

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: Nevada (2002 — 2006)

In 2002, Nevada's Department of Health and Human Services received funding from CDC to plan for a statewide Environmental Public Health Tracking Network that would be part of the National Network. Nevada used the funding to build workforce capacity and enhance infrastructure. The results range from improving health surveillance to faster responses to environmental public health questions and action to prevent disease.

Why Tracking Matters to Nevada

Childhood lead poisoning is re-emerging as a problem due to lead-based paints, lead-tainted candies, ceramics, and jewelry that is concentrated in the Hispanic and African-American communities in Las Vegas. The Nevada Tracking Program successfully identified childhood lead cases primarily due to tainted candies in these often underserved populations. From August 2004 through July 2006, 27 percent of the blood lead level screenings were elevated, with 81 cases of lead poisoning. Thirty-five percent of the lead-poisoning cases were in children younger than seven years of age. Hispanic children accounted for more than half of all childhood elevated blood lead levels and 82 percent of the childhood lead-poisoning cases during this period. Nevada's Tracking Program immediately launched an intensive lead poisoning prevention campaign, using a variety of educational materials (pamphlets, posters, newsletters, TV/Radio spots) in both English and Spanish. The support of Nevada's Tracking Program has increased parents' awareness of their children's risk of exposure to lead from tainted candies.



“Infrastructure is rarely at the top of the public's agenda, yet it is essential to improve the health care in the United States.”

Thomas Burke, Ph.D.,
Professor, Co-Director, Risk
Services and Public Policy,
Johns Hopkins University

Tracking in Action

What is the problem?

Enhancing Surveillance Capabilities for Asthma

With no effective asthma surveillance system, little was known about the links between polluted air in Las Vegas and asthma exacerbations in Nevada's most vulnerable populations.

What did tracking do?

With tracking funds, Nevada used a Geographic Information System (GIS) to link health outcomes regarding asthma and cardiac events from hospital discharge data, hazard data on air pollutants gathered from air quality monitoring stations, and population data from census information. These combined data were the foundation for the Nevada Asthma Surveillance System (NASS), a tracking pilot project that maps information, provides critical analysis, and reports on state asthma cases and associated environmental exposures.

Improved Public Health:

The NASS program has made a great deal of progress in linking three non-traditional, but uniform and reliable data sets to help the Nevada's Tracking Program conduct an integrated and active asthma surveillance system. Surveillance staff were provided with valuable linkage data between this prevalent respiratory disease and the connection to localized environmental issues across the state.



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

