

# NCEH/ATSDR Strategic Plan

Fiscal Years 2014–2016



National Center for Environmental Health  
Agency for Toxic Substances and Disease Registry



Look around you. The air you breathe; the water you drink; the places where your food is grown, prepared and sold; your home; and your neighborhood are your environment. When your environment is safe and healthy, you are more likely to stay healthy. But when you encounter hazardous environmental conditions, your health can be negatively affected. Environmental health recognizes the connections between the environment and people's health.



When you drink water from the tap, eat at a restaurant, or use a can of tomatoes to make dinner for your family, you don't expect to be exposed to harmful chemicals or disease-causing agents. When you breathe, you expect the air to be free from particulate matter and other harmful substances. You also expect your homes, indoor environments, and communities to be free from toxic contamination and other threats, and you expect them to endure even in the face of storms and other forces that could undermine them.

Environmental public health professionals at the Centers for Disease Control and Prevention's (CDC) National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) work to prevent or reduce health threats found in our air, water, food, home and indoor environments, and communities. We also work to ensure the environment promotes health. This strategic plan outlines our vision, mission, goals, and core values, which will guide our work for the next three years.



## VISION

Healthy people in a healthy environment.

## MISSION

NCEH/ATSDR protects people's health from environmental hazards that can be present in the air we breathe, the water we drink, and the world that sustains us. We do this by investigating the relationship between environmental factors and health, developing guidance, and building partnerships to support healthy decision making.

## GOALS

1. Implement environmental health programs and interventions to protect and promote health.
2. Prepare for and respond to public health emergencies, including chemical, biological, radiological, and nuclear incidents; natural disasters; and extreme weather events.
3. Identify, characterize, and monitor health outcomes and environmental exposures to guide actions that protect and promote health.



## NCEH/ATSDR CORE VALUES

### 1. Accountability

As diligent stewards of the funds entrusted to our agency, we act decisively and compassionately in service to people's health. We ensure that our research and our services are based on sound science to meet real public needs and achieve our public health goals.

### 2. Collaboration

We share a common purpose. We work cooperatively to leverage our resources and efficiently achieve our goals. We cannot achieve our vision by acting alone. Partnerships within CDC/ATSDR and with states, territories, localities, tribes, academic institutions, and other organizations are essential.

### 3. Innovation

We encourage creativity and innovative thinking to advance public health practice and science. We provide national leadership as we focus on improvements and solutions to the most important environmental health problems.

### 4. Equity

We are committed to ensuring a healthy environment for all Americans. We recognize that some among us can be more vulnerable to risks from poor environmental conditions, disproportionate amounts of contamination or exposures, and also may not have fully equitable access to environmental benefits. We are committed to protecting these potentially vulnerable populations.

### 5. Integrity

We are honest and ethical in all we do. We will do what we say. We prize scientific integrity and professional excellence.

### 6. Respect

We respect and understand our interdependence with all people, both inside NCEH/ATSDR and throughout the world, treating them and their contributions with dignity and valuing individual and cultural diversity. We are committed to achieving a diverse workforce at all levels of the organization.



## GOAL 1

### Implement environmental health programs and interventions to protect and promote health.



NCEH/ATSDR protects people from environmental hazards that may be found in air, water, food, and soil. We provide training, models, best practices, other resources, and on-the-ground support to maintain sanitation and hygiene necessary for our modern society. We provide guidance and leadership to assess how the environment affects people's health and to ensure communities are healthy. We advance a "health in all policies" approach to incorporate health considerations into decisions related to transportation, housing, agriculture, and other sectors. We are exploring potential threats found in federally unregulated drinking water and are developing guidance on how to keep this water safe to drink. NCEH/ATSDR is also exploring how a changing climate affects human health and helping communities adapt to protect human health in the future.

NCEH/ATSDR will expand efforts in these areas by helping prepare the environmental health workforce of the future, a workforce that represents more than 10% of the overall public health system. We also aim to improve recognition and management of environmentally-related diseases in the clinical setting, and we are well positioned to help communities evaluate and develop policies to improve environmental health and reduce the burden on people and society from conditions like asthma.

**Objective 1.1** Build the capacity of the state, tribal, local, and territorial workforce to anticipate, assess, and respond to environmental exposures and conditions.

**Objective 1.2** Strengthen collaborations between environmental public health and healthcare.

**Objective 1.3** Reduce asthma morbidity and mortality through comprehensive asthma control activities.

**Objective 1.4** Ensure safe drinking water by assessing, preventing, or mitigating waterborne exposures and diseases associated with unregulated drinking water sources.

**Objective 1.5** Develop strategies to prevent and minimize adverse effects from known and emerging environmental health challenges, including unsafe food, air pollution, and climate change.

