

OF LABORATORY NETWORKS (ICLN)

OF LABORATORY WETHOR



MISSION

Provide for a federally coordinated and interoperable system of laboratory networks that provide timely, credible, and interpretable data in support of surveillance, early detection and effective consequence management for incidents requiring CBRN laboratory response capabilities.



Memorandum of Understanding signed by all ICLN Member Agencies



PARTNERS





SIGNATORY AGENCIES OF THE ICLN MEMORANDUM OF AGREEMENT (MOA)

U.S. Department of	U.S. Department of	U.S. Department of
Agriculture (USDA)	Defense (DoD)	Energy (DOE)
U.S. Department of	U.S. Department of	U.S. Department of
Health and Human	Homeland Security	Interior (DOI)
Services (HHS)	(DHS)	
U.S. Department of	U.S. Department of	U.S. Environmental
Justice (DOJ)	State (DoS)	Protection Agency (EPA)



Overview of HSPDs, ESFs, & NSMs supported by the ICLN

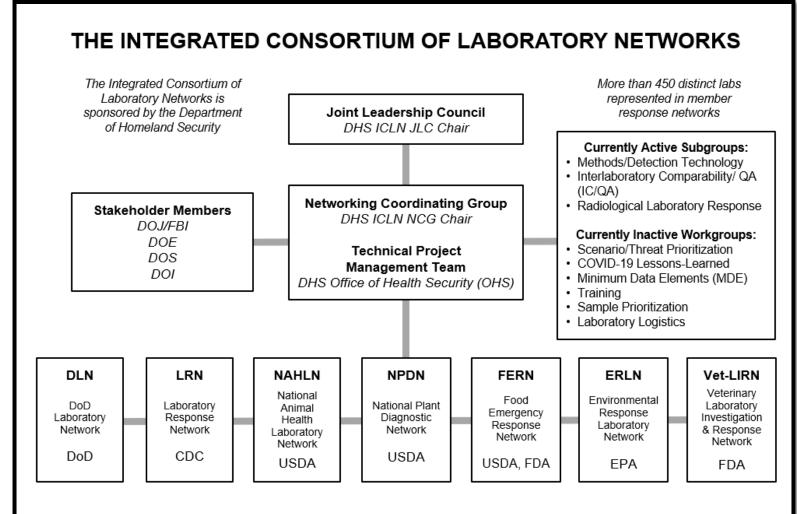
Overview of HSPDs, PPDs, ESFs, and NSMs supported by the ICLN				
HSPD-5: Management of	HSPD-7: Critical	NSM-16: National Security		
Domestic Incidents	Infrastructure Identification,	Memorandum-16		
	Prioritization, and	Strengthen the Security and		
	Protection.	Resilience of U.S. Food		
		and Agriculture		
HSPD-10: Biodefense for the	HSPD-21: Public Health and	HSPD-22: Domestic		
21st Century	Medical Preparedness	Chemical Defense		
PPD-8: National	2012 National Strategy for	ESF-5: Emergency		
Preparedness Goal	Biosurveillance	Management		
ESF-8: Public Health and	ESF-10: Oil and Hazardous	ESF-13: Public Safety and		
Medical Services	Materials Response	Security		

2022 Security Memorandum-15: National Biodefense Strategy and Implementation Plan for Countering Biological Threats, Enhancing Pandemic Preparedness, and Achieving Global Health Security

5



ICLN STRUCTURE





TWO COORDINATING ELEMENTS OF THE ICLN:

Joint Leadership Council (JLC):

- Strategic level entity.
- Made up of one senior policy member from each Department or Agency participating in the ICLN.
- JLC is charged with "assuring an appropriate strategy is in place to support an effective all-hazard laboratory response capability."

Network Coordinating Group (NCG):

- Operational level entity.
- NCG is composed of senior technical (e.g., laboratory managers) 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, ERLN, FERN, LRN, NAHLN, NPDN, and Vet-LIRN.



