Emergency Preparedness and Response Training for Environmental Health Practitioners

The Centers for Disease Control and Prevention (CDC) collaborated with federal, state, and local health and environmental health partners to develop a comprehensive pilot course to train environmental health practitioners on emergency preparedness and response. The pilot course, Environmental Health Training in Emergency Response (EHTER), provides practitioners with the basic knowledge and skills to address environmental health concerns that result from emergencies and disasters. Environmental systems are interrelated (Figure 1), and practitioners can apply their everyday skills in responding to emergency events.

EHTER is divided into 10 modules and focuses on key environmental health issues and challenges for emergency response:
1. EHTER Introduction and Background
2. Disaster Management
3. Responder Safety
4. Potable Water
5. Wastewater Management and Disposal
6. Food Safety
7. Vector Control and Pest Management
8. Solid Waste and Hazardous Materials
9. Shelter Assessment
10. Building Assessment

The training incorporates lectures, group discussion and activities, hands-on interaction, demonstration components, and a tabletop exercise.

Real-World Application

More than 450 environmental health practitioners from 40 states and territories have completed the nine EHTER pilot trainings. Preparedness knowledge among course participants markedly improved as a result of the training, as shown in a comparison of pretraining and postraining test scores. Participants have applied the concepts and information to improve response capacity during actual emergencies and disasters such as power outages, tornadoes, and wildfires.

Geoffrey Snyder, director of environmental health, Madison County Health Department, New York, relates how he used what he learned in EHTER in a real-world response:

I feel very fortunate to have attended the EHTER course when I did. Although the CSX train derailment in Madison County on March 12, 2007, does not compare to the magnitude of Katrina or other events discussed during the course, it did serve as a prime example of why we need to be prepared for such emergencies.

The concepts covered during the EHTER course were very helpful during the emergency and our subsequent response activities. The course provided valuable training that was helpful in responding to this incident, and we hope to secure the same training for all county environmental health staff as well as other public health staff and emergency responders.
Demand for Course
The demand for additional EHTER trainings is high. “I can’t begin to tell you how needed this training is. Environmental health often seems just an afterthought to response agencies and others,” says Michelle Cochran, R.S., emergency planner, West Virginia Bureau for Public Health, Division of Threat Preparedness in Charleston, West Virginia.

EHTER training requests include those for environmental health professionals working in
- U.S. Public Health Service Applied Public Health Teams;
- Los Angeles County, California (500 practitioners); and
- other state and local jurisdictions (e.g., Iowa, Pennsylvania, New York, Texas, and Louisiana).

Course Feedback
Participant feedback has been positive and has led to continuous improvements in training with each successive pilot. “Certainly the training gave me a better 360-degree vision when analyzing an incident and evaluating and managing environmental health issues. I have recommended this training to others and would certainly like to see opportunities on a regional basis,” said Leon Moore, environmental health supervisor, Washtenaw County, Michigan.

The Florida Division of Environmental Health and Louisville Metro Public Health and Wellness participated heavily in the development of the curricula. In 2007, the Florida Division of Environmental Health adopted the EHTER pilot curricula and implemented its own intrastate training program for its Environmental Health Strike Teams.

Train-the-Trainer Toolbox
An EHTER train-the-trainer toolbox is being developed for federal, state, local, and tribal environmental health programs. The toolbox will provide materials and guidance for training organizers to effectively plan and conduct an EHTER workshop tailored to a particular locality or region.

The toolbox will contain
- a course guide,
- presentations with speaker notes for all modules,
- training organizer checklist with suggested timelines,
- electronic and printed materials,
- suggested speaker criteria,
- video modules of all sessions divided into subject chapters, and
- video modules about planning effective workshops.

Additional Information
Presentations from the EHTER Atlantic City pilot course are available free through NEHA for continuing education credit for environmental health practitioners and students. To access these materials, visit www.nehacert.org/catalog/ and click on “CDC Sponsored Programs.”

For more information and resources related to environmental health emergency response, visit the
- CDC Emergency and Terrorism Preparedness for Environmental Health Practitioners Web site (www.cdc.gov/nceh/ehs/ETP);
- Environmental Health Services Emergency Preparedness topic page (www.cdc.gov/nceh/ehs/Topics/Emergency-Preparedness.htm); and
- CDC Emergency Preparedness and Response Web site (www.emergency.cdc.gov/).

Corresponding author: CAPT Mark D. Miller, U.S. Public Health Service Senior Environmental Health Officer, Environmental Health Services Branch, National Center for Environmental Health, CDC, 4770 Buford Highway, NE, MS F28, Atlanta, GA 30341. E-mail: zdq8@cdc.gov.

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