CDC’s National Environmental Public Health Tracking Network

Helping Public Health Leaders Make Informed Decisions

The foundation of CDC’s National Environmental Public Health Tracking Network (Tracking Network) was built on the idea that health and environmental problems are not always separate issues with unrelated solutions. And, that information and data to study environment and health issues should be easy to find and use together.

What is the Tracking Network?

A Dynamic System
The Tracking Network is a dynamic system that provides information and data about environmental hazards and the health problems that may be related to them. It presents what is known about where environmental hazards exist, where people are exposed to hazards, and how targeted action can protect health, reduce illness, and save lives.

Brings Together Environment and Health Information and Data
The Tracking Network is a unique resource that

• brings together information that cannot be found, or is hard to find, anywhere else.
• provides national, state, and county level data for a variety of environmental and health topics.
• standardizes data that usually would be kept by different agencies in different formats in one easy-to-use website, allowing us to see how our health and the environment are related.

Makes Data Easier to Understand and Use
The Tracking Network helps make environment and health data easier to understand using maps, charts, and tables that show where environmental and health problems are happening. These tools provide valuable, easy-to-access information to decision-makers as they look for answers to important questions about public health.

A Valuable Resource for Public Health Leaders
The Tracking Network is a valuable resource for public health leaders. It can help weave together the intricate relationships between environment and health. The Tracking Network has been used to

• identify people at risk of a health problem that can get worse from an environmental exposure.
• protect public health through education, interventions, or policies.
• save money by improving the speed and accuracy of public health activities and responses.
Tracking in Action: Informing Decisions and Improving Public Health

The Tracking Network helps public health professionals quickly answer community concerns, provide data to decision makers for public policies, and identify neighborhoods that need help most urgently. These stories highlight the impact of CDC’s Tracking Program across the nation.

NEW YORK STATE

Answering Concerns about Neighborhood Air Quality

Neighborhood Concerned About Air Pollution: The Buffalo Peace Bridge Plaza spans the Niagara River and connects New York State to Ontario, Canada. Lots of traffic passes over the bridge every day. Residents in neighborhoods on the New York side of the bridge worried that the planned future expansion and improvements of the Peace Bridge Plaza would cause an increase in air pollution from additional traffic and lead to respiratory health problems like asthma attacks.

Tracking Program Analyzed Asthma, Air Quality, and Other Data: The New York State Tracking Program partnered with state environmental and transportation agencies to investigate residents’ concerns. They examined air quality and related health concerns in neighborhoods surrounding the Peace Bridge toll plaza. The tracking program analyzed zip code level data on asthma-related hospital stays and emergency department visits in the neighborhoods surrounding the Peace Bridge. They also studied and mapped air quality data, traffic counts, and socioeconomic data for the same areas. The data showed that neighborhoods surrounding the bridge were not at increased risk for asthma-related health problems from air pollution.

Findings Show Residents’ Health Not Affected by Air Quality: The state tracking program and partners presented the information to concerned residents and issued a report. They shared information about how current air quality in the neighborhoods around the bridge was not contributing to asthma problems among people living there. Also, they educated neighborhood residents about how the new construction would result in improved air quality over time, despite a possible increase in traffic.

SOUTH CAROLINA

Protecting Adults from Lead Exposure

Some Workers at Risk for Lead Poisoning: Even though lead poisoning often is considered to be a children’s health issue, hobbies or jobs can put adults at risk. Exposure to high levels of lead can damage the brain, nerves, and kidneys. Symptoms of lead exposure may not be noticed until blood lead levels are very high. The Occupational Safety and Health Administration requires blood lead testing for some workers to ensure that they are not overexposed to lead.

Tracking Program Helps Monitor Cases and Inform Investigations: The South Carolina Tracking Program built and maintains a database of blood lead testing results for the state. They initiate follow up for cases of elevated lead results in children. And, they partner with the SC Occupational Safety and Health Administration (SC OSHA) to monitor adult blood lead levels. Tracking staff create quarterly reports on elevated adult blood lead levels. SC OSHA uses the information in these reports to decide where to conduct targeted inspections of worksites where employees’ blood lead levels were above regulation limits.

