Iowa – Environmental Laboratory Response Network Summit
June 28, 2011

Background

The previous L-SIP assessment conducted in Iowa indicated a lack of an environmental laboratory system and an inability to communicate effectively with environmental partners. The development of a statewide environmental laboratory network has long been a goal of the State Hygienic Laboratory. The APHL L-SIP grant allowed the SHL to address this gap and take the first step in developing an effective environmental laboratory network by hosting the Iowa Environmental Laboratory Response Network (I-ERLN) Summit on June 28. Participants included representatives from commercial, county, municipal, and state laboratories as well as representatives from the Iowa Department of Natural Resources and Iowa Department of Public Health. The event was facilitated by the University of Iowa Office of Organizational Effectiveness. A survey was completed by participants at the conclusion of the summit.

Current Environmental Laboratory Community in Iowa

In Iowa all laboratories that submit compliance monitoring data to the Iowa Department of Natural Resources (IDNR) must be certified. Currently there are 53 laboratories that are certified to perform some level of testing in support of the drinking water program, 164 wastewater laboratories, 29 solid waste laboratories, and 16 leaking underground storage tank laboratories. All of these laboratories are certified to perform at least some testing associated with the program(s) for which they are certified. Current national environmental related networks include the Environmental Protection Agency (EPA) Water Laboratory Alliance (WLA) and Environmental Laboratory Response Network (ELRN). Participants in the I-ERLN Summit were introduced to the EPA Laboratory Compendium database of environmental testing laboratories as well as the Water Contamination Information Tool (WCIT). While these resources can link some components for a national environmental testing network they fail to provide a functional local network comprised of all types of environmental laboratory testing facilities which can be utilized for information sharing and in response to environmental emergency situations in Iowa.

Summit Outcomes

Discussion began by identifying commonalities and mutual needs. Participants quickly discovered that regardless of the type of laboratory, each share a mutual mission to protect the health of Iowans. Consensus was quickly reached that an emergency response network would be advantageous for communities and for the customers served by each laboratory on a daily basis. With a well-designed network, this newly formed partnership could share resources and technical expertise, and provide rapid results in emergency situations. Participants also identified additional benefits such as sharing training resources and partnering with one another to overcome projected laboratory staffing shortages.

Significant barriers also were identified by the participants of the summit. Most notably is the fact that many if not most environmental laboratories are in direct competition with each other to provide environmental testing services throughout the state. This may make forming relationships challenging and may inhibit sharing of resources in emergency situations. In addition, representatives from commercial labs indicated a desire to partner in emergency situations but may be restricted by the amount of resources they can volunteer. Because of challenging economic times, participants asked, "Where will the funding come from to support this network?"

To overcome these barriers, discussions led to the creation of an ideal network, which would be narrow in focus, have defined leadership, and have representation inclusive of all environmental labs regardless of their type or geographical location. Participants agreed that to be successful, a network should include formalized agreements such as a memorandum of understanding and, most importantly, have measurable value and be sustainable. At the conclusion of the summit a core design team was established to develop a framework for an I-ERLN Laboratory Advisory Board (I-ERLN LAB) which will guide the development of the network. The core design team was charged with establishing the initial mission, leadership structure, and objectives of the LAB with the goal to introduce the I-ERLN during the annual statewide Laboratory Symposium scheduled for September 12, 2011 at the Iowa Laboratories Facilities in Ankeny, Iowa. To inform Iowa's environmental laboratorians on these and other updates, a Google Group was established.

At the conclusion of the summit all participants were encouraged to provide feedback and sixteen completed surveys were received. Feedback was overwhelmingly positive; 100% of respondents indicated that the summit met their expectations and comments revealed that the summit exceeded the expectations of many of the participants. All of the respondents indicated that they would attend another summit and/or participate in workgroups or committees relating to the creation of the I-ERLN. Prior to the meeting 25% of the participants were hesitant regarding the need for an environmental network and at the conclusion this number had been reduced to 6%. Only 56% of particpants were aware of the lab compendium and due to the information presented at the summit 70% of the participants not already part of the lab compendium would consider or likely become part of the compendium. 38% of respondents indicated an awareness prior of the ERLN prior to the Summit and 83% indicated that would consider or likely join the ERLN.