ICLN NETWORK FOCUS

Network Name	Primary Network Focus
DLN: DoD Laboratory Network; Agency: DoD	Human clinical, animal (e.g., zoonotic surveillance), vector-borne (e.g., mosquito and tick surveillance), environmental, and food matrices of the military
ERLN: Environmental Response Laboratory Network; Agency: EPA	Environmental matrices
FERN: Food Emergency Response Network; Agencies: HHS/FDA and USDA/FSIS	Food consumed by humans and animal feeds
LRN: Laboratory Response Network; Agencies: HHS/CDC	Clinical specimens as well as environmental, water, and food samples
NAHLN: National Animal Health Laboratory Network; Agency: USDA	Animal clinical/live animals in the field
NPDN: National Plant Diagnostic Network; Agency: USDA	Plants/crops in the field
Vet-LIRN: Veterinary Laboratory Investigation & Response Network; Agencies: HHS/FDA	Regulatory compliance and safety of animal feeds and veterinary drugs by testing animal diagnostic samples



ICLN TOOLS

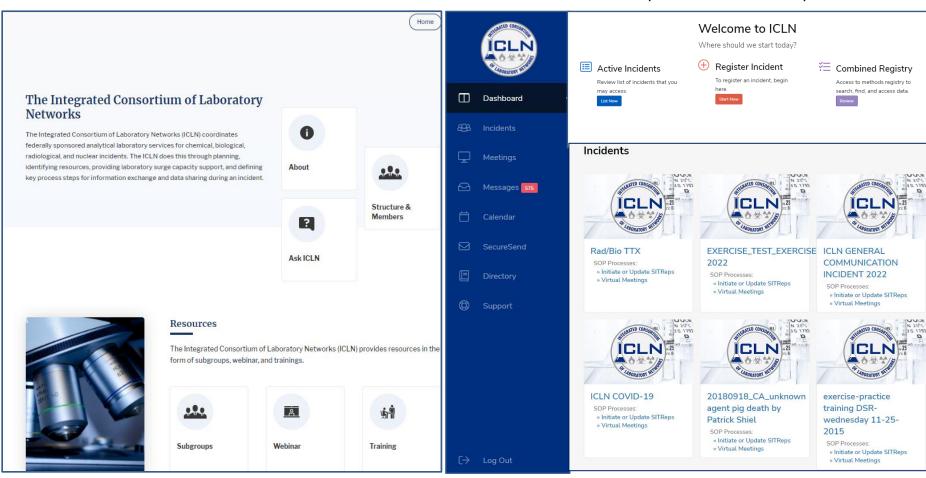
- **ICLN Portal:** A secure, password-protected web portal that can be used by member networks on a day-to-day basis as well as during an incident.
- Combined Registry: A password-protected database that houses the Methods Registry, network proficiency testing data and schedules, and the training calendar.
- Standard Operating Procedure/Key Process Steps Checklist: Provides guidance on how to request assistance for capability/capacity support from fellow networks; describes the processes/procedures to communicate about ongoing incidents/events; simplifies data reporting between network program offices; and assists with returning resources back to their home network.
- Data Exchange Utility: [IN FINAL DEVELOPMENT STAGE] A secure online system that supports the exchange of laboratory results data, in an agreed-upon standardized ICLN format, among participant networks in a joint response action.



ICLN PORTAL

External Portal

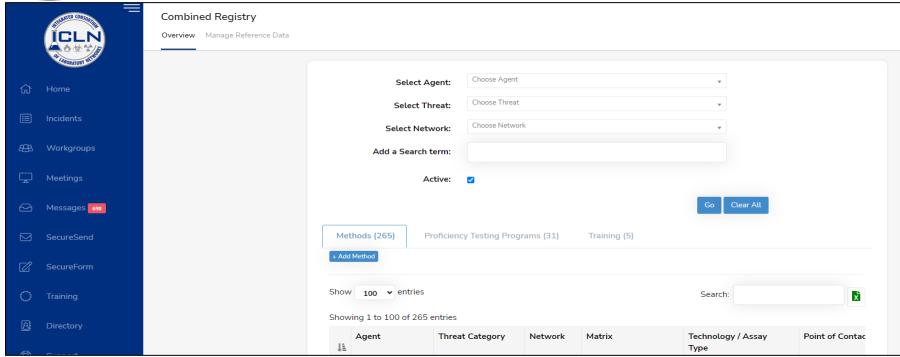
Internal Portal (Password-Protected)



^{*}Federal laboratory partners can request an account by sending an email to ICLN@hq.dhs.gov.



