

MASSACHUSETTS

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 Massachusetts

Like most people in the United States, Bay Staters appreciate and even demand clean air. People in Massachusetts, especially those with asthma, know how important clean air is to good health. In fact, one goal of the Massachusetts Tracking Program is to understand the link between clean air and personal health. Among other things, the tracking program reviews studies that suggest asthma-causing or aggravating pollutants could include:

- particulate matter and ozone in outdoor air pollution,
- mold and mildew, dust, pet dander and pests in indoor air pollution, and
- second-hand smoke.

Particularly, these pollutants could cause or aggravate asthma in children.

The Massachusetts Tracking Program brings health and environment data together in one place: the Massachusetts Environmental Public Health Tracking Network. Users of the state tracking network can now more closely examine possible links between environmental problems like air pollution and chronic diseases like asthma. The Massachusetts Tracking Program has already compared data for asthma in children with indoor air quality data in schools. The tracking program found that moisture problems in schools were linked to asthma in children. These results influenced changes to school policy to reduce mold and moisture in schools. The tracking program is currently tackling other public health issues, including cancer and lead poisoning.

Massachusetts has been part of CDC's Environmental Public Health Tracking Program since 2002. Massachusetts began building its own state Tracking Network in 2006 and successfully launched it in the summer of 2009.



TRACKING IN ACTION

	The Problem	Tracking in Action	Improved Public Health
<p>Informing policymakers and protecting community health</p>	<p>The Town of Norwood's Board of Health asked for help to decide whether to allow construction of a new asphalt plant within the town limits. Asphalt production releases several dangerous pollutants into the air. These pollutants are known to cause some cancers. For people living nearby, the pollutants might also aggravate respiratory conditions like asthma and chronic obstructive pulmonary disease.</p>	<p>The Massachusetts Tracking Program looked at available state tracking data for childhood asthma and rates of asthma hospital stays. The tracking program also evaluated potential health outcome patterns related to emissions from the asphalt plant. The data showed that Norwood residents may be at higher risk of health problems from air pollutants compared with the rest of the state. The tracking program recommended that town leadership request additional information from the asphalt company. The program also encouraged the company to consider ways to reduce emissions.</p>	<p>Data from the state tracking network informed policymakers about the potential effects of asphalt production on public health. Ultimately, based in part on the data and recommendations provided by the Massachusetts Tracking Program, Norwood's zoning board denied the permit required for the asphalt plant.</p>
<p>Examining the relationship between cancer rates and proximity to a nuclear power plant</p>	<p>Franklin County residents expressed concern about the number of new cases of cancer in their towns because they are close to the Vermont Yankee Nuclear Power Plant. This plant is less than 5 miles from the Massachusetts state border.</p> <p>Nuclear power plants produce ionizing radiation. Exposure to radiation has been associated with certain cancers such as bone, brain, central nervous system, thyroid, leukemia, and multiple myeloma.</p>	<p>The tracking program reviewed available cancer data for five cancer types with possible associations to radiation. The data covered a span of 23 years for 17 Massachusetts communities located within a 20-mile radius of the power plant. They did not find any unusual patterns for cancer in Franklin County.</p>	<p>The Massachusetts Tracking Program used data from the state's tracking network to address community concerns about cancer risks. They shared their findings with the community in a report. Over time, the tracking program has noticed a decrease in the number of questions they receive related to this power plant.</p> <p>Because data are readily available on the tracking network, answering inquiries like this one take less time and resources. This ensures that public health responses are efficient and economical.</p>
<p>Collaborating with federal agencies to improve public health</p>	<p>The U.S. Environmental Protection Agency (USEPA) asked the Massachusetts Tracking Program to evaluate lead levels in surface soil at the former Agawam Sportsman Club site. EPA wanted to find out whether the amount of lead in the soil posed a risk to young children or to others who used the area.</p> <p>High amounts of lead in surface soil can pose serious health concerns if exposures occur, especially to young children.</p>	<p>The Massachusetts Tracking Program evaluated surface soil sampling results for the site. The tracking program also looked at available data on blood lead levels (BLLs) in children who lived or had lived near the site.</p> <p>Lead was detected in the soil in amounts higher than EPA screening levels. But, the actual BLLs among the tested children were low. The tracking program also found that the number of cases of high BLLs in the area of the former sportsmen's club was similar to other parts of the town.</p>	<p>Though BLLs among children living near the site were not as high as expected, the EPA took action to reduce possible contact with the contaminated soil.</p> <p>Specifically, the EPA removed soil where needed and installed soil-erosion control devices next to a nearby stream.</p>