

# ENVIRONMENTAL LABORATORIES

PROTECTING OUR WATER FROM CONTAMINATION

## UNMET NEEDS

Support the US Environmental Protection Agency (EPA)'s Homeland Security Laboratory Program to fund the Office of Emergency Management to:

- Develop and validate methods for transfer to state and local labs
- Maintain funding for the state chemical warfare agents program
- Restore support for the state radiological grant program

Provide EPA with funding to ensure continued function of the Water Laboratory Alliance (WLA, a nationwide laboratory network protecting our drinking water) to serve both homeland security and public health purposes. This will allow the Alliance to:

- Expand membership to smaller utilities to ensure coverage of all population centers
- Continue exercises and workshops related to the National Response Plan
- Develop and validate methods for transfer to local and state laboratories
- Provide additional funding so that the Water Security Division can more effectively carry out this work

## BACKGROUND

The air we breathe, the water we use, 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 supplies, 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 and may call upon EPA and other environmental laboratories around the country for assistance. The majority of state and local environmental laboratories, however, lack the proper resources to adequately respond to large-scale events.

The Environmental Response Laboratory Network (ERLN) is a mechanism for state, federal and local environmental laboratories to collaborate and leverage capabilities. It currently lacks sufficient funding for public health laboratories to fully establish and maintain their preparedness capabilities, particularly for the state chemical warfare agents program and the state radiological laboratory program. **To date, only two states can test environmental samples for chemical warfare agents.** The vast majority of states are capable of radiochemistry testing, but there is a significant gap between the nation's testing capacity and the potential testing demand in the event of a major radiological or nuclear incident. This is of great concern given current radiological threats to the US and the fact that, as revealed by a 2007 Congressional hearing on US laboratory capacity, an effective radiological attack response for a major nuclear event could take as long as six years. No current evidence suggests that this estimation has improved considerably, indicating that a significant amount of work is necessary to close this gap.

If the ERLN is sufficiently funded, states could develop a more competent emergency response laboratory workforce through increased capabilities, training activities and hands-on exercises. **Investment in this network, both for maintenance and growth purposes, is critical for nationwide public health protection.**

## DRINKING WATER SECURITY

Over 286 million Americans receive their drinking water through public water systems. A terrorist attack on a large municipal water supply could endanger the lives of millions of Americans. A switch in a municipality's water supply could lead to a federal state of emergency, exposing thousands of children to unsafe levels of lead in the process (Flint, Michigan— ongoing). Fluorinated chemicals (per- and polyfluoroalkyl substances) have been detected in public water systems in almost all 50 states and have been called the greatest environmental health challenge of the next decade.

## EPA LABORATORY FUNDING

### EMERGENCY RESPONSE LABORATORY NETWORK

FY 2019: \$30.3  
FY 2020: \$31.5 (necessary)

### WATER SECURITY INITIATIVE

FY 2019: \$4.8  
FY 2020: \$4.8 (necessary)

### WATER ALLIANCE FOR THREAT REDUCTION

FY 2019: \$1.1  
FY 2020: \$5.0 (necessary)

(Dollars in millions)

The EPA WLA—a network of laboratories created to increase collaboration and mutual aid during emergencies—provides a model for tapping into under-utilized capabilities at state and local laboratories. Unfortunately, the system lacks the necessary resources to overcome barriers such as ease of use, visibility and membership expansion to ensure robust nationwide laboratory support. Dedicated funding should be directed to WLA to increase environmental laboratory coordination to better analyze threats of national significance. ■

## CONTACT

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