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Evaluating Local and State Food and Water Safety Programs

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 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*.

In this column, EHSB and guest authors from across CDC will highlight a variety of concerns, opportunities, challenges, and successes that we all share in environmental public health. 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.

The conclusions in this article are those of the author(s) and do not necessarily represent the views of the CDC.

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Local and state food and water safety programs are on the frontline of food and waterborne illness prevention. Yet in the current economic climate, some of these public health programs are being reduced or eliminated. Data that show the impact of these programs on public health are crucial to policy makers faced with difficult choices that may affect the health of the communities they serve.

The Environmental Health Specialists Network (EHS-Net) at the Centers for Disease Control and Prevention's (CDC's) National Center for Environmental Health is planning to conduct an evaluation of local and state food and water safety programs that will provide these needed data. EHS-Net 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. Food and/or water safety programs from California, Iowa, Minnesota, New York (including New York City), Rhode Island, and Tennessee participate in EHS-Net.

The purpose of this evaluation is to

- describe local and state food and water safety programs and their components,
- describe how these programs are influenced by both internal and external factors (e.g., staffing, economics, politics, etc.), and
- assess these programs' impact on public health, to the extent possible.

Some of the anticipated results of this evaluation include identification of services provided by food and water safety programs, a description of infrastructure and how it changes over time, identification of program strengths and gaps, assessment of future program challenges, and measurement of the impact of public health interventions. Current local and state EHS-Net programs will be participating in the evaluation. Non-EHS-Net programs will also be asked to participate to provide a comparison group that does not have the benefit of CDC funding for their food and/or water programs. The evaluation is expected to include a retrospective, current, and prospective view of programs. CDC will publish findings over the course of the evaluation process.

A review of environmental health evaluation and program assessment tools revealed no existing tool fully met this project's needs. Thus, CDC EHS-Net staff, with assistance from EHS-Net local and state program staff, developed a framework to guide the development of evaluation tools. This framework

FIGURE 1

Environmental Health Specialists Network Evaluation Framework



incorporated theories from recognized public health instruments and profiles, such as the National Public Health Performance Standards (www.cdc.gov/NPHPSP/PDF/UserGuide.pdf).

Figure 1 depicts the EHS-Net evaluation framework, which is organized into four levels:

1. Outcomes and Impacts

In general, food and water safety programs are expected to reduce the risk of food and waterborne illness, and thereby

reduce the burden of these illnesses in the community served.

2. Standards

The standards, regulations, and operating procedures that programs utilize need to be considered to fully understand program impact. Standards could include locally developed policies and regulations, model policies and regulations (e.g., FDA Model Food Code), or accreditation and

standardization (e.g., FDA Retail Program Standards).

3. Programs and Services

The services provided by food and water safety programs need to be fully described and understood. Programs and services are delivered using the standards defined in the Standards level.

4. Basic Infrastructure

The programs' structure and capacity to implement services need to be assessed. Workforce capacity and competency, information systems, organizational structure, physical capacity, and financial resources are included. Basic infrastructure is essential to effectively provide the services represented in Programs and Services.

Many external factors may positively or negatively influence programs. These factors surround the triangle in Figure 1 and include social or political pressures (Social Environment), physical attributes of a program's jurisdiction such as the number of restaurants (Physical Environment), and community attributes such as population density (Community). These factors can influence how and what services the program delivers, and ultimately, the public health impact of the program.

The evaluation framework described here will be used to guide the development of data collection instruments to meet the goals of the evaluation. The EHS-Net food and water programs will begin data collection in 2012. If your food or water safety program is interested in participating in this evaluation process, or if you have comments or suggestions, please contact NVEAIS@cdc.gov.

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