Core Design Team Outcomes

The core design team has met twice via conference call since the Summit and established that the creation of the Iowa Environmental Laboratory Network (I-ERLN) will be under the leadership and direction of the Laboratory Advisory Board (I-ERLN LAB). The I-ERLN LAB is tasked with the mission to coordinate commercial, state, and local environmental laboratories to prepare for and mobilize resources in response to an environmental emergency in Iowa.

The leadership of the LAB shall have eight members with an effort to provide geographical representation for all of Iowa. The membership will be comprised as follows:

- Two representatives from the State Hygienic Laboratory
- Two representatives from commercial laboratories
- Two representatives from local laboratories
- Two at-large representatives
- One non-voting/ex-officio member from IDPH
- One non-voting/ex-officio member from Iowa Department of Public Health (IDNR)

Selected individuals will be invited to participate in the LAB and will be confirmed no later than mid August. Members of the core design team have developed preliminary objectives and are working to finalize a framework to guide the LAB.

Summary

The Iowa Environmental Response Laboratory Network Summit was successful. The summit provided an opportunity to raise awareness and educate those laboratories in attendance about some of the opportunities and resources available to the environmental laboratory community from the EPA. Barriers to the creation of a functional and sustainable environmental laboratory network were discussed and a plan was developed to overcome challenges in the creation of the network. The I-ERLN design team was established and this team has been successful in defining the mission and leadership of the Laboratory Advisory Board. In the future the LAB will guide the development of the I-ERLN and use the established Google Group to communicate with and receive feedback from participating environmental laboratories. The Summit served to open crucial channels of communication necessary to build a sustainable and beneficial environmental network. Future challenges include a way to build and sustain the network in terms of funding and functionality.

APHL Follow-Up Questions

What had prevented this project from taking place earlier?

The previous L-SIP assessment conducted in Iowa did not include cross-sectional representation of the environmental sector. The state laboratory, county health department and state agencies participated and represented the environmental sector in-part, but the municipal drinking water and waste water treatment laboratories nor the commercial sector were represented in the initial L-SIP. After the L-SIP we knew the gap needed to be addressed but we simply did not have the resources, time, or funding to complete a project of this nature.

What examples or discussions during the assessment or follow-up identified the gap?

During the summit all of the participants agreed that communication among environmental partners was poor and very little partnership exists due to time constraints, fiscal responsibilities, and competition in the environmental community. Further discussion regarding the ongoing flooding in Western Iowa highlighted the need and advantages to a having a functional network to share resources, knowledge, and communicate rapidly. In Iowa, recent all-hazard events; flooding, tornadoes, a train derailment and helicopter crash are additional examples of where an effective network of environmental laboratories could be utilized to quickly assess environmental contamination.

What is the impact that completing this project has or will have on your laboratory system?

Communication has been established and all participants agreed that an environmental emergency response network would be advantageous for communities and for the customers served by each laboratory on a daily basis. With a well-designed network, this newly formed partnership could share resources and technical expertise, and provide rapid results in emergency situations. Participants also identified additional benefits such as sharing training resources and partnering with one another to overcome projected laboratory staffing shortages.

Please identify other gaps that have not yet been addressed. What are the barriers to carrying out improvement projects that would address or correct the issue?

Resources to maintain an environmental network is a significant gap. A functional network must be inclusive of all types of environmental laboratories and partnerships between the commercial and public sectors are difficult to build. Strategic relationships must be built and maintained to support the partnerships. Budget and time constraints make this difficult. In addition, the network must be carefully designed to have measurable value and be narrow in scope to encourage continued participation. Funding and resources must be available to sustain the effort until the network if fully operational.