

# Integrated Consortium of Laboratory Networks (ICLN)

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# What is the ICLN?

**Vision:** To create a U.S. homeland security infrastructure with a coordinated and operational system of laboratory networks that provides **timely, high quality, and interpretable results** for **early detection** and **effective consequence management** of acts of terrorism and other events requiring an integrated laboratory response



**Coordinating bodies** that *develop guidelines* in quality assurance, proficiency testing, methods development, and information management



A **portal** that enables *efficient coordination of analytical laboratory services* for chemical, biological, radiological, and nuclear incidents

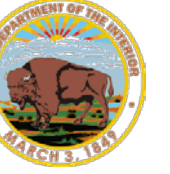


A **network of networks** that facilitates *integrated and coordinated response actions*, involving multiple agents and matrices

**A Coordinated Network of Networks**



# ICLN History



November  
2004

- Under the auspices of the Homeland Security Council, agencies sponsoring relevant capabilities met, recognized the benefits gained from creating a collaborative alliance, and endorsed participation of independent lab networks.

June 2005

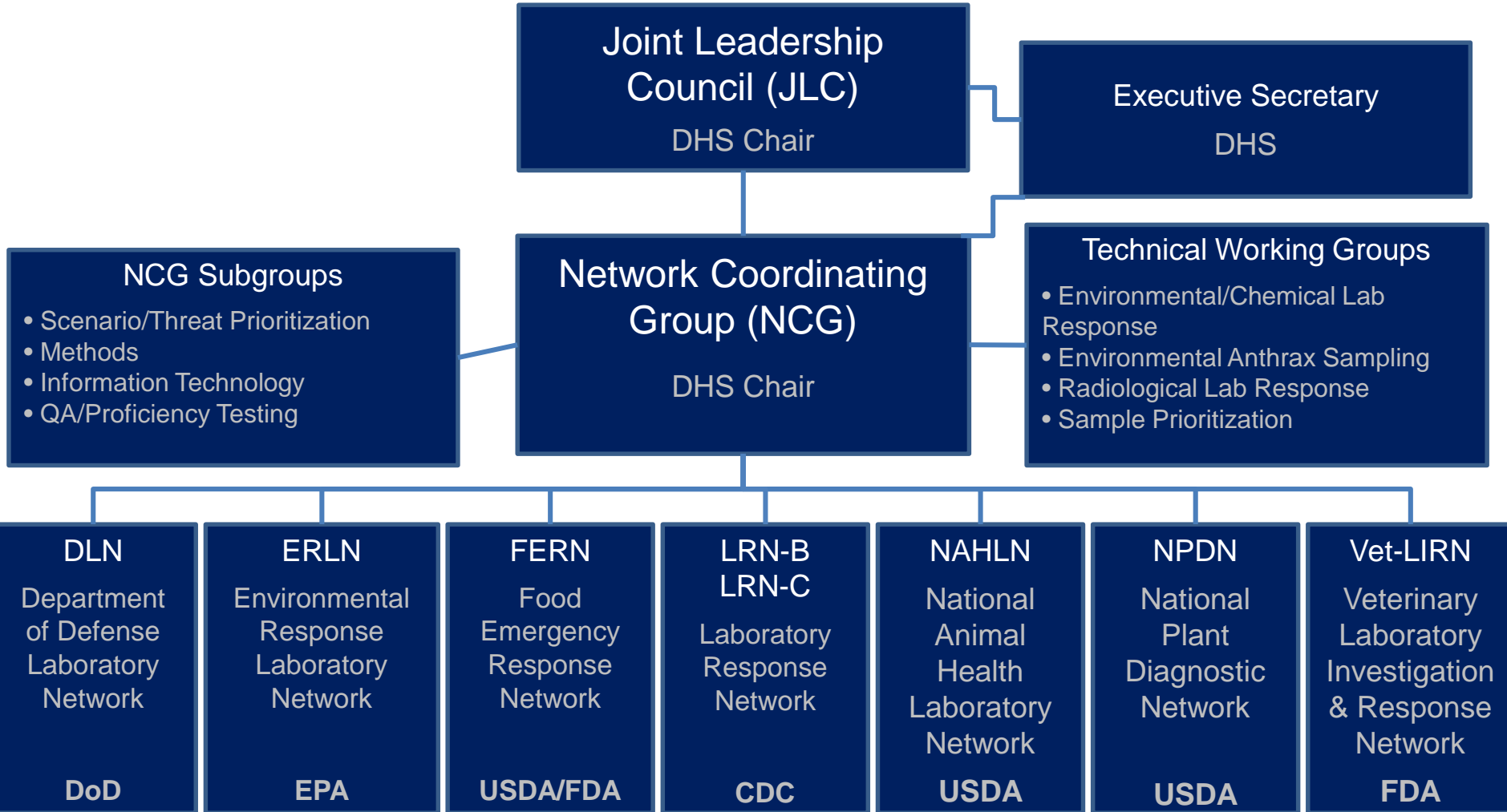
- 10 agencies signed a Memorandum of Agreement (MOA) that established the ICLN and solidified the vision statement.
- The signatories agreed to work to **optimize national laboratory preparedness by improving coordination of laboratory response to incidents.**

