



## **INTEGRATED CONSORTIUM OF LABORATORY NETWORKS** **FISCAL YEAR 2016 ANNUAL REPORT**

### ***Introduction & Background***

The Integrated Consortium of Laboratory Networks (ICLN) provides a venue for the efficient coordination of federally sponsored analytical laboratory services for chemical, biological, radiological and nuclear incidents. This is accomplished through inter-network strategic and operational planning, identification of roles and responsibilities, communication and information sharing, and resource and response coordination.

The ICLN was established by a Memorandum of Agreement (MOA) initially signed in 2005, and renewed in 2012 and again in 2016. Led by the Department of Homeland Security (DHS) the ICLN's members are from nine federal departments and agencies, including the Department of Agriculture (USDA), Department of Commerce (DOC), Department of Defense (DoD), Department of Energy (DOE), Department of Health and Human Services (HHS), Department of Interior (DOI), Department of Justice (DOJ), Department of State (DoS), and Environmental Protection Agency (EPA).

Fiscal Year 2016 was a pivotal year for the ICLN. It transitioned from a research and development project to a fully operational emergency preparedness and response tool.

### ***JLC and NCG Activities:***

The ICLN is made up of two primary entities, the Joint Leadership Council (JLC) and the Network Coordinating Group (NCG).

The JLC is comprised of senior leadership from each of the signatory federal Departments and Agencies and is charged with "assuring an appropriate strategy is in place to support an effective all-hazard laboratory response capability." The JLC met on September 21, 2016 and discussed the transition of ICLN management from DHS Science and Technology Directorate to the Office of Health Affairs and the path forward used to determine areas for growth within the ICLN. Other items reviewed included updates from the Methods, Radiological Laboratory, and Sample Prioritization Subgroups. The JLC approved the ICLN Strategic Plan.

The NCG is composed of network coordinators and operational representatives from all ICLN partners and is charged with "promoting enhanced commonality and integration of network functions." The NCG met twelve (12) times this past fiscal year. The NCG meets monthly on the 3<sup>rd</sup> Wednesday of each month to consider interagency interoperability issues and recommendations from the technical subgroups. The following items were successes of the NCG during Fiscal Year 2016:

- Transitioning of the ICLN from a research and development organization to an operational entity.
- Incorporating the ICLN vision and mission into interagency documents.

- Updating and executing the ICLN MOA that encompasses the Data Sharing and Information Exchange procedures.
- Determining the objectives of the ICLN subgroups.
- Initiating monthly exercises to build “muscle memory.”
- Conducting and participating in a confidence building competency test – the Malathion (organophosphate insecticide) Exercise.
- Creating a logo for the ICLN.
- Updating the public ICLN webpage.
- Developing the ICLN 101 briefing deck.
- Finalizing the Incident Specific Data Sharing Agreement form.

### ***Subgroups***

The ICLN also hosts a number of technical subgroups which focus on addressing solutions to specific laboratory preparedness issues. The Subgroups review key issues and requirements of the networks and devise recommendations for operational or policy choices. Below is a list of Subgroup successes for the 2016 Fiscal Year.

- Subgroup Successes:
  - Methods Subgroup Successes: Revising three ICLN Methods Subgroup generated documents:
    - Chain of Custody Form (completed)
    - Sample Collection & Handling Guidelines (in progress)
    - Guidelines for Comparison of Validation Levels between Networks (in progress)
  - Radiological Laboratory Subgroup successes include:
    - Participated in the planning of the radiological lab portion of DOE Northern Lights Exercise 2016.
    - Developing a white paper on “The Critical Need for Radiochemists and Radiological Laboratory Infrastructure Upgrades in the next 20 years” (in progress).
    - Continuing to update ICLN Laboratory Limiting Issues Document (radiological section) (in progress).
    - Utilizing past network development experiences (EPA, FDA, CDC, USDA) to support the development of the DOE/Radiological Response Laboratory Network (RRLN) (in progress).
  - Sample Prioritization Subgroup Successes:
    - Creating a Sample Prioritization document which describes the types of decisions that will be needed during different phases of an incident as a means to frame sample prioritization during an incident. The document covers Bio, Chem, Rad and Nuclear incidents (in progress).
      - Incident scenarios are used to assist the local, state, and federal response groups to understand the possible types of information needed from sample analysis and the impact of sample prioritization in order to obtain this critical information.
      - This document is being submitted for ICLN NCG review and then the ICLN will seek reviews from various response organizations.
      - Once approved, this document will be widely distributed to local, state and national emergency response groups.

***ICLN Exercises:***

A critical component of ICLN success in incident response management is communication before and during events. The ICLN has undertaken much work in this area to build the relationships necessary to support effective laboratory response. Ongoing exercises and efforts to measure throughput help identify room for growth and focal areas for improvement. The ICLN utilizes four exercise types which are more in-depth than the standard Homeland Security Exercise and Evaluation Program (HSEEP) exercise types. These include monthly ICLN Portal exercises, tabletop exercises (TTX), confidence building competency tests (CBCTs), and interagency exercises.