COMBINED REGISTRY



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



Table 1: ICLN Key P				November 30, 2022		
ABORATORY WET		Table 1: ICLN Key P		ACTIVITY ACTION		
		November	6.	New information		TI I A DA GITTETT MA CA C
	ACTIVITY			becomes available		Update the PAs or SITREPs with the new information.
Table 1: ICLN Key Novemb	NCG members should be alerted via a formal communication	☐ Enter the Incident on the Por ☐ Fill out the SITREP template form and upload. Use the "In		about the Incident.		Verify that the PA or SITREP has been sent by email to those included within the Incident email distribution list. Check in the email inbox or the "Prior PA" or "Prior SITREP" box to verify the document has been sent out.
☐ If the activity for which you are using the Portal is for "EXERCISE EXERCISE EXERCISE" in all comm ☐ If feasible, DHS will alert all members on the Emerge	developing incident by	the Preparedness Alert sectio If assistance is needed (e.g., 1 Outlook/Status of Assistanc analysis, data entry, increase	7.	Resource needs change (they increase or decrease).		Convene Zoom.gov virtual meeting to determine how to gain use of additional resources or how to demobilize resources that are no longer needed.
alarmed if they receive communications which cite th 1. NCG members should be alerted via a formal Enter the ICLN GENERAL create a Preparedness Alert	Situation Report (SITREP).	☐ Save the form. Send SITREI☐ Verify that the SITREP has be Report" pull down menu at the options. You can also check	8.	Track Lessons Learned		Go to the main screen within the Incident and find the "Lesson Learned" text box. Click "+Add Topic" in the upper right-hand corner of the screen. Once topic has been created, click on it then select "Add post." Write your observations and comments in the area provided.
communication mechanism about an unconfirmed, developing incident by sending out a Preparedness Alert. Click on "Create PA" in flot top of page. Fill out the PA form templa manually, the format for Inwhere incident started_co 20120330_Denver_B.anth Save the form and send the Verify that the PA has been down menu at the top of the the "Latest Activity" blog was after the PA is created, it is virtual meeting to discuss the networks/azencies.	Create a meeting to discuss seeking analytical/support resources from NCG members is identified and needs to be communicated.	check the email inbox for the Enter the Incident on the Por Click on the appropriate "Ac Go to "Meetings" on the SO choose "Meetings" from the Fill out the form with the appreselect that option at the botto Set-up time for the zoom.gov The earlier the incid electronic meeting, necessary networks. In the body of the mappropriate time zor CST/11 a.m. MT/10 If feasible, provide a	9.	Incident is nearing conclusion.		Go to your Incident on the Portal. Choose either the "Create SITREP" button in the flow chart or select the "Situation Report"/"Add" option from the top of the page. Send SITREP to members of the Incident. If this is the final communication of the Incident, note it as the "final" SITREP. Verify that the SITREP has been sent by email to those included within the Incident email distribution list. Check in the "sent" email box to verify the email has been sent. The NCG Chair will schedule the Hot Wash meeting within several business days of the end of the Incident or Exercise. Discuss "Lessons Learned" that were tracked during the Incident.
2. NCG identifies need for members to collaborate in a confirmed incident or event (e.g., exercise). An incident is considered "confirmed" when an official lab result has been received that identifies the agent of concern. Go to the ICLN Portal (www.) Enter email and password to On main screen, click "Reg whether it is an actual Incident Exercise Add members to the Incident coordinators for that group enter their last name in the total pull-down menu under to contact." Follow screen productions of the incident coordinators for that group enter their last name in the total pull-down menu under to contact." Follow screen products of the ICLN Portal (www.) Add members to the Incident coordinators for that group enter their last name in the total pull-down menu under the pul	5. Data Exchange Utility	During the call, designate s items resulting from the me Discuss what resources your Do you need assista analysis, or an incre Determine what informatio analysis. If you are at the step where d complete the Incident-Specileast the required Minimum I between agencies/networks. [Future Activity] Utilize the Data can be uploaded, merged decision.	DEU t			
Refer to Step 5 regarding th		dent Specific Data Sharing	Γ			



