The Association of Public Health Laboratories

UNMET NEEDS
Support EPA's Homeland Security Laboratory Program to fund the Office of Emergency Management to:

• Maintain funding for the state chemical warfare agents program
• Restore support for the state radiological grant program
• Increase efficiency of electronic data exchange and review with states
• Develop and validate methods for transfer to state and local labs

Provide EPA with funding to ensure continued function of the Water Laboratory Alliance (a nationwide laboratory network protecting our drinking water).

• Continue capability-building exercises related to the National Response Plan
• Develop and validate methods for transfer to local and state labs
• Build relationships between EPA, states and small water systems
• Fund additional FTEs in the Water Security Division to carry out this work
• Provide funding to ATSDR to improve the use of laboratory data in communities impacted by potentially toxic exposures

BACKGROUND
The air we breathe, the water we use, the soil in which we plant, the buildings and neighborhoods in which we live — everything around us affects our health.

Environmental laboratories routinely monitor air, water and soil samples to prevent unintentional (as well as intentional) environmental contamination, and to ensure that populations are not exposed to unhealthy levels of contaminants.

HOMELAND SECURITY LABORATORY PROGRAM
Environmental emergencies endanger not only human life and health, but also the national economy, due to the need for evacuation and later remediation of the affected environment.

Laboratories conduct the environmental sampling that feeds into the decision-making process following an ‘incident of national significance’ involving the environment. State and local laboratories are typically the first to receive samples during an incident that then requires coordination with EPA and other environmental laboratories around the country as needed. The majority of state and local environmental laboratories, however, lack the proper resources to adequately respond to large-scale events.

To meet needs like expanding testing capabilities when the need arises and increasing training opportunities, APHL requests the restoration of funding for the Environmental Response Laboratory Network, particularly to support the state chemical warfare agents program and the state radiological grant program. This network provides a mechanism for state, federal and local environmental laboratories to collaborate and leverage capabilities.
To date only three states can test environmental samples for chemical warfare agents, while only four states receive funding for radiological testing.

This is of great concern, given the Fukushima disaster and the fact that not much has changed since a 2007 Congressional hearing on US laboratory capacity to effectively respond to a radiological attack: expert testimonies revealed that analysis of environmental samples could take as long as six years.

**DRINKING WATER SECURITY**

Two hundred and fifty million Americans get their drinking water from public water systems. A terrorist attack on a large municipal water supply could endanger the lives of millions of Americans.

Illustrated by the 2014 chemical spill in West Virginia’s Elk River, state and local laboratories are hard-pressed to analyze thousands of samples during a threat to our water supply without a support network (http://www.charlestondaily-mail.com/News/Kanawha/2014011000095). However, despite the multi-state impacts of this spill as the plume traveled down the Ohio River, surprisingly, EPA’s Water Laboratory Alliance (WLA), a network of laboratories created to increase collaboration and mutual aid during emergencies, was not activated for the response. Nor was it activated during the Superstorm Sandy response, nor during Fukushima—all incidents involving a great deal of water testing. Despite being a robust network that is regularly tested, there continue to be great needs regarding its use and adoption. In order to improve its usefulness and utilization, additional funding is needed to help overcome barriers like ease of use and visibility.

The WLA provides a resource into which several other EPA program offices should connect. In an era of increasing efficiencies across government services, such a network provides a model for tapping into under-utilized capabilities available at state and local laboratories. Unfortunately, the system lacks the necessary funding to promote its effectiveness to communities in need and laboratories that may join the efforts. Dedicated funding should be directed toward exercising the WLA’s National Response Plan in order to increase coordination of environmental laboratories and for building capability in the states to analyze threats.

**AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY (ATSDR)**

ATSDR investigates community exposures related to chemical sites and releases; in 2013 they touched over 700,000 people through over 150 health consultations. With additional funds, they could take their consultations to the next level by engaging experts from environmental health laboratories. For example, according to their calculations, 24% of sites had indeterminate findings due to a lack of data (impacting about 200,000 people). New funding would allow ATSDR to better connect over 40 communities with their state or local laboratories, whose advanced capabilities may provide additional answers and data. Such an investment would improve the quality & timeliness of community health assessments and increase our ability to protect the public from exposure at the federal, state and local levels.

Dedicated funding should be directed toward exercising the WLA’s National Response Plan in order to increase coordination of environmental laboratories and for building capability in the states to analyze threats.

**CONTACT**

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