



ICLN
Countering Weapons
of Mass Destruction

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The Integrated Consortium of Laboratory Networks Newsletter

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The Integrated Consortium of Laboratory Networks (ICLN) is a system of interconnected federal laboratory networks that can quickly respond to high-consequence incidents and give decision makers timely, credible, and interpretable data.

Check Out the ICLN Website!

The ICLN (www.icln.org) website is a resource-rich tool that contains information on the ICLN mission, membership, historical documentation, activities and includes numerous resources for laboratory stakeholders. The Resources section of the website consists of **Subgroups**, **Webinars** and **Training**. The **Subgroups** tab is organized according to each of the ICLN subgroups and displays



public documents that each subgroup has created. The **Webinar** tab consists of 76 informational radiologically-focused webinars sponsored by DOE. Lastly, the **Training** tab comprises a compilation of links to training opportunities from multiple organizations.

NETWORK SPOTLIGHT:

Veterinary Laboratory Investigation and Response Network (Vet-LIRN)

Vet-LIRN's Role in COVID-19 Emergency Response

The Food and Drug Administration's Veterinary Laboratory Investigation and Response Network's (Vet-LIRN) mission is to promote human and animal health by collaborating with veterinary diagnostic laboratories to provide scientific information, build laboratory capacity for routine and emergency response, and train scientists. The Vet-LIRN Program office (VPO) has a very active role in supporting capacity and emergency response related to COVID-19.

- The VPO, in collaboration with the FDA Center for Veterinary Medicine's Office of Surveillance and Compliance, facilitates necropsies of animals, excluding production animals, that have tested positive for or been exposed to SARS-CoV-2. The VPO partnered with USDA's National Veterinary Services Laboratory, Department of Defense, and CDC to develop a supplementary



necropsy sample inventory to standardize sample collection and archiving for partners conducting necropsies. This work is a part of a One Health approach that has included collaboration with the CDC, state and local veterinarians, and the VPO to allow Vet-LIRN network laboratories to conduct necropsies on animals across the nation. To date, three cats, one dog, and one tiger have been necropsied through this collaborative process. This work is important because we are still learning about the disease process from

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natural exposures in animals. In addition, this collaboration builds on the One Health framework.

- In association with numerous partners, Vet-LIRN offers Inter-Laboratory Comparison Exercises (ICE) to evaluate SARS-CoV-2 detection assays at veterinary diagnostic laboratories, private industry, and other government partner laboratories. The first ICE (Round 1, or ICE-1) was completed in October of 2020. In collaboration with the USDA's National Animal Health Laboratory Network (NAHLN), FDA/CFSAN's Moffett Center Proficiency Test Campus, Cornell University, United States Geological Survey, and the ICLN, the VPO is working on the second ICE (Round 2, or ICE-2) to evaluate SARS-CoV-2 detection assays. A description of each ICE follows:



- ▶ ICE-1: Veterinary diagnostic laboratories developed tests for SARS-CoV-2 in animals in spring 2020. These methods were initially evaluated only in the originating laboratories. ICE-1 allowed laboratories to evaluate their individual assays in comparison to assays run by other laboratories. Private commercial laboratories also participated. The Moffett Center shipped samples to over 40 participating laboratories. Sample preparation and analysis of results were completed following ISO Guidelines 13528 and 16140. Results showed that for RNA in buffer, 100% of samples were detected, and for samples requiring extraction, PCR methods provided almost perfect results.

- ▶ ICE-2: The round 2 ICE occurred in June 2021 and offered SARS-CoV-2 and non-SARS-CoV-2 coronavirus samples at various concentrations to evaluate sensitivity and specificity of participants' methods and their ability to detect emerging variants. Participant laboratories included those in the Vet-LIRN and NAHLN networks, as well as CDC, DoD, USGS, EPA, and private laboratories. ICE-2 is an especially relevant exercise because 25 veterinary diagnostic laboratories are testing human samples for the SARS-CoV-2 virus under Clinical Laboratory Improvement Amendments (CLIA) certifications. To date, millions of human diagnostic samples have been tested. Stay tuned for results.

While Vet-LIRN's efforts related to COVID-19 are focused on emergency response, they also promote and protect human and animal health. The veterinary diagnostic laboratory community is building laboratory capacity, training scientists, and providing critical scientific information to federal stakeholders. The VPO is focused on ensuring results gathered by network laboratories are accurate and meaningful, advancing our ability to respond to this pandemic.

Interlaboratory Comparability /Quality Assurance Subgroup

The ICLN Interlaboratory Comparability /Quality Assurance (IC/QA) Subgroup (formerly known as the Performance/Proficiency Testing/Quality Assurance [PT/QA] subgroup) focuses on promoting confidence in laboratory results across ICLN member networks, in anticipation of joint participation of multiple lab networks in response to a large-scale incident. The mission of the IC/QA Subgroup includes two major thrusts.

First, Subgroup members work to identify common elements of effective PT (Performance/Proficiency Testing) programs against which they can align the PT programs of their networks, implementing improvements as needed. Second, the Subgroup has within its domain the maintenance of guidance for the conduct of Interlaboratory Comparison Exercises. These exercises involve the distribution of samples among different laboratory networks to assess the capability of multiple networks to provide quality analyses (for matrices not usually analyzed by these supporting networks) in assistance to a primary responsible network who might be potentially overwhelmed by a large sample load in a wide-scale incident.

The Subgroup has recently created a guidance

document, titled "Recommendations for Conducting Proficiency/Performance Testing Programs of the Integrated Consortium of Laboratory Networks." The document clarifies topics such as:

- Policies Regarding Participation in PTs
- Network Program Office Administration of PTs
- Quality Control Measures for Sample Production
- Coordination of Samples and Results
- Safety Considerations

Once finalized, the document will be publicly available at www.icln.org/subgroups.cfm. Additionally, an operationally focused document is being created by the Subgroup that includes operational details that are not currently part of the scope of the original document.