	Table 1: ICLN Key Process Steps Checklist					
	ACTIVITY	November 30, 2022 ACTION				
Ш	☐ If the activity for which you are using the Portal is for an exercise, PLEASE remember to put the words, "EXERCISE EXERCISE EXERCISE" in all communications.					
	If feasible, DHS will alert all members on the Emergency Contact list before the exercise starts so they will not be alarmed if they receive communications which cite there is a (notional) incident occurring.					
1.	NCG members should be alerted via a formal	☐ Enter the ICLN GENERAL COMMUNICATION INCIDENT 2022 on the Portal and create a Preparedness Alert (PA).				
	communication mechanism about an unconfirmed, developing incident by sending out a Preparedness	☐ Click on "Create PA" in flowchart or select "Preparedness Alert" pull-down menu from top of page.				
		Fill out the PA form template on the Portal. If filling out the form and uploading manually, the format for Incident Name is as follows: year month day_location where incident started_contamination type (if known). Example: 20120330_Denver_B.anthracis.				
	Alert.	Save the form and send the PA to members of the Incident.				
		Verify that the PA has been created and sent by reviewing the "Preparedness Alert" pull down menu at the top of the page and looking under "Prior PAs." You can also check the "Latest Activity" blog within the incident or check the email inbox for the incident.				
		After the PA is created, it is suggested (although optional) to hold an initial Zoom.gov virtual meeting to discuss the developing incident and the current status of networks/agencies.				
2.	NCG identifies need for members	Go to the ICLN Portal (www.icln.org).				
	to collaborate in a	Enter email and password to gain access to the secure side of the Portal.				
	incident or event (e.g., exercise). An incident is considered	 On main screen, click "Register Incident." Follow prompts to create an Incident. Note whether it is an actual Incident or an Exercise. ☐ Incident ☐ Exercise 				
	"confirmed" when an official lab result has been received that identifies the agent of concern.	Add members to the Incident. If you check each specific network, the network coordinators for that group will be added automatically. To add additional members, enter their last name in the "search" screen and hit enter. Select their "role" by using the pull-down menu under the "actions" header. Then click the button labeled "Add this contact." Follow screen prompts to complete creation of the incident.				
		Activate the Data Exchange Utility by clicking on the "activate" button.				
		Refer to Step 5 regarding the need to complete an Incident Specific Data Sharing Agreement prior to sharing data.				
		rigitedment prior to snaming data.				



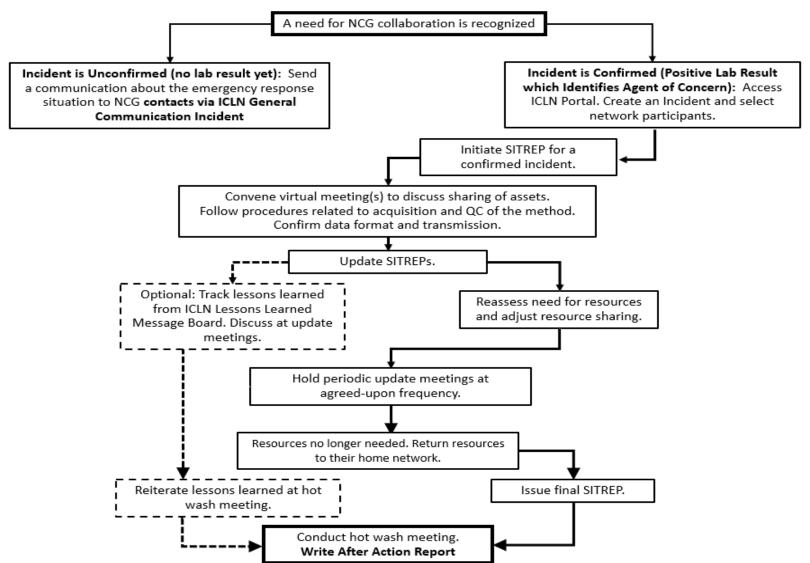
Table 1: ICLN Key Process Steps Checklist November 30, 2022					
ACTIVITY	ACTION				
 NCG members should be alerted 		Enter the Incident on the Portal and create a Situation Report (SITREP).			
via a formal communication mechanism about a confirmed		Fill out the SITREP template form on the Portal or manually populate the pdf of the form and upload. Use the "Incident Name" nomenclature format referenced above in the Preparedness Alert section.			
developing incident by sending out a		If assistance is needed (e.g., resources), check the appropriate button under "Capacity Outlook/Status of Assistance" box. Assistance includes analytical capacity, data analysis, data entry, increase in reagents/supplies, etc.			
Situation Report (SITREP).		Save the form. Send SITREP to members of the Incident.			
		Verify that the SITREP has been created and sent by reviewing the "Situation Report" pull down menu at the top of the page and looking under "View" Or "History" options. You can also check the "Latest Activity" blog on the Incident Home page or check the email inbox for the incident.			
 Create a meeting to discuss seeking 		Enter the Incident on the Portal.			
analytical/support resources from		Click on the appropriate "Access Incident" button.			
NCG members is identified and needs to be communicated.		Go to "Meetings" on the SOP Guidance Steps flowchart and pick "create meeting" or choose "Meetings" from the left side bar within the Portal and pick "+ add meeting." Fill out the form with the appropriate information. If the meeting is a recurring one, select that option at the bottom of the form and designate the frequency.			
		Set-up time for the zoom.gov virtual meeting. Verify time zone is correct. The earlier the incident team can be alerted of an upcoming zoom.gov electronic meeting, the more likely there will be good representation from necessary networks. In the body of the message, type the time for the meeting including the appropriate time zone (e.g., The meeting will be at 1 p.m. EST/12 noon CST/11 a.m. MT/10 a.m. PST). If feasible, provide an agenda for the meeting.			
		During the call, designate someone to take notes and generate minutes and action items resulting from the meeting.			
		Discuss what resources your network needs. For example: o Do you need assistance with sample processing, data analysis, data entry, data analysis, or an increase in reagents and/or supplies?			
		Determine what information is required to support data accumulation and analysis.			
5. Data Exchange Utility		If you are at the step where data is to be shared through the Data Exchange Utility, complete the Incident-Specific Data Sharing Agreement (ISDSA) form. Select at least the required Minimum Data Elements variables in the form. Attain agreement between agencies/networks.			
		[Future Activity] Utilize the DEU to upload data results into the appropriate incident. Data can be uploaded, merged, viewed and utilized to help make a public health decision.			