January  
2012

- MOA updated with current capabilities, objectives, and goals, and re-signed by all agencies.



# ICLN Organization



More than 450 distinct labs represented in member response networks.



# Progress in Key Areas

## Representative Guidance Created

- Integrated Response Architecture and Standard Operating Procedure
- Chain of Custody guidance
- Methods Validation guidelines
- Sample Management Logistics guidelines
- Quality Assurance guidelines
- Tabletop Exercise Conduct guidelines
- Combined registry: methods, training, proficiency tests posted on Portal

## Secure Web Portal for communications and data exchange

The screenshot shows the ICLN Portal interface. At the top, it says "ICLNPortal INTEGRATED CONSORTIUM OF LABORATORY NETWORKS" with a row of member logos. Below that is a navigation bar with "Incident Home", "Preparedness Alerts", "Create PAs", "Situation Reports", "Create SitReps", "Data Exchange", "Upload Data Files", "Merge Data Files", "View Data Files", "Communications", "Email", and "Virtual Meetings". The main content area features an "EXERCISE: FERN/ICLN Tetramine CBCT August 2011" announcement. To the right, there is a "Point of Contact" section for Donald Burr and a "Next Meeting" section. A "SOP Guidance Steps" flowchart is also visible. The URL [www.icln.org](http://www.icln.org) is displayed at the bottom right.

## SOP Exercises (virtual via Portal)

- Environmental *B. anthracis* (2010 [2], 2014)
- Bio in food (2010)
- Chem in food (2010, 2012, 2014 in planning)
- Radiological (2012, 2013, 2014 in planning)
- Foot and Mouth Disease (2011, 2013)
- *Rathyibacter Toxicus* [plant pathogen] (2013)

