

INTEGRATED CONSORTIUM OF LABORATORY NETWORKS





MISSION: The mission of the Integrated Consortium of Laboratory Networks (ICLN) is to coordinate federally sponsored analytical laboratory services for chemical, biological, radiological, and nuclear (CBRN) incidents. The ICLN does this through planning, identifying resources, providing laboratory surge capacity support, and defining key process steps for information exchange and data sharing during an incident. During CBRN incidents, the ICLN provides timely, credible, and interpretable data in support of surveillance, early detection, and effective consequence management.

The Integrated Consortium of Laboratory Networks is sponsored by the Department of Homeland Security/Office of Health Security



More than 450 distinct labs represented in member response networks

Two Major Coordinating Elements of the ICLN:

- **1. STRATEGIC LEVEL:** Joint Leadership Council (JLC) is made up of one senior policy member from each Department or Agency participating in the ICLN.
 - The JLC is charged with "assuring an appropriate strategy is in place to support an effective all-hazard laboratory response capability."
- 2. **OPERATIONAL LEVEL:** Network Coordinating Group (NCG) is composed of senior technical and program representatives.
 - The NCG is charged with "promoting enhanced commonality and integration of network functions."
 - There are presently seven networks within the NCG: DLN, CDC LRN, ERLN, FERN, NAHLN, NPDN, and Vet-LIRN.



| Network Name | |
|--|-------------|
| DLN: DoD Laboratory Network; Agency: DoD | H k a |
| ERLN: Environmental Response Laboratory Network; Agency: EPA | E |
| FERN: Food Emergency Response Network; Agencies: HHS/FDA and USDA/FSIS | F |
| LRN: Laboratory Response Network; Agencies: HHS/CDC | (f |
| NAHLN: National Animal Health Laboratory Network; Agency: USDA | / |
| NPDN: National Plant Diagnostic Network; Agency: USDA | F |
| Vet-LIRN: Veterinary Laboratory Investigation & Response Network; Agencies: HHS/FDA | F |

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Primary Network Focus

- Human clinical, animal (e.g., zoonotic surveillance), vectorborne (e.g., mosquito and tick surveillance), environmental, and food matrices of the military
- Environmental matrices
- Food consumed by humans and animal feeds
- Clinical specimens as well as environmental, water, and food samples
- Animal clinical/live animals in the field
- Plants/crops in the field
- Regulatory compliance and safety of animal feeds and veterinary drugs by testing animal diagnostic samples

ICLN Tools

Portal: A secure, passwordprotected web portal that can be used by member networks on a day-to-day basis as well as during an incident.



Data Exchange

Utility: A secure online system that supports the exchange of laboratory results data in an agreedupon standardized ICLN format, available through the ICLN Portal.

Standard Operating

Key Process Steps

guidance on how to request

capacity support from fellow

Checklist: Provides

assistance for capability/

networks; describes the

program

returning

resources

their home

back to

network.

offices: and

assists with

processes/procedures to communicate about ongoing

incidents/events; simplifies

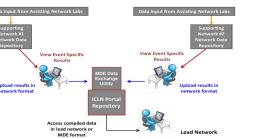
data reporting between network

Procedure/

Combined Registry: A password*protected* database that houses the Methods Registry, network proficiency testing data and schedules, and the training calendar.



The Combined Registry is a multi-function application and available through the ICLN Portal. It provides the ICLN community the ability to securely access and share Methods, Proficiency Testing, Training information, and schedules.



- Converts from native network formats to common MDE* format
- >10K record upload in <10 minutes 400K records searchable
- <4 minutes with 8 concurrent users

*MDE = Minimum Data Elements: A format developed by the Methods and IT subgroups comprising some 40 fields intended to encompass all attributes potentially associated with samples.

OPERATIONAL STEPS OF THE ICLN

ICLN Activated

- Network member recognizes there may be a need for collaboration.
- Incident is created on the ICLN Portal.
- Communication is sent to all NCG members.

Initial SITREP

A SITREP is issued when a potential or evolving situation has been confirmed as a valid incident via a positive analytical result.

ICLN Coordination Teleconference

Details of the incident, including current laboratory capacity and capability, are discussed. Resources may be requested to help respond to the incident.

SITREP Updates & Data Exchange

- SITREPs are updated as new information becomes available.
- Analytical data results are uploaded to the ICLN Data Exchange Utility.

ICLN Deactivated

- Resources no longer needed are returned to their home network. - Final SITREP issued to close out incident.

-This process may vary slightly from incident to incident.-

ICLN Exercises

Completed ICLN Tabletop (TTX) and ILCE/Live **Sample Exercises:**

Tabletop Exercises (TTXs):

- B. anthracis (December 2008)
- Melamine in macaroni product (December 2008)
- H5N1 exercise (2009)
- B. anthracis inhalation (IBRD, July 2010)
- B. anthracis inhalation (October 2010)
- C. botulinum in food (October 2010)
- Sodium fluoroacetate in food (October 2010)
- Foot and Mouth Disease (March 2011)
- Rathyibacter Toxicus (September 2011)
- Rad TTX: 3 RDD (Denver, Chicago, Los Angeles) using Strontium-90 and Plutonium-238 (February 2012)
- Chemical-in-Milk/ChemR2 (August 2012)
- Foot and Mouth Disease in Milk (May 2013)
- Radiological IND (July 2013)
- Anthrax Validation Exercise (April, 2014)

IN SUMMARY:

The ICLN delivers a coordinated consortium of networks that are:

- Aligned with national, departmental, and agency guidance, policies, and response mechanisms.
- Poised to deal with high consequence, low probability events by leveraging existing laboratory resource capability and capacity.

The ICLN provides an operational, cost-effective contribution to national security.

CONTACT INFORMATION

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Tabletop Exercises

Monthly

Exercises

ICLN COLLABORATION & COORDINATION

- Cyclosarin Tabletop Exercise (September 2014)
- Nuclear Power Plant Tabletop Exercise (June 2015)

Internetwork

Laboratory

Coordination

Exercises

Interagency

Exercises

- Sodium Fluoroacetate Tabletop Exercise (December 2015)
- Cvanide/Ethvl Parathion/Strontium-90 Mixed Agent Tabletop Exercise (September 2017)
- Opioid Tabletop Exercise (September 2018)
- Biological/Radiological Americium-241/Highly Pathogenic Avian Influenza (H5N1) (June 2022)
- Fourth Generation Agent Tabletop Exercise (Projected for March/April 2025)

Internetwork Laboratory Coordination Exercises (ILCEs) & Live Sample Exercises:

- BioRad2 Live Sample Exercise (January 2023)
- Fentanyl Live Sample Exercise (January 2024)

