CDC's National Environmental Public Health Tracking Network

PENNSYLVANIA

Keeping Track, Promoting Health

"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 Pennsylvania

Pennsylvania's 12.5 million people live from the Pocono Mountains to Lake Erie's shore, from the Steel City to the City of Brotherly Love. Pennsylvanians live in cities and towns that have to deal with a variety of urban, suburban, and rural environmental health challenges. To meet these challenges, Pennsylvania's Tracking Program is gathering data —including water, hospital stays, and blood lead levels— from various state sources. When complete, the program will connect health effects, exposures, and environmental hazards. It will look at any possible links to such things as time or place. On its network, the Pennsylvania Tracking Program also provides a toolset for data analysis, reporting, and monitoring.

Pennsylvania has been a part of CDC's Tracking Program since 2002. It began building its own Web site in 2006. Before that Web site's 2011 launch, Pennsylvania worked with universities, built relationships with other government agencies, and built the necessary support for the Pennsylvania Environmental Public Health Tracking Network. Today, the tracking network provides valuable data and tools to public health officials, researchers, and the public. It allows them to spot trends and look at possible relationships between the environment and some chronic health issues. Such findings can drive public health policy and can lead to actions that will reduce Pennsylvania resident's burden of environmental public health challenges.

National Center for Environmental Health
Division of Environmental Hazards and Health Effects

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TRACKING IN ACTION

	The Problem	Tracking in Action	Improved Public Health
Asthma school project (2004-2005 school year)	Analysis showed that the Bradford Area and Oley Valley school districts had the highest prevalence of reported asthma for six school years between 1997 and 2003.	School nurses tracked asthma cases at all 501 public school districts in Pennsylvania. The project then tracked all students with asthma in the two districts that had the highest prevalence of asthma cases. The project also evaluated environmental factors at the schools but no unusual patterns or links to the schools were identified.	Pennsylvania's Tracking Program uses information from this school-based asthma surveillance project to target prevention strategies. They provided prevention strategies and educational materials on asthma and asthma triggers to the public, schools and communities. People can use these materials to reduce exposure to potential environmental risks and triggers and increase their knowledge and awareness regarding asthma.
Arsenic concentrations in groundwater	Pennsylvania has a large rural population dependent on private wells for drinking water. Some of these wells pull groundwater that contains high levels of arsenic. Several studies have suggested that long-term exposure to arsenic contamination in groundwater increases the risk of developing bladder, kidney, liver, bronchus and lung, and prostate cancer.	In order to better evaluate distribution of arsenic in the state's ground water, USGS, Pennsylvania Department of Health, and Pennsylvania Department of Environmental Protection began surveillance in 2005 to relate arsenic concentrations in major aquifers. Aquifers are a formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield significant quantities of water to wells and springs. Of 169 domestic wells and springs tested, arsenic was detected in 18. Of these, 10 wells had total arsenic levels greater than the U.S. Environmental Protection Agency (EPA) maximum containment level.	Pennsylvania's Tracking Program counseled families in high risk areas to use bottled water and referred one person to a doctor because of extremely high arsenic levels. Also, doctors were advised to provide arsenic tests to residents in areas where severely elevated arsenic concentrations had been identified.
Documenting elevated blood lead levels	Studies have shown Pennsylvania to have elevated blood lead level (BLLs) prevalence rates for adults and children that are higher than the national average.	Pennsylvania's Tracking Program began using the state's National Electronic Disease Surveillance System (PA-NEDSS) to analyze 123 clusters of family members, containing 268 people with elevated BLLs.	Tracking elevated BLLs is of particular interest because biomonitoring for the disease can be accomplished. The surveillance showed that the PA-NEDSS database could provide an extensive resource of those individuals showing high levels of a serious environmental toxin, and that through tracking collaborative efforts, a more complete and thorough surveillance system could be established, linking the environmental hazards, exposures, and adverse health effects of lead.

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National Environmental Public Health Tracking Network
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Pennsylvania Environmental Public Health Tracking Program
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