, is missing up to one-third of the time. This limits practitioners' and researchers' ability to assess community health outcomes. They need to know whether these outcomes might be related to environmental factors.</p>	<p>In partnership with the Colorado Health and Hospital Association, the Colorado Department of Public Health and Environment has geocoded hospital discharge records from 2004 to the present. Geocodes assign a precise residence geography to at least 95% of the records.</p>	<p>Practitioners and researchers will be able to evaluate more effectively the relationship between environmental hazards or exposures and hospital stays. For example, practitioners and researchers will be able to assess the proximity and concentration of air pollutants and an excess number of hospital stays related to asthma.</p>
<p><b>Using environmental health indicators for assessment and planning</b></p>	<p>The legislatively mandated Colorado Public Health Improvement Plan of 2009 calls for a comprehensive set of public health indicators. These include environmental health indicators to be used in assessment and planning. Colorado does not currently have the ability to track environmental health indicators. Thus, those indicators are not included in community health assessment or in state or local-level planning. Developing Colorado environmental health indicators would meet state requirements and would help local health agencies move towards national accreditation.</p>	<p>The tracking network provides the framework Colorado needs to track environmental health indicators. A group consisting of Colorado Environmental Public Health Tracking staff and members of Colorado Tracking's Technical Advisory Committee has discussed, developed, and prioritized environmental indicators for Colorado. The group used Nationally Consistent Data and Measures where appropriate. The group will also develop Colorado-specific indicators such as radon and private well water. Through Colorado's Tracking Web site, state and local health agencies will be able to query environmental health indicator data.</p>	<p>State and local public health agencies will use the new environmental health indicator data in assessments and planning to identify priorities for policies and programs throughout the state. This will help improve environmental quality and lower risk of exposure to environmental hazards. Leveraging the legislative mandate and the environmental public health tracking grant ensures the development and use of a robust surveillance system for the state of Colorado and supports the goal of improving the health of Colorado residents.</p>
<p><b>Evaluating radon exposure</b></p>	<p>Colorado has high levels of radon in the soil. A U.S. Environmental Protection Agency (EPA) model of predicted indoor air radon levels indicates 52 of the 64 counties in Colorado are likely to exceed 4 picocuries per liter (pCi/L). This is the level at which EPA recommends action. (<a href="http://www.epa.gov/radon/zonemap.html">http://www.epa.gov/radon/zonemap.html</a>). Voluntary radon test results had not been compiled by county—resources have not been available. So Colorado had no data to compare with the EPA model predictions. Also, little was known about peoples' awareness of the need for testing, understanding of test results, or actions taken based on radon test results.</p>	<p>The tracking program worked with the Colorado Department of Public Health and Environment Radon Program to assess more than 85,000 radon test results. These results were voluntarily collected and reported to the Colorado Department of Public Health and Environment from 2005 to 2009. The tracking program also compiled and analyzed data from the 2009 Behavioral Risk Factor Surveillance System survey. This survey gathered information on what Colorado residents report about radon risk in their homes. The Colorado Tracking Network will include a radon topic page featuring this information. Maps and tables will help visualize the data.</p>	<p>The information and data on the tracking Web site will be a resource for public health and environmental practitioners and the public. It will help guide intervention strategies and encourage Colorado residents to test for radon in their homes. Testing provides residents with information about indoor air radon levels. This addition to the Colorado Department of Public Health and Environment's radon dataset will help to better understand radon levels in the state.</p>