



National Animal Health Laboratory Network (NAHLN) Update Fiscal Year 2025

New NAHLN Laboratories (66 NAHLN laboratories in 43 states)

- National Wildlife Research Center's Wildlife Disease Diagnostic Laboratory -Affiliate
- Idaho State Dept. of Agriculture Animal Health Laboratory –Level 3

New NAHLN Laboratory Requirements- Raising the Bar

- All Level 1, 2, 3, (Main and Branch), Affiliate and Specialty Laboratories must meet the new requirements by the NAHLN Laboratory Self-Assessment in October 2027.
- Any new laboratory being evaluated for NAHLN approval must meet these requirements prior to NAHLN approval.
- **Requirements:**
 - Full Accreditation by a 3rd-party (AAVLD, ISO17025)
 - Intent to include NAHLN diseases upon next accreditation audit.
 - Acceptable laboratory information management system (LIMS) with electronic results messaging vetted successfully.
 - Minimum of 2 disease approvals with molecular assays.
 - Minimum Capacity of 400 PCR tests per 8 hr. shift
 - Annual Exercise Scenario (Activated NAHLN Laboratories will be exempt).

Electronic Messaging – Quality Improvements

- Standardized data capture and improving electronic messaging data quality is a NAHLN Strategic Priority.
- Several tools have been developed to provide NAHLN laboratories with the ability to monitor their result messages including quality issues.
- Through a cooperative agreement with the Iowa State University Veterinary Diagnostic Laboratory, a tool was developed for laboratories to monitor messages that are rejected due to failed validation checks (Message Monitoring Tool).
- The use of the QC Dashboard, Message Monitoring Tool, and validation techniques support ongoing data quality continuous improvement.
- Conducted a message troubleshooting exercise at the HL7 Messaging Symposium held in September 2025 that was organized by Colorado State University, a Level 1 member of the NAHLN, and supported with Pandemic Preparedness funding to help labs identify and resolve messaging issues.

***HPAI Response FY25 HPAI Summary***

- 58 NAHLN Laboratories continue in activated status for the on-going outbreak.
- HPAI Outbreak Testing- Over 1.1 million PCR tests provided by NAHLN laboratories
 - Domestic birds, associated with outbreak
 - Total PCR: 569,467(Feb. 2022 – Sept.2025) FY25 PCR: 228,567
 - Dairy Cattle
 - Total PCR: 297,524 (April 2024 – Sept.2025) FY25 PCR: 255,441
 - FY25 ELISA: 96,196
 - Wild bird testing-estimated
 - Total PCR: 250,650 (Feb. 2022 – Sept.2025) FY25 PCR: 90,630

New World Screwworm

- NAHLN laboratories in Southern Border states are standing ready to assist NVSL with the morphologic evaluation of flies from traps set by Veterinary Services in CA, NM, AZ, and TX.
- NAHLN assisted NVSL in developing the SOP and training. A proficiency test will be provided when available.
- The NAHLN Program Office developed a results messaging guide and modified the current Indefinite Delivery/ Indefinite Quantity (IDIQ) contracts to include a price for morphologic evaluation.

NAHLN Surveillance and Response Testing

- In fiscal year 2025, NAHLN laboratories participated in surveillance programs for African swine fever/classical swine fever (ASF/CSF), Antimicrobial Resistance (AMR), bovine spongiform encephalopathy (BSE), Foot and Mouth Disease/Seneca Valley A virus (FMD/SVA), influenza A virus in swine (IAV-S), pseudorabies virus (PRV), and scrapie. NAHLN laboratories also provided significant testing support in response to the highly pathogenic avian influenza (HPAI) outbreak in poultry, wild birds and cattle.

Disease/Agent	FY2024	FY2025	# of NAHLN Laboratories Currently Approved for Testing
	Samples or Animals Tested		
ASF/CSF	21,552	16,399	50
AMR	6,526	4,449	34
BSE	23,224	22,147	4
FMD/SVA	1,960	2,257	49
IAV-A wild bird	92,273	90,629	62
IAV-S	29,432	18,663	46
PRV	50,802	34,428	26
Scrapie	25,937	24,795	17
vND	8,358	8,282	60
HPAI/LPAI	244,913	228, 567	62
VSV	0	0	8



NAHLN Farm Bill

- A Dashboard has been developed to display information about the projects awarded through the NAHLN Farm Bill competitive process. It will be shared by the Quarter 3 of FY2026.
- Beginning in fiscal year 2026, funding for the NAHLN Farm Bill program will increase to \$10 million per year. APHIS will host a Listening Session to gather stakeholder input on how these new funds should be used to strengthen national, regional, and local capabilities to prevent, prepare for, and respond to animal disease outbreaks. A date for the Listening Session will be shared as soon as it is available.

NAHLN-NBAF Partnership

- Our five (5) scientists are tasked with evaluating local, regional, national, and international threats and ensuring the NAHLN laboratories have the tools necessary to diagnose emerging threats. The program will enhance the Nation's veterinary laboratory systems to respond to immediate, emerging animal threats with improved diagnostics to sustain the U.S. agricