Where Have All the Vector Control Programs Gone?
Part Two

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 Centers for Disease Control and Prevention.

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How Is CDC Responding?
CDC has been an advocate of integrated pest management (IPM) for many years. CDC has partnered with the U.S. Environmental Protection Agency (U.S. EPA), U.S. Department of Housing and Urban Development, and other agencies and organizations on several projects and publications that promote the use of IPM in homes, schools, businesses, and communities.

Training
In response to the decline in vector control capacity at state and local health departments, EHSB partnered with NEHA in 2006 to develop an intensive two-day training course entitled, “Biology and Control of Insects and Rodents.” Several of the top IPM experts, entomologists, and environmental health professionals in the country were assembled to conduct the training. Response to the course has been overwhelming. The course was offered as a preconference workshop again at the NEHA annual conferences in 2007 and 2008. It became evident, however, that the environmental health workforce could be better served if the course were offered on a state or regional basis to focus on specific vector issues within the region. The course was expanded to three days to add important emerging pest issues such as bed bugs and to provide interactive training opportunities such as “kitchen crawls,” where instructors take students through a facility inspection that includes locating frequently overlooked pest harborage sites.

The principles of IPM are embedded in every course module. Depending on course location, modules may include the following:
- “green” pest management;
- bed bug biology, control, and interactive inspection;
- health effects of pesticides;
- interactive “kitchen crawl” inspection;
- interactive question-and-answer sessions;
- IPM basics;
- mosquito control;
- rodent control;

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• structural pest management for food and lodging facilities;
• the impact of global warming on pest management;
• tick management;
• vectorborne diseases;
• vectorborne diseases as bioterror agents; and
• venomous pests.

To better capture the IPM emphasis and the evolving nature of the course, the course title was changed to “Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management.” EHSB funded videotaping of the course, which is available free of charge on the NEHA Web site at www.nehacert.org (under CDC Sponsored Workshops). Updated versions of the online course focusing on rodent and bed bug control have been recently added. More than 10,000 sites from around the world have registered for the online course.

The Environmental Health Training in Emergency Response (EHTER) course developed by EHSB includes a module in emergency vector control with an emphasis on IPM in disaster environments. All EHTER modules are available free of charge via the CDC Sponsored Workshops link at www.nehacert.org.

Vector control training is also provided in the newly created Environmental Public Health Online Courses (EPHOC) (Studyvin & Struzick, 2010). Vector control is one of 15 modules that make up the EPHOC curriculum. The EPHOC modules can be accessed free of charge at www.cdc.gov/nceh/ehs/Workforce_Development/EPHOC.htm.

Continuing education credits are available for the IPM, EHTER, and EPHOC courses.

Web Site Resources
The EHSB Web site (www.cdc.gov/nceh/ehs/) hosts a Vector Control/IPM topic page (www.cdc.gov/nceh/ehs/Topics/VectorControl.htm) with numerous pest control resource documents developed by CDC, other federal agencies, and nongovernmental public health organizations. Publications, manuals, fact sheets, and archived webinars on the topic page include important information that promotes an integrated approach to vector and pest control that maximizes effective control methods while minimizing human health risks and environmental exposures caused by inappropriate or unwarranted use of pesticides. The site also includes narratives of vector control intervention projects accomplished by graduates of EHSB’s Environmental Public Health Leadership Institute (www.cdc.gov/nceh/ehs/ephti).

In response to the resurgence of bed bugs throughout the country, EHSB partnered with U.S. EPA to develop the Joint Statement on Bed Bug Control in the United States. The document highlights emerging public health issues associated with bed bugs and includes sections on bed bug biology, IPM for bed bugs, the role of government, and additional resource information. The joint statement can also be found at www.cdc.gov/nceh/ehs/Topics/VectorControl.htm.

Conclusion
As budget challenges continue to negatively impact vector activities at state and local health departments, it is important that environmental health programs remain vigilant to the greatest extent possible to protect the public from vectorborne illnesses and pest-related health problems. CDC will continue to support activities to enhance the knowledge and skills of the nation’s environmental public health workforce in the areas of IPM and vector control.

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