## Cross-Network Confidence Building Tests

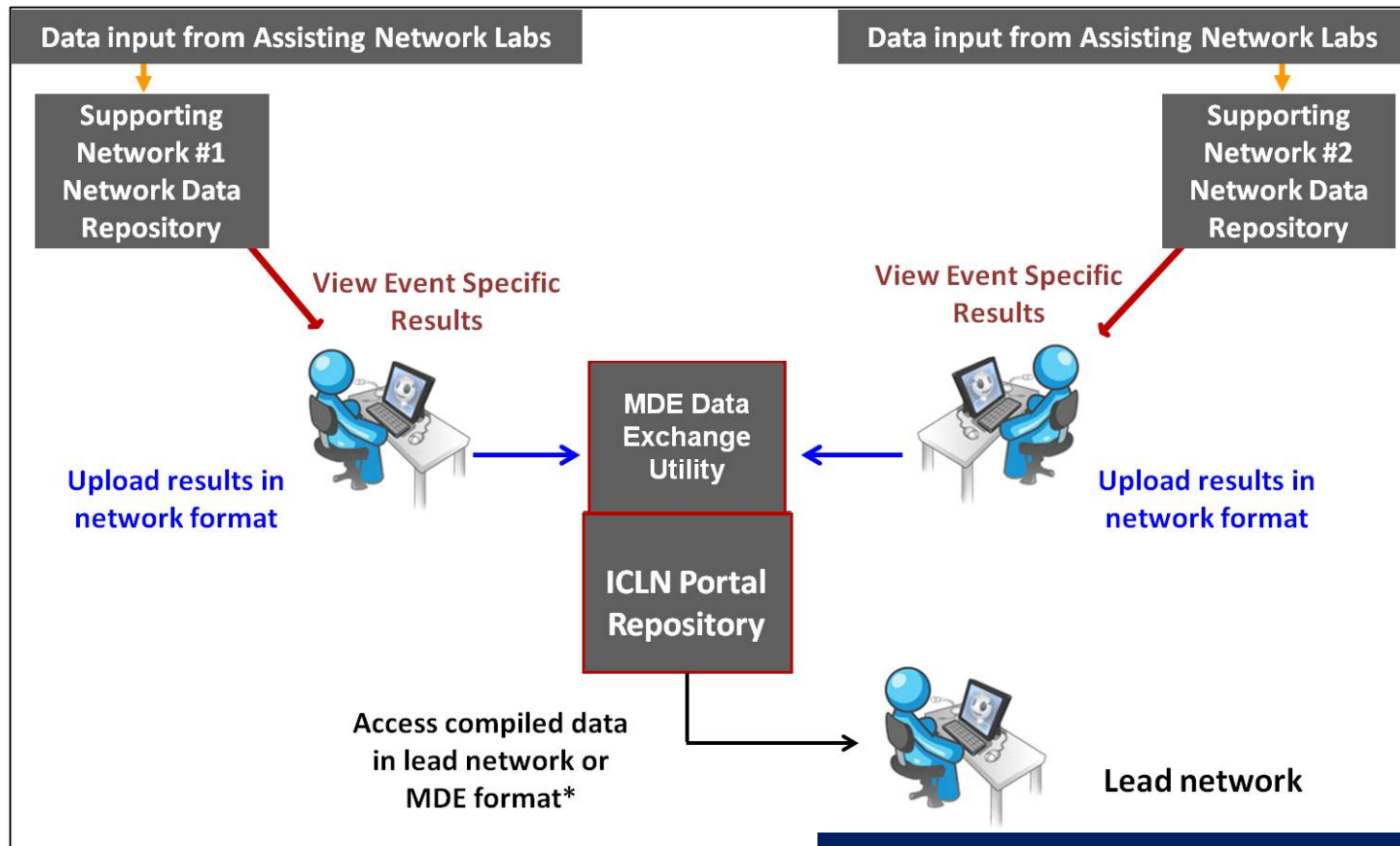
(To promote confidence in other network performance)

- *B. anthracis* sterne on swabs (2010)
- TETS in beer (2011)
  - Overall performance in both was excellent
- Rad in environmental samples, food currently in process



# Data Exchange via Portal

In FY12, we developed and began implementing a Data Exchange Utility enabling multiple network results to be aggregated in a common format, a critical step forward.



Mapping to MDE format complete for ELRN, LRN-B and -C, FERN, NAHLN formats; other networks in progress

\* MDE = minimum data elements: format developed by Methods and IT subgroups comprising some 40 fields intended to encompass all attributes potentially associated with samples



# Exercise with State/Local

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- Conducted first joint exercise with state/local response entities  
April 2014
- Scenario: *B. anthracis* environmental release in Baltimore, MD
- Combined traditional tabletop exercise (at Fort Meade, MD) and ICLN virtual participation (ICLN players on web portal)
- Players at Ft. Meade: MD Departments of Health and Mental Hygiene, Emergency Management; Baltimore Health Department, Office of Emergency Management, Fire Department; EPA; DHS OHA; USDA
- Key lesson: State/local participants intrigued by learning about ICLN, would prefer a traditional tabletop exercise with ICLN in room to learn more.



# Concluding Perspectives

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- ICLN is presently in position to enable optimized, joint lab response capabilities for scenarios of prime concern.
- Opportunities to improve interface with Incident Command concepts through simulations, tabletops will be sought.
- ICLN will be working to enhance outreach across affected communities.