Workers Have Safer Job Environments: The SC Tracking Program identified 89 cases of elevated blood lead levels in occupational settings in 2012. As a result, SC OSHA inspected four workplaces and issued citations containing 15 violations. Some worksites were required to pay fines and all were required to reduce lead exposures. Workers in these locations now have safer work environments where their risk for lead exposure has been decreased or eliminated.

MASSACHUSETTS

Investigating Parents’ Concerns about Childhood Cancer

Tracking staff investigated parents’ concerns that their children might get cancer from playing in a neighborhood park thought to have contaminated soil. Findings showed that soil in the park is safe.
Tracking in Action: Informing Decisions and Improving Public Health (continued)

MAINE

Educating Residents about a New Risk for Carbon Monoxide Poisoning

Following three deaths from carbon monoxide (CO) poisoning, the tracking program identified off-roading as a new risk in Maine. They worked with local news media to educate residents about safe off-roading practices and other CO prevention tips. These messages are now part of annual health advisories issued each spring.

CALIFORNIA

Preventing Exposures to Nitrates in Drinking Water

Some Communities at Higher Risk for Nitrate Exposure:

Nitrate-contaminated drinking water can lead to serious illness in infants. Also, exposure to nitrates has been associated with certain cancers and adverse reproductive outcomes, including various birth defects. In California, some communities are at higher risk for having nitrate contamination in their drinking water. Because there was no statewide digital map of the areas served by drinking water systems, identifying communities at higher risk for nitrate exposure has been difficult. Moreover, the state had no central location for gathering this information.

Tracking Program Tool Helps Map Water Systems: The California Tracking Program created a Web-based tool to help water systems create digital maps of the areas they serve. Prior to this effort, many systems only had paper maps. The tracking program's water tool has received information for public water systems that serve almost 90% of the state’s total population. With this information, users can also identify communities that may be using unregulated private wells, which are also at high risk for nitrate contamination.

High Risk Communities Receive Help to Prevent Exposures:

The University of California at Davis, on behalf of the state Water Resources Control Board, used data from the water tool and other sources in a report to the state legislature. The report identified communities most exposed to nitrate contamination in drinking water and proposed potential remediation solutions. Findings and recommendations in the report have led to prevention, monitoring, training, and funding activities in high risk areas.

MINNESOTA

Evaluating Indoor Smoking Ban Legislation to Protect People from Secondhand Smoke

Legislators Worked to Repeal Smoking Ban Legislation: Secondhand smoke, also known as environmental tobacco smoke, causes cancer and other health problems in both children and adults. To help reduce exposure to secondhand smoke, Minnesota passed Freedom to Breathe legislation in 2007. The legislation banned smoking in almost all indoor public places and indoor work sites, including bars and restaurants. In 2011, some legislators worked to repeal the legislation.

Tracking Data Shows Legislation Helped Reduce Exposures to Secondhand Smoke: The Minnesota Tracking Program maintains data on secondhand smoke among nonsmokers for the state. Tracking staff analyzed state data to determine if Freedom to Breathe legislation helped reduce residents’ exposures to secondhand smoke. The results showed that since 2007 exposures to secondhand smoke decreased among nonsmokers. Children’s exposures decreased by 20% and adults’ exposures decreased by 25%.

Minnesotans Exposed to Less Secondhand Smoke: Freedom to Breathe legislation remains in place because the tracking program demonstrated that the legislation was associated with a decrease in exposures to secondhand smoke and because there is strong support to keep the smoking bans in Minnesota. In addition, tobacco prevention programs and others have been able to use the tracking data to plan more effective smoking cessation and awareness activities.
What can the Tracking Network do?

You can use the Tracking Network to

- compare data among counties and states.
- respond quickly to community concerns.
- discover emerging health or environmental issues.
- plan effective and cost-saving public health activities.

Who is part of the Tracking Network?

State and Local Health Departments

CDC funds 26 state and city tracking programs as a part of the National Environmental Public Health Tracking Network. These funded partners have developed local tracking networks that provide information to the national website and contain data that are important to local environmental public health issues.

National Organizations

Several national organizations and federal agencies receive funding from CDC to enhance Tracking efforts. The funds help agencies share information that may advance environmental public health science and research, expand the Tracking workforce and infrastructure, and foster collaboration among public health and environmental programs.

Visit CDC’s Tracking Network today.

www.cdc.gov/ephtracking