NACCHO is the national organization representing local public health agencies. NACCHO supports efforts that protect and improve the health of all people and all communities by promoting national policy, developing resources and programs, seeking health equity, and supporting effective local public health practice and systems.

CDC's National Environmental Public Health Tracking Program

An orientation for local public health practitioners

In January 2001, the Pew Environmental Health Commission issued the report, *America's Environmental Health Gap: Why This Country Needs a Nationwide Health Tracking Network*. The "gap" referred to is the lack of basic information that could provide documented links between toxicants and chronic diseases. The Pew report presents a logical and compelling prescription to address the gap by integrating existing and new surveillance systems for disease with environmental exposure tracking systems; linking disease and exposure-integrated systems with data on environmental hazards; analyzing all of these integrated data on an ongoing basis; and taking public health action based on revealed links between diseases and environmental conditions.

ENVIRONMENTAL PUBLIC HEALTH TRACKING *is a specific type of public health surveillance. It provides for the ongoing collection, integration, analysis, and interpretation of data or information about environmental hazards, exposure to environmental hazards, and non-infectious chronic and acute human health effects potentially related to exposure to environmental hazards. It includes dissemination of information learned from these data.*

The Centers for Disease Control and Prevention (CDC)'s Environmental Public Health Tracking program is designing a national Environmental Public Health Tracking (EPHT) network to overcome this gap identified by the Pew Environmental Health Commission. A local perspective—based on the need for relevant, consistent information about the distribution of hazards; public support; and environmental health priorities developed through community participation—is important to developing effective tracking systems. Local public health agencies, along with their constituents, will both contribute to and access the EPHT network in ways that will inform policies and timely interventions.

Ideally, local public health agencies, working with their communities, would be able to facilitate community-based research, particularly where data were culturally sensitive.

The vision for the EPHT program is that communities are better protected from adverse health effects through the integration of public health and environmental information systems.

The goals of the EPHT program include:

- The development of a sustainable, national environmental public health tracking system.
- Increasing environmental public health tracking capacity.
- Disseminating reliable information.
- Advancing environmental public health science and research.
- Bridging the gap between public health and the environment.

When created, the national EPHT network will be standards-based and will allow for direct electronic data reporting and linkage within and across health effect, exposure, and hazard data. This system will offer ongoing monitoring and dissemination of information on levels of

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environmental contaminants and trends in disease occurrence. It will also facilitate research on possible etiologic linkages, and provide information to help assess the impact of regulatory and prevention strategies. With this information, federal, state, and local agencies will be better prepared to develop and evaluate effective public health action to prevent or control diseases across our nation.

Benefits

Using information from an EPHT network, federal, state, and local agencies will be better prepared to develop and evaluate effective public health actions to prevent or control chronic and acute diseases that can be linked to environmental conditions. Public health and health care providers will be more informed about environmental health in general, and specifically will understand more thoroughly the connection between the environment and the health of their communities, leading to better care and targeted preventive services. In addition, communities will have a better understanding of actions that may be taken to protect or improve the public's health. Overall, EPHT will create an improved organizational and technical environment for collecting, managing, exchanging, and using information about a wide array of environmental public health issues and concerns.

On a local level, these benefits can manifest in any number of specific environmental health innovations. The network will make accesible linked data sets to examine local-level geographic and temporal trends around health outcomes. The analysis of such data sets will improve the ability to respond to outbreaks, disease clusters, and emerging threats. Whether tracking the prevalence of asthma, increasing rates of birth defects, or linkages between traffic-related injuries, traffic patterns, and population density, the EPHT network will offer health officials unprecedented combinations of data sets necessary to improving long-term environmental health interventions.

Partners

The relevance and value of the emerging data is intrinsically linked to the commitment and capacity of the myriad national, state, and local partners that will both develop and use the network. Fortunately, a broad and comprehensive slate of national, state and local partners already exists and is working collaboratively to form the network. From the CDC's National Center for Environmental Health (NCEH), to a number of nationally recognized academic institutions, national professional organizations, to upwards of 24 state and local public health agencies, the work to-date reflects a groundswell of influential and multidisciplinary partnerships.

Funded Projects

With appropriations of $17.5 million in fiscal year 2002, CDC funded 17 states, three local public health agencies, and three schools of public health to begin development of a national EPHT network and to develop capacity in environmental public health at the state and local levels. In 2003, CDC awarded an additional $4.2 million to state health departments to fund 10 additional projects. These projects will demonstrate and evaluate methods for linking data from ongoing, existing health-effect surveillance systems with data from existing surveillance and monitoring systems for human exposures and environmental hazards.

If you are interested in learning more about the Environmental Public Health Tracking network, or want to become more directly involved in current or future Environmental Public Health Tracking activities, please visit www.cdc.gov/NCEH/TRACKING/EPHTracking/EPHTracking.htm.