**Objective 1.6** Investigate, reduce, and prevent environmental threats in neighborhoods and communities, with a particular focus on vulnerable populations or those bearing a disproportionate burden.

**Objective 1.7** Develop and strengthen interventions and practices to promote healthy land use, healthy and safe community design initiatives, and safe home and indoor environments.

## GOAL 2

Prepare for and respond to public health emergencies including chemical, biological, radiological, and nuclear incidents; natural disasters; and extreme weather events.

Natural disasters and chemical, biological, radiological, and nuclear incidents, whether unintentional or acts of terrorism, can seriously impact people's health. Preparing for and responding to such incidents requires integrated multi-jurisdictional approaches to minimize disease and death. Environmental health professionals are routinely called on to respond to situations involving exposure to chemicals, radiation, and pathogens, as well as to natural disasters and extreme weather events.

NCEH/ATSDR helps the nation prepare for these events by lending expertise to exercises and by training the workforce and providing tools needed to respond. NCEH/ATSDR's expertise in epidemiology, toxicology, and laboratory sciences is essential for evaluating emergencies that could compromise crucial infrastructure such as our water and food systems. NCEH/ATSDR develops recommendations to protect the public when an urgent response is required.

NCEH/ATSDR focuses on developing and using the best public health tools and information and ensuring a trained, competent, and prepared workforce of subject matter experts and regional staff ready to assist during environmental emergencies. By integrating applied epidemiology such as surveillance, registries, needs assessment, and research into preparedness, response, and recovery efforts, we ensure we are able to move more quickly and effectively to identify and address health problems. Increased use of resources like ATSDR's Assessment of Chemical Exposures (ACE), NCEH's chemical and radiologic response laboratories, Community Assessment for Public Health Emergency Response (CASPER), and Environmental Health Training in Emergency Response (EHTER) also improves the nation's response to environmental emergencies.



Photo: FEMA

**Objective 2.1** Enhance the nation's capacity to respond to environmental health emergencies through use of epidemiology, laboratory science, and integrated preparedness and response planning with federal, state, tribal, and local partners.

**Objective 2.2** Provide support to people, communities, and environmental public health systems to recover and rebuild after environmental incidents.

**Objective 2.3** Guide threat assessment, risk reduction, and resilience building efforts to lessen the impact of environmental threats and promote healthy community environments.

## GOAL 3

Identify, characterize, and monitor health outcomes and environmental exposures to guide actions that protect and promote health.



NCEH/ATSDR uses science to interpret and apply new information to identify and reduce harmful environmental exposures and promote health. ATSDR uses the latest research and new risk assessment techniques to develop recommendations on acceptable risk from chemical exposures. NCEH will use climate models to anticipate the size and scope of climate and weather-related health threats. In addition, NCEH provides laboratory science to reduce toxic exposures to priority substances such as tobacco smoke.

NCEH/ATSDR evaluates data on amounts of hazardous substances in our environment, traces the spread of these substances over time and place, and directly measures them to see if they show up in human tissues. NCEH will develop new tools and improve those that already exist so they can be used to quantify exposures. NCEH/ATSDR will also focus on making this type of information more relevant and available to people where they live, work, and play—an important step in addressing environmental justice concerns.

NCEH has particularly prominent roles in the field—including leadership of the National Environmental Public Health Tracking and National Biomonitoring programs. To strengthen our surveillance and tracking efforts, we will incorporate new sources of data and make our systems more complete and compatible. For example, we are exploring ways to use electronic health records to collect data relevant to environmental public health and develop better, lower-cost tools that provide the type of information we need to measure community exposures.

Because of our expertise in using science and data to identify and solve problems, NCEH/ATSDR is called on to address emerging environmental health problems. We respond by developing new tools or recommending improvements in practice. ATSDR will identify and measure exposures in communities and address them using specialized technologies such as Geographic Information Systems. NCEH will develop and apply improved epidemiologic tools and timely and comprehensive monitoring systems to protect people from threats associated with the changing climate, air pollution, and vulnerabilities in the nation's food and federally unregulated drinking water systems.

**Objective 3.1** Develop and use new tools and technologies to better anticipate and quantify exposures in populations, especially vulnerable sub-populations such as children, the elderly, low-income individuals, and minority groups.

**Objective 3.2** Provide more complete, relevant, timely, and accurate data through environmental health surveillance and tracking.

**Objective 3.3** Advance the development and interpretation of human health risk estimates from exposure to environmental hazards.

**Objective 3.4** Provide laboratory science that improves the detection, diagnosis, treatment, and prevention of disease resulting from exposure to environmental hazards.