	Table 1: ICLN Key Process Steps Checklist November 30, 2022					
	ACTIVITY	ACTION				
6.	New information becomes available about the Incident.	 □ Update the PAs or SITREPs with the new information. □ Verify that the PA or SITREP has been sent by email to those included within the Incident email distribution list. Check in the email inbox or the "Prior PA" or "Prior SITREP" box to verify the document has been sent out. 				
	Resource needs change (they increase or decrease).	Convene Zoom.gov virtual meeting to determine how to gain use of additional resources or how to demobilize resources that are no longer needed.				
8.	Track Lessons Learned	Go to the main screen within the Incident and find the "Lesson Learned" text box. Click "+Add Topic" in the upper right-hand corner of the screen. Once topic has been created, click on it then select "Add post." Write your observations and comments in the area provided.				
9.	Incident is nearing conclusion.	Go to your Incident on the Portal.				
		Choose either the "Create SITREP" button in the flow chart or select the "Situation Report"/"Add" option from the top of the page.				
		Send SITREP to members of the Incident. If this is the final communication of the Incident, note it as the "final" SITREP.				
		Verify that the SITREP has been sent by email to those included within the Incident email distribution list. Check in the "sent" email box to verify the email has been sent.				
10.	Hot Wash	☐ The NCG Chair will schedule the Hot Wash meeting within several business days of the end of the Incident or Exercise.				
		☐ Discuss "Lessons Learned" that were tracked during the Incident.				
		Determine the top three successes and the top three items needing improvement.				
		☐ The NCG Chair and/or designated ICLN representative(s) will assist with issuing a draft After-Action Report about the Incident approximately 30 business days after the Hot Wash meeting.				
11.	Close Incident	From within an incident, choose the "close event" option from the SOP Guidance Steps flow chart. Fill out the form and submit. If needed, a Word version of the form is available on the Incident landing page under the "SOP templates" area. Fill out the Incident Close-out form and send it to DHS ICLN email box at icln@hq.dhs.gov . NOTE: Incident cannot be closed until Portal Support Manager/Administrator approves this action.				

