



ENVIRONMENTAL HEALTH & TOXIC SUBSTANCES

CDC protects people from environmental hazards found in the air we breathe, the water we drink, and the world that surrounds us. CDC safeguards the health of children, older adults, people with disabilities, and other populations vulnerable to certain environmental threats. CDC's researchers in the laboratory and field investigate the effects of the environment on health. We track and evaluate related health problems, and we help organizations in the U.S. and around the world respond to natural, technological, and terrorism-related environmental emergencies.



7 MILLION

About 7 million children in the U.S. have asthma.



150

Toxicologists use advanced diagnostic tests to identify exposure to more than 150 harmful chemical agents.



\$5,600

It costs on average more than \$5,600 in medical and special education costs when a child is severely poisoned from lead.

KEY ACCOMPLISHMENTS

- Helped New York City develop a system to track weather events. During Hurricane Sandy, the system immediately identified an increase in people exposed to extreme cold, which helped to protect people faster.
- Supported 23 states to improve food and drinking water safety and conduct health impact studies to prevent harmful exposure to biohazards.
- Protected children and pregnant women from the dangers of trichloroethylene (an industrial-use chemical) in indoor air at a daycare center, batting-cage complex, and many homes and businesses.
- Reported the growing threat of asthma, including deaths in the U.S., treatment issues, and education strategies. Health departments and policy makers used these data to improve decisions about how to manage asthma.



760,000 People Protected

The Agency for Toxic Substances and Disease Registry made site recommendations to states and communities that protected 760,000 people from toxic exposures.



Environmental scientists help the food industry provide safer food by using CDC's Environmental Health Specialists Network to exchange research and new ideas.

SAFER RESTAURANT FOOD—ONE STUDY AT A TIME

Half of all U.S. foodborne illness outbreaks involve restaurants. Some outbreaks can be deadly. To save lives and protect people, CDC's Environmental Health Specialists Network (EHS-Net) studies key factors behind restaurant outbreaks. This research includes how restaurants handle foods commonly associated with outbreaks (eggs, ground beef, chicken, tomatoes, leafy greens, etc.) and whether employees use good food safety practices (wash hands, avoid work when ill, and cook and cool food properly). Understanding these factors will improve the safety of restaurant food.

In one study, EHS-Net interviews with restaurant workers revealed that 20% had worked at least one shift sick—including while vomiting or experiencing diarrhea, which are common symptoms of a contagious foodborne illness. Another study found that 20% of the time, tomatoes were improperly washed and refrigerated, which led to contamination. This EHS-Net study resulted in recommendations that tomato temperatures be monitored at every stage of preparation.

“Data from our studies influence the training we provide to restaurant staff and our inspection process,” said Danny Ripley, a Nashville, Tennessee, EHS-Net data collector. Like Danny, EHS-Net staff are environmental public health and food safety professionals working at the state and local levels. CDC considers improving food safety to be an achievable public health victory, and EHS-Net's groundbreaking work will promote safer food practices throughout the U.S.