Direct from CDC's Environmental Health Services Branch

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The Environmental Health Specialists Network—EHS-Net

Editor's note: NEHA strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, we will feature a column from the Environmental Health Services Branch (EHSB) of the Centers for Disease Control and Prevention (CDC) in every issue of the Journal.

EHSB's objective is to strengthen the role of state, local, and national environmental health programs and professionals to anticipate, identify, and respond to adverse environmental exposures and the consequences of these exposures for human health. The services being developed through EHSB include access to topical, relevant, and scientific information; consultation; and assistance to environmental health specialists, sanitarians, and environmental health professionals and practitioners.

EHSB appreciates NEHA's invitation to provide monthly columns for the Journal. *EHSB staff will be highlighting a variety of concerns, opportunities, challenges, and successes that we all share in environmental public health.*

The overarching goal of the Centers for Disease Control and Prevention's (CDC's) *National Strategy to Revitalize Environmental Public Health Services* is "to enhance and revitalize the system of environmental public health services to address the broad range of issues facing states and communities." An underlying goal is the support of research "to define effective approaches to enhance environmental public health services." The Environmental Health Specialists Network (EHS-Net) is the primary research program of CDC's Environmental Health Services Branch.

EHS-Net, organized in 2000, is a collaborative project of CDC, nine states, the U.S. Food and Drug Administration (FDA), the U.S. Department of Agriculture (USDA), and the U.S. Environmental Protection Agency (U.S. EPA). The nine states currently participating are California, Connecticut, Georgia, Iowa, New York, Minnesota, Oregon, Rhode Island, and Tennessee (Figure 1). The network consists of environmental health professionals, epidemiologists, and laboratorians who work to understand environmental causes of food- and waterborne diseases and to improve environmental public health practice.

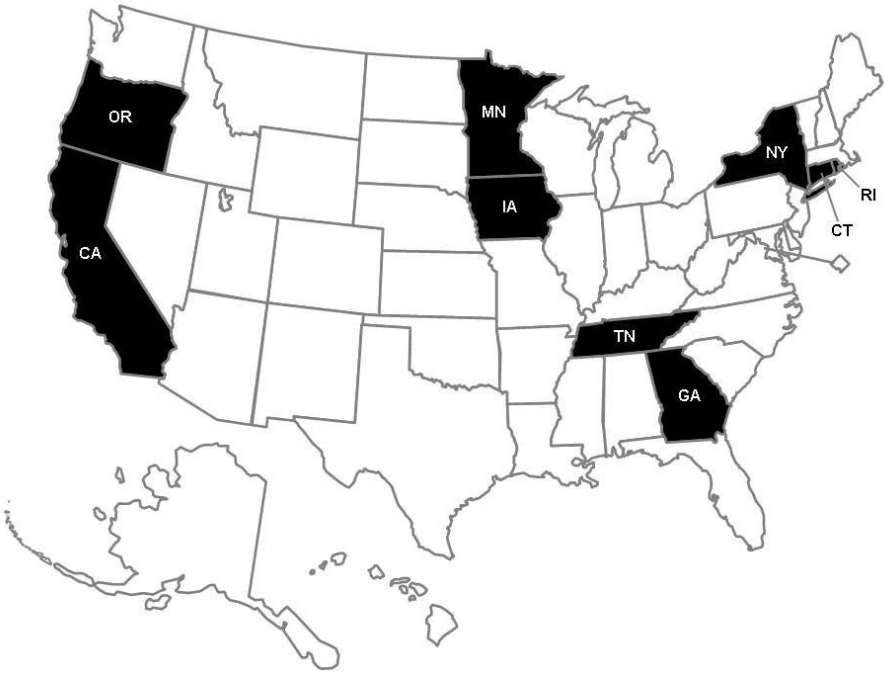
Partnership and collaboration are cornerstones of EHS-Net. Within CDC, the project involves a partnership between the National Center for Environmental Health (NCEH) and the National Center for Infectious Diseases (NCID). In fact, EHS-Net grew out of NCID's successful FoodNet program, a program designed to understand the burden of foodborne disease in the United States. FoodNet has served as an organizational model for EHS-Net, and its state and federal members have been its strongest supporters and mentors. NCEH's EHS-Net staff maintain a very close working relationship with foodborne- and waterborne-disease experts in NCID. This philosophy of collaboration is also reflected in the participating states, where EHS-Net environmental health specialists work closely with epidemiologists and laboratory professionals.

Other federal agencies, such as FDA and USDA, have been active partners in EHS-Net. They have helped develop studies, providing guidance and technical assistance. In 2006, as EHS-Net expanded its focus on food safety to include drinking-water safety, U.S. EPA joined as another federal partner.

The strong collaborative relationships formed through EHS-Net have brought together some of the brightest and best public health professionals to tackle the tough questions facing environmental public health professionals and the food and water safety service programs in which they work. Food and water safety programs have regulatory responsibilities and collect large quantities of regulatory data through their inspection programs. What role should these programs play in identifying the causes of foodborne or waterborne diseases and improving environmental public health practice? Surprisingly, although some service programs perceive a role for themselves in this arena, oth-

FIGURE 1

States Participating in EHS-Net, 2006



ers do not. EHS-Net provides a forum in which environmental public health professionals and their service programs can explore their roles in identifying the causes of foodborne or waterborne diseases. They also have the opportunity to develop models of practice that can help other state and local service programs improve environmental public health practice.

Although outbreaks of foodborne and waterborne diseases may be relatively rare, they do provide a unique opportunity to learn more about the epidemiology of these diseases, including the environmental factors that contribute to outbreaks. In this country, except in large urban areas, opportunities for service programs to investigate foodborne or waterborne outbreaks may not occur very often. In some areas, many years may elapse before enough outbreaks have occurred, been recognized, and investigated that the information gathered can be used. Yet it is important to collect and use this very information to promote understanding of the complex interaction of environmental factors that sets the stage for these events.

The epidemiology of foodborne diseases is ever-changing, and this quality makes it necessary to understand all farm-to-fork environmental factors associated with food, including food-handling practices at the retail level. Environmental public health professionals have a unique perspective on many aspects of the farm-to-fork trail our foods travel. They can provide much information that will shed light on the epidemiology of foodborne disease.

EHS-Net facilitates multistate studies of outbreaks. Studies of this type enable researchers to gather standardized environmental data, and they help identify contributing factors in outbreaks. The capacity for multistate study has also allowed EHS-Net to study food-handling practices of foods newly linked to specific pathogens. Finally, EHS-Net supports individual state projects that have the potential to become multistate projects and ultimately result in practice models that can be shared nationally. Examples of EHS-Net projects can be found at www.cdc.gov/nceh/ehs/EHSNet/highlights.htm.

CDC has made the EHS-Net Information System available to various environmental public health service programs and organizations. This system enables Web-based data collection and can be used to support program evaluation, training assessment, and research efforts. More information on this free Internet application can be found at www.cdc.gov/nceh/ehs/EHSNet/default.htm.

Environmental public health service programs must be involved in promoting understanding of the environmental causes of foodborne and waterborne diseases, improving the practice of environmental health, and ultimately improving the health of the communities served. EHS-Net is one resource the Environmental Health Services Branch has designed to support those programs. Suggestions or comments about the project can be sent to ehsb@cdc.gov.

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