

CITY OF HOUSTON

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: City of Houston (2002-2006)

In 2002, the Houston Department of Health and Human Services (HD HHS) received funding from CDC to plan for a city-wide Environmental Public Health Tracking Network. Houston used the funding to build capacity, enhance infrastructure, and complete surveillance 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 to the City of Houston

Community engagement is an essential aspect of environmental public health tracking. The Houston Department of Health and Human Services previously lacked information about community health concerns. So, to be inclusive of the residents it serves, the Houston Tracking Program conducted community assessments. The Tracking Program, in collaboration with the University of Texas School of Public Health, used a tool called the Protocol for Assessing Community Excellence in Environmental Health to learn about community health concerns. Meetings were held with community leaders and neighborhood councils in the Houston neighborhoods of Kashmere Gardens, Fifth Ward, and Magnolia/Harrisburg to gain insight about their chronic disease and environmental hazard concerns. By working with communities to establish tracking priorities, Houston laid the foundation for a tracking network that provides relevant information that communities truly want.



“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?

Creating Pediatric Asthma Surveillance

The American Lung Association's 2005 report, State of the Air, shows nearly 90,000 cases of pediatric asthma in Harris County, Texas, which includes the city of Houston. Asthma mortality has been increasing nationally and disproportionately in Texas in minority and urban populations. However, the state currently has no formal system to track asthma, making it difficult to efficiently target prevention and education outreach programs.

What did tracking do?

Houston's Tracking Program partnered with the Texas Emergency Department Asthma Surveillance (TEDAS) to provide surveillance of pediatric asthma in the Houston metropolitan area. TEDAS is a collaborative project between government entities and healthcare institutions in southeast Texas. The collaboration of these two programs allowed for ongoing surveillance of asthma visits to pediatric emergency departments, including data collection on demographics, disease severity, and environmental asthma triggers and risk factors.

Improved Public Health:

By developing such a surveillance project, the Houston Tracking Program is one step closer to determining pediatric asthma prevalence, morbidity, and mortality, estimating the use of emergency healthcare, defining useful areas for asthma control and preventive therapy, and providing the region with an asthma surveillance system infrastructure for future projects.

Understanding How Children are Exposed to Lead

Across the country, poor and minority children are disproportionately affected by lead poisoning. Although the use of lead-based paint was banned in 1978, it can still be found in many older homes. This continues to be the most common high-dose source of lead exposure for preschoolers. However, there are other sources of lead exposure that may be affecting Houston's children.

The Houston Tracking Program provided technical assistance to the city's Childhood Lead Poisoning Prevention Program (CLPPP) in an analysis of all CLPPP data. One aspect of their work included an analysis of CLPPP data that would determine the impact of non-traditional lead exposure sources, such as folk medicines and imported candies, on the population tested.

This information was used to target prevention and education efforts to areas with the greatest need. This is an example of how tracking can use existing data and resources to focus prevention strategies and improve public health.



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

