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InFORM: An Innovative, Integrated Food Safety Meeting

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

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September is Food Safety Month, so this column provides the perfect opportunity to tell *Journal of Environmental Health* readers about an upcoming food safety meeting: the Integrated Foodborne Outbreak Response Management (InFORM) Meeting. Sponsored by several federal agencies and national organizations, this meeting emphasizes the integration of laboratorians, epidemiologists, and environmental health professionals to focus on foodborne disease surveillance and outbreak response. This integration is significant, as all three disciplines are integral to the successful surveillance of and response to foodborne disease outbreaks. Each discipline represents a

component of the host-agent-environment model of disease transmission, and each serves a critical role in foodborne disease surveillance and response activities (Figure 1). Foodborne disease outbreak surveillance and investigation are greatly enhanced when these three groups of professionals understand the roles of each discipline, work in an integrated manner, and communicate well. This enhancement includes more rapid identification of and response to outbreaks and their causes.

Background

Since 1996, the Centers for Disease Control and Prevention (CDC) and American Pub-

lic Health Laboratories (APHL) have sponsored annual meetings for laboratory personnel participating in the national network of PulseNet certified laboratories (www.cdc.gov/pulsenet/). The PulseNet network, consisting of over 85 public health laboratories, works to identify foodborne disease outbreaks by connecting foodborne illness cases together through DNA "fingerprinting" of the bacteria causing the illnesses. The network identifies some of the many local and state foodborne disease outbreaks and is critical to identifying widespread multistate outbreaks, which often reveal important gaps in the nation's food safety systems. The annual PulseNet meeting has been an important component of the network's success.

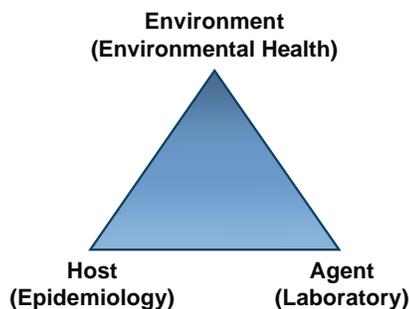
Since 2005, CDC and either APHL or the Council for State and Territorial Epidemiologists have sponsored the OutbreakNet annual meetings for epidemiologists responsible for leading foodborne disease outbreak surveillance and response activities in state health departments (www.cdc.gov/outbreaknet/). OutbreakNet works to ensure rapid, coordinated detection and response to multistate disease outbreaks, promoting comprehensive outbreak surveillance and improving collaboration among agency officials. As with PulseNet, the annual OutbreakNet meeting has been an important component of OutbreakNet's success.

In recent years, the PulseNet and OutbreakNet annual meetings were held concurrently. Participant evaluation responses of these concurrent meetings were very positive, and the meetings grew in size and scope. But it was obvious that the third critical discipline, environmental health, was underrepresented.

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FIGURE 1

Host-Agent-Environment Model of Disease Transmission



This model posits that disease spread requires a susceptible host, an infective agent, and a supportive environment. In the example of a foodborne disease outbreak, the hosts are the humans infected with the foodborne disease, the agent is the foodborne pathogen causing the disease (e.g., *Salmonella*), and the environment is the restaurant and the circumstances in the restaurant that led to the outbreak (e.g., poor food handling preparation and cooking practices). Typically, during a foodborne disease outbreak, epidemiologists provide critical information about the host, laboratory personnel provide critical information about the agent, and environmental health professionals provide critical information about the environment in which the agent is transmitted to the host (Friis, 2012).

The InFORM Meeting has been conceived to bring all three disciplines together for shared and discipline-specific sessions. Thus, laboratorians, epidemiologists, and environmental health professionals responsible for foodborne disease outbreak surveillance and response activities will attend the InFORM Meeting together. Additionally, the InFORM Meeting will incorporate the Environmental Health Specialists Network (EHS-Net, pronounced "s-net"). The mission of this collaborative forum of environmental health specialists is to identify and prevent environmental factors contributing to foodborne and waterborne disease outbreaks (www.cdc.gov/nceh/ehs/ehsnet/).

The inclusion of environmental health in this meeting is timely, given the increasingly important role environmental health plays in foodborne disease surveillance and outbreak response. For example, in recent years, EHS-Net has increased focus on conducting environmental assessments during outbreak investigations. These assessments, typically conducted by environmental health

professionals, provide valuable information on the environmental causes of foodborne disease outbreaks. Additionally, environmental health professionals typically conduct the traceback investigations that are so critical to the investigation of multistate outbreaks.

Participants invited to the InFORM Meeting include federal, state, territorial, and local government officials responsible for leading state and national foodborne disease outbreak surveillance and response activities among laboratory, epidemiology, and environmental health disciplines. The expected number of participants is approximately 450–500 people.

InFORM Meeting Topics

InFORM will focus on enhancing national foodborne disease outbreak surveillance and response capacity at federal, state, territorial, and local levels by providing information on the following:

- The biology and epidemiology of foodborne pathogens and diseases;
- studies, investigations, and programs in foodborne disease outbreak surveillance, response, and prevention;
- national food safety programs, such as Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE), FoodNet, the Food and Drug Administration's Coordinated Outbreak Response and Evaluation (CORE) Network, and Rapid Response Teams; and
- the latest developments in investigation methods, information technology, and assessment tools.

InFORM will also provide detailed training on laboratory, epidemiologic, and environmental health methods; software tools; and surveillance systems; as well as a venue for formal and informal communication among participants.

The InFORM meeting will be held November 18–21, 2013, in San Antonio, Texas. If interested in attending, please visit this Web site: www.aphl.org/conferences/InFORM-2013-PulseNet-OutbreakNet-and-Environmental-Health/Pages/default.aspx.

Conclusion

The Environmental Health Services Branch fully supports the InFORM Meeting and the concept of integration and collaboration among the laboratory, epidemiology, and environmental health disciplines. We are excited about the opportunities the InFORM Meet-

InFORM Meeting Sponsors

The following organizations support the InFORM Meeting.

Federal Agencies

- Centers for Disease Control and Prevention
- U.S. Department of Agriculture's Food Safety and Inspection Service
- U.S. Food and Drug Administration

National Associations

- American Public Health Laboratories
- Association of Food and Drug Officials
- Council for State and Territorial Epidemiologists
- National Environmental Health Association

ing will provide to enhance foodborne disease outbreak surveillance and response. 🇺🇸

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Reference

Friis, R. (2012). *Essentials of environmental health*. Sudbury, MA: Jones & Bartlett Learning.

Did You Know?

You can access CDC columns published in the *Journal* as far back as 2006 by going to www.cdc.gov/nceh/ehs/Publications/JEH_EHSB_Columns.htm.