At the national, state, and local levels, the initiative works across categorical programs to integrate existing and new surveillance systems with a goal of developing networks that address stakeholder needs. Additional information on funded state, local, and academic programs can be obtained online at www.cdc.gov/nceh/tracking/EPHTracking/EPHTracking.htm.

Local Demonstration Sites

Three local public health agencies were funded directly through the CDC/NCEH EPHT grants. Their projects, while vastly different, seek to build environmental public health capacity, increase collaboration between environmental and health agencies, identify and evaluate existing data systems, and develop partnerships with non-governmental organizations and communities.

New York

The New York City (NYC) Department of Health and Mental Hygiene plans to assess, evaluate, and enhance health effect, exposure, and hazard surveillance systems in New York City. Its program, "Environmental Connections," builds upon the long-recognized need for surveillance programs for many environmental health issues, including pesticide use and exposure, health-related housing quality concerns and integrated adult and child heavy metals exposure. The objectives of Environmental Connections include evaluating current data systems for their ability to describe housing quality, pesticide use, and heavy metals exposure, and to link these data to health outcomes to evaluate their relationships. To carry this out, NYC is completing an inventory of health and environmental data sources; convening a planning consortium of local environmental health stakeholders; acquiring, linking and analyzing data; gathering new human pesticide and metals exposure data through a New York City Health and Nutrition Examination Survey, evaluating local policies and regulations affecting environmental health; and identifying and promoting local standards-based environmental health promotion activities.

One goal of the NYC project is the development of a tracking system that links descriptors of social conditions in NYC to environmental hazards and health outcomes. For example, NYC is linking housing quality data with economic indicators and building a body of knowledge around links between financial status, building conditions, and population health. Ultimately, the work will support a broadening of the definition of environment to include some social conditions that may predict health and help support more appropriate and targeted interventions.

For more information, visit www.cdc.gov/nceh/tracking/EPHTracking/contacts/nyc.htm.

Houston

The Houston Department of Health and Human Services is developing a local environmental public health tracking system that builds on existing local data systems, including the department's environmental monitoring data and laboratory data. Work is underway to develop linkages with many external data systems, including the Texas Department of Health's cancer and birth defects surveillance systems; the Texas Commission on Environmental Quality monitoring data; the U.S. Environmental Protection Agency's data; the local council of government's traffic density data; and various complaint databases kept by local governments. The environmental tracking systems will be an integral part of the department's public health information network (PHIN). The tracking system will provide information for chronic disease surveillance and assist in research to mitigate the effects of environmental exposures on the health of members of the Houston community. Upgrading of the department's computer infrastructure to allow continued progress toward an integrated surveillance network is a priority of the project.

Thus far, the city of Houston is building capacity for collaboration between public health and environmental agencies. The intention is that environmental health officials in Houston will soon be better able to identify interrelationships and design interventions in chronic disease just as other public health branches do through traditional epidemiology. They are working to usher in an era in which information on the environmental hazards associated with chronic illnesses will lead to appropriate and effective environmental

interventions that will result in improved community health.

For more information, visit www.ci.houston.tx.us/departme/health/Winter_2003.pdf or www.cdc.gov/nceh/tracking/EPHTracking/contacts/houston.htm.

The District of Columbia

The District of Columbia Department of Health is developing information systems containing environmental data on human exposures and hazards. Established data on health effects is being used to build an environmental public health tracking system. Project goals include documenting the relation between environmental exposure and health effects; gaining greater ability to undertake health assessment, policy development and assurance; and generating information that guides policy development and decision making on prevention and treatment activities, as well as resource allocation.

Washington, DC, is using their emerging EPHT network project to focus on the development of policies that identify and address specific environmental health issues before they evolve into environmental health emergencies.

For more information, visit www.cdc.gov/nceh/tracking/EPHTracking/contacts/wash_dc.htm.

Connecting to the Network

The success of the network depends, in part, on the willingness of local public health professionals to commit time, knowledge, and energy to its development and use. As such, the National Association of County and City Health Officials (NACCHO) will focus a great deal of attention in the coming years to linking local public health professionals to the emerging EPHT network.

NACCHO will enhance collaboration between local public health agencies, environmental agencies, and partner organizations in order to improve the efficacy of the various tracking projects by participating in coordination activities, convening focus groups to discuss barriers and needs, and through discussions with individual tracking project coordinators. Particular attention will be given to advancing communications and developing links between state and local public health agencies.

From promoting the progress of demonstration sites to serving as a resource for connecting interested local public health professionals to ongoing environmental public health tracking efforts, NACCHO intends to be a conduit between environmental health practitioners and the architects of the EPHT network.

National Environmental Public Health Tracking Network

To find out more about the Environmental Public Health Tracking network, please visit www.naccho.org/project95.cfm.

If you are interested in learning more about NACCHO's work related to Environmental Public Health Tracking, please contact Jennifer Li, MPH, Program Manager, at (202) 783-5550, Ext.234, e-mail jli@naccho.org. Web site: www.naccho.org/project95.cfm.