“CDC’s National Environmental Public Health Tracking Network is the most important accomplishment of the past decade.”

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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 Utah

Utah’s diverse landscape ranges from rural farming and mining to urban industrial settings. Each environment presents public health challenges, such as elevated blood lead levels related to mining waste, contamination of well water, and concerns about cancer clusters. In addition, up to one third of Utah’s citizens live in remote areas where access to health care is limited. Tracking illness and environmental hazards is difficult. Addressing environmental health in Utah requires an understanding of the unique environments in which people live.

In 2002, the Utah Department of Health began receiving funding from CDC to develop a statewide Environmental Public Health Tracking Network that is now part of the National Tracking Network. Since then, the Utah Tracking Network has provided information and data needed to help identify public health emergencies in Utah’s unique environments. It has also been used to provide information about the relationship between environmental factors and health outcomes. The Utah Tracking Network is an important tool in helping identify and address important health issues in the state.
### The Problem

**Lowering exposure to arsenic from private well water**

Some Millard County residents use private wells for cooking and drinking water. The Health Hazard Assessment team of the Utah Department of Health confirmed that in the Delta Conservation Districts, many of the private wells had arsenic concentrations high enough to be an urgent public health hazard.

**Addressing a cancer cluster concern**

A cancer cluster disease specialist (epidemiologist) with Utah’s Tracking Program received an inquiry from a concerned resident about a possible cancer cluster in her neighborhood. The resident requested a study of the rate of female thyroid cancer in the past ten years in Tooele County. She named the Energy Solutions landfill as a possible source of environmental radiation exposure.

**Reducing exposure to lead**

The Eureka Valley was heavily mined from the 1870s to 1965. Several large mine waste rock piles are located on the south side of the town of Eureka, close to homes and businesses. Mining activity and housing construction spread mine waste throughout the town.

The mine waste exposed many residents to lead from the Eureka Mills Superfund site.

### Tracking in Action

**Lowering exposure to arsenic from private well water**

The Health Hazard Assessment team used drinking water data from the Utah Tracking Network to assess health effects in residents of Millard County caused by drinking arsenic-contaminated water from private wells.

**Addressing a cancer cluster concern**

The cancer cluster epidemiologist compared rates of thyroid cancer in the area to statewide rates, over five year periods. The epidemiologist used the secure Utah Tracking Network’s data as well as the Rapid Inquiry Facility (RIF), a mapping and analysis tool used by the Tracking Program.

**Reducing exposure to lead**

Blood lead data available in the Utah Tracking Network showed highly elevated blood lead levels in children in Eureka. Soil sampling by the U.S. Environmental Protection Agency and the Utah Department of Environmental Quality also showed elevated levels of lead in soil in this community. These data resulted in an emergency cleanup of the area.

### Improved Public Health

**Lowering exposure to arsenic from private well water**

Due to the high levels of arsenic found in this study, the Health Hazard Assessment team recommended that well water in this area not be used for drinking or cooking. They also suggested that residents of the area purchase and install water systems to reduce arsenic exposure in the community. Arsenic levels in water will be monitored until amounts are at levels that are not harmful to human health.

**Addressing a cancer cluster concern**

The epidemiologist analyzed the data from the tracking program and did not find enough evidence to prove that a thyroid cancer cluster exists among women ages 20-54 in Wasatch, Tooele, and Box Elder counties. Utah’s Tracking Network helped the epidemiologist provide a much quicker response to citizens’ concerns than was previously possible.

**Reducing exposure to lead**

During the cleanup period, the Health Hazard Assessment team (HHA) and the Blood Lead Poisoning Prevention Program conducted free quarterly blood lead testing and provided education to the community. Since cleanup began, fewer children have shown signs of elevated blood lead levels. Now blood lead testing frequency has been reduced from every three months to once a year.

The Utah Tracking Program with the Central Utah Public Health Department, Utah Department of Health, and the HHA team will continue blood lead testing for children living in Eureka until 2013.