***Monthly Exercises:***

Monthly exercises were implemented to improve “muscle memory” related to utilizing ICLN Portal tools. A specific task was practiced during each monthly exercise. These included the following activities as noted in Table 1:

<b>Table 1: Monthly ICLN Exercises</b>	
<b>Month</b>	<b>Exercise</b>
March 2016 (Initial Monthly ICLN Exercise)	Profile Check
April 2016	Preparedness Alert Drill
May 2016	SITREP Alert Drill
June 2016	Incident Specific Data Sharing Agreement
July 2016	Summer Intermission
August 2016	Combined Registry Exercise
September 2016	Malathion Exercise
October 2016	Northern Lights Exercise
November 2016	Winter Intermission
December 2016	Winter Intermission

***Tabletop Exercises:***

In order to promote overall laboratory response readiness and ensure participants and systems tools are prepared for joint incident response, the ICLN conducts virtual, tabletop laboratory exercises across all networks that analytically address all matrices (human clinical, animal clinical, human food, environmental, plants/crops in the field, and animal feeds/medicines). These exercises include scenario injects and responses via use of the ICLN Portal and associated ICLN tools, as noted in the *ICLN NCG SOP for Incident Response*. These types of exercises have improved knowledge of network and Department/Agency responsibilities and capabilities, enhanced overall execution of the laboratory incident response process, and increased use and

quality of communications through the ICLN Portal. The ICLN participated in the Sodium Fluoroacetate Tabletop Exercise (ICLN SFA TTX) in Fiscal Year 2016 (December, 2015). The ICLN SFA TTX focused on a notional contamination of milk powder that was included in human baby formula and animal milk replacement products.

***ICLN Confidence Building Competency Tests (CBCT):***

The ICLN also conducts laboratory-based exercises, including “cross-network confidence building tests,” to promote confidence in laboratory network performance during cross-network actions. These exercises promote confidence that laboratorians can competently conduct analyses with methods and matrices they may not use on a regular basis (e.g., an analytical method provided by a lead network in an incident response to a network providing support during that response). In Fiscal Year 2016, the ICLN initiated and participated in a Malathion CBCT (September, 2016). The scenario associated with this CBCT simulated anticipated laboratory response to an investigation of potential Malathion contamination in both milk and water.

***Interagency Exercises:***

Members of the ICLN participated in the exercise and planning calls associated with an interagency exercise titled, “Northern Lights”. This exercise was spear-headed by Department of Energy and funded with Department of Homeland Security funds. The exercise scenario focused on a notional Nuclear Power Plant incident in Minnesota. The exercise occurred in October of 2016 (Fiscal Year 2017).

During the exercises, real samples were sent out for analysis by laboratories that are members of ICLN networks. Departments/Agencies and networks that participated in the planning calls leading up to the exercise include the Department of Energy, Environmental Protection Agency’s Environmental Response Laboratory Network, and the Food and Drug Administration/Food Emergency Response Network.

***ICLN Outreach***

In Fiscal Year 2016, several projects were initiated to provide information to external parties about the ICLN and to share products developed by the ICLN. These projects included the following:

- Development of a logo which will allow “branding” recognition of the ICLN.
- Redevelopment of the external ICLN website (iclcn.org) to make it more user friendly and to allow increased ease in finding reports, documents, and webinars developed or produced by members of the ICLN.
- Creation of an “ICLN 101” PowerPoint briefing and “ICLN Fact Sheet” which includes information on the mission, structure, and activities of the ICLN.

***ICLN Strategic Plan:***

In Fiscal Year 2016, the ICLN developed the Strategic Plan. Members agreed to the following goals and objectives:

**GOAL 1: STRENGTHEN ICLN’S INCIDENT RESPONSE CAPABILITIES**

- Incorporate the ICLN into the overall federal incident response landscape. For example - within the National Response Framework and National Incident Management System.
- Enhance the incident management workspace/tools on the ICLN portal.
- Identify areas and resources where the ICLN Program Office (i.e., DHS) can increase its support to the networks.
- Identify current accreditations, if any, for each lab.
- Determine the accreditation requirements for each network and the need for, and means of obtaining, waivers of regulatory requirements that may be necessary for surge emergency response.

**GOAL 2: STRENGTHEN THE ICLN'S TECHNICAL CAPACITY**

- Support departments/agencies that are establishing and/or participating in laboratory networks.
- Routinely assess the ICLN networks' capabilities against appropriate benchmarks.
- Continually refine the ICLN Portal, the Data Exchange Utility, and Combined Registry. Correct identified deficiencies and implement enhancements as deemed appropriate.
- Utilize subgroups to identify and address gaps; provide support to the subgroup chairs.

**GOAL 3: IMPROVE AND EXPAND ICLN EXERCISES AND PARTICIPATION**

- Develop an exercise structure to test the response capability and capacity of all stakeholders and incorporate the ICLN into existing interagency and national level exercises.
- Enhance and utilize CBCTs to identify and address capability/capacity gaps.
- Develop and execute monthly exercises to build "muscle memory" within the ICLN community.

**GOAL 4: DEVELOP AND BUILD OUTREACH FOR THE ICLN**

- Build interagency awareness of the ICLN and its vision and mission.
- Identify areas where the ICLN Program Office can provide resources and support to state and local partners.
- Partner with laboratory associations to address needs of federal and state laboratories.
- Collaborate with international labs and partners to share best practices.
- Participate and host events during National Laboratory Week.

**Conclusion:**

Fiscal Year 2016 has been a busy and successful year for the ICLN. Accomplishments have been achieved by the JLC, NCG, ICLN Subgroups, and through initiation of ICLN exercises and the development of the 2016 ICLN Strategic Plan. Also important is the transition of the ICLN from a "research and development" entity to an "operational" entity. Based on the high caliber of outcomes produced by the ICLN, this has proven to be a strong and useful incident management tool which can be utilized during a multi-agency integrated laboratory response.