

Public Health Laboratories' Role in Chemical Exposure Events

Theresa Miller – Chemical Response Training Coordinator – Bureau of Laboratories

Since September 11, 2001, public health laboratories focused most of their preparedness efforts on the detection and identification of biological agents. However, in order to fulfill the public health laboratory's all hazard capabilities, other emergency events such as chemical exposures require additional effort.

One of the key functions of public health departments is to coordinate collection of environmental and clinical samples for analysis by public health laboratories. During a chemical exposure event, the Michigan Department of Health and Human Services Bureau of Laboratories (MDHHS BOL) role is to provide scientific expertise in clinical sample analyses protocols for most categories of hazardous chemicals.

Public health threats whether natural or intentional may be investigated simultaneously by public health departments, laboratories, and law enforcement. While each agency may have different interests in the investigation, a collaborative approach will yield the most information. Therefore, it is essential that public health agencies incident response plans provide training to all agency partners and conduct exercises in order to evaluate preparedness of both the public health departments and its partners. The ability of public health laboratory to respond to chemical hazard events may be limited by a lack of cooperative planning and training of partner agencies. This is particularly important for chemical threat agents because the need for clinical sample testing is immediate.

MDHHS BOL has taken several steps to protect the citizens of Michigan. This includes a role in developing and exercising interagency chemical hazard exposure preparedness response plans, providing training for collection, packaging and shipping evidentiary chemical hazard exposure clinical samples for healthcare partners, and having a laboratory with expert scientists and state-of- the art equipment to conduct clinical sample testing.