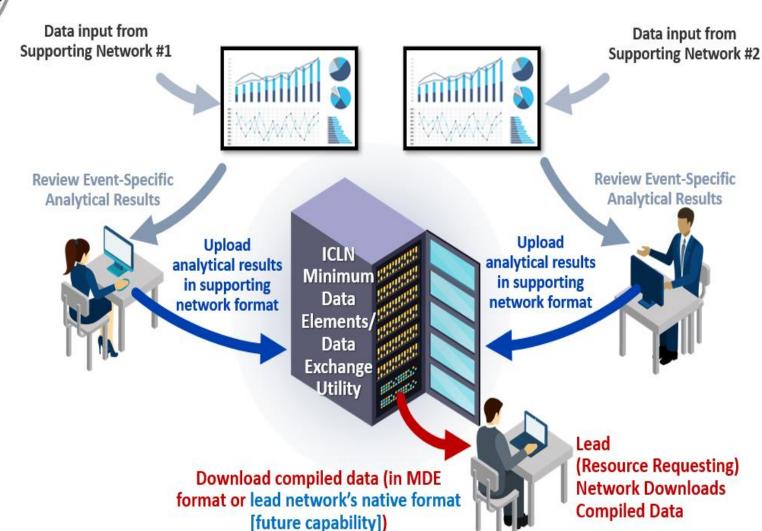


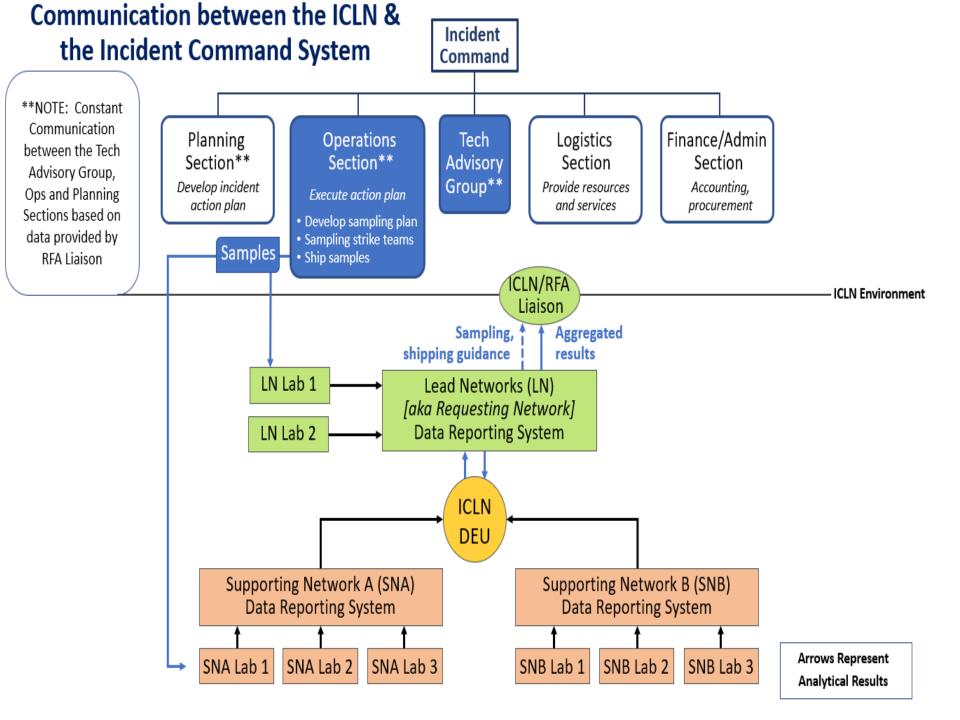
OPERATIONAL STEPS OF THE ICLN





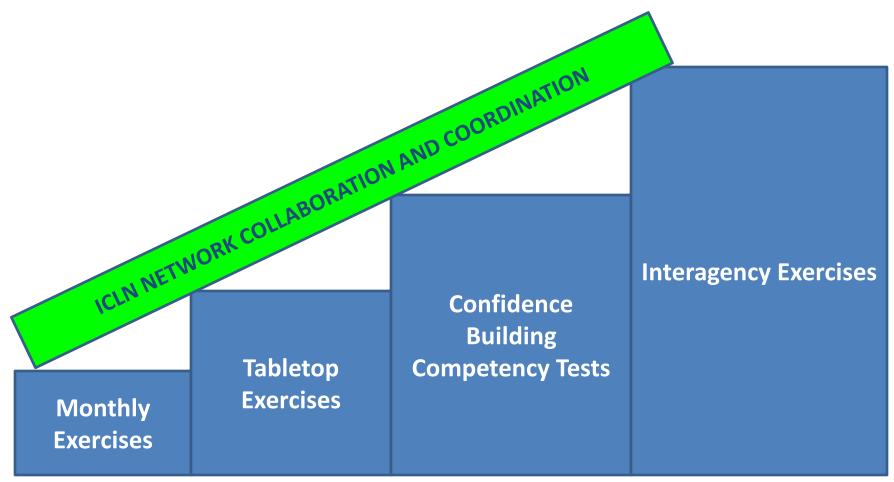
Data Exchange Utility on the ICLN Portal







EXERCISES



ICLN TABLETOP EXERCISES (TTXs) & INCIDENT COLLABORATION

Objectives of ICLN TTXs:

- Networks learn about the procedures, policies of the other networks
- Promote collaboration of NCG network representatives
- Evaluate adequacy of guidance provided in the ICLN Standard Operating Procedure
- Practice sending communication alerts through the ICLN Portal (www.icln.org)
- Enable exchange of analytical data in a common format through the Data Exchange Utility (within the ICLN Portal)
- Find areas where interoperability is lacking and move forward to address a solution

Prior ICLN TTXs (20 to date):

- Biological: 9
- Chemical: 6
- Radiological: 3
- Mixed Agent (Chemical + Radiological): 1
- Mixed Agent (Biological + Radiological): 1
- COVID-19 Pandemic Collaboration & Lessons-Learned Tracking

OTHER AREAS OF PROGRESS

Representative Guidance Created by ICLN Subgroups:

- Chain of Custody guidance
- Methods Validation guidelines
- Sample Management Logistics guidelines
- Quality Assurance guidelines
- Tabletop Exercise (TTX) and Confidence Building Competency Tests (CBCT) Conduct guidelines
- Combined registry: methods, training, proficiency tests posted on Portal

Cross-Network Confidence Building Competency Tests (CBCTs):

- These exercises are used to promote analytical confidence and performance between ICLN networks. Challenge samples are sent to volunteer participating labs in multiple networks, with aggregate performance across networks assessed for quality.
 - o Biological: 1
 - o Chemical: 2
 - Radiological: 1



CURRENT STATUS

- The ICLN Program has been active since 2005.
 - o Between February 2019 and March 2020, the ICLN program was in a non-operational status (due to a lack of funding in the FY 2019 budget).
- As a result of the COVID-19 pandemic, the ICLN was reactivated in April 2020 by the Countering Weapons of Mass Destruction (CWMD) office of the Department of Homeland Security (DHS).
 - o As of July 2022, the ICLN is now seated in the new DHS Office of Health Security.

Requirements to manage ICLN:

- ✓ Program funding for contracts in ~\$750K/year range
 - ICLN Program Contract Support Team: Approximately 3,300 hours/year
 - Portal IT Operating Costs

Coordinated laboratory response is critical to resolution of CBR contamination or disease incidents.



RECENT ICLN INITIATIVES

COVID-19 Lessons-Learned Workgroup

- Included members from each ICLN network/department/agency supporting the COVID-19 pandemic.
- Summarized and prioritized lessons-learned and gaps, as reported by this group.
- Defining solutions for prioritized workgroup outcomes.
 - List of items was developed by network members for those supplies found to be in short supply during the pandemic.
 - Based on the concern regarding these supply shortages for laboratory items, a suggestion to create a Strategic National Laboratory Stockpile was discussed.

BioRad Tabletop Exercise (June 2022) & BioRad2 Live Sample Exercise (In process)

- Goals included developing a list of labs that can analyze for mixed agent samples, addressing the types of samples that would be taken based on the scenario, outlining the process of screening/analyzing potentially mixed-agent samples, and verifying sample transport requirements.
- BioRad2 includes live sample analysis. Labs will document best practices and guidelines used to screen for and analyze mixed agent (rad + bio) samples.



RECENT ICLN INITIATIVES (cont.)

Rad Lab Hub (In development)

- Being developed by the ICLN Radiological Laboratory Subgroup (RLS).
- The Rad Lab Hub is slated to host a list of documents, trainings, and resources related to Radiological field.
- This resource will be for public use and will reside on the external icln.org website.
- Currently the RLS is focused on culling the compiled list of documents and references to those that are most useful.

Analytical Laboratory Community of Interest (Future development)

- The ALCOI is a proposed replica of our ICLN Community, but it would be for stakeholders such as State/Local/Tribal/Territorial (SLTT) and non-federal labs. The need for ALCOI is to help link in the non-federal lab entities to enable a "whole of nation" response with respect to public health preparedness and response.
- DHS is in the process of communicating with appropriate public health stakeholders to sound out the best way forward to create an ALCOI.



CONTACT INFORMATION



Email:

<u>ICLN@HQ.DHS.GOV</u> <u>andrew.scott@hq.dhs.gov</u> (ICLN PM)

Public Website:

https://www.icln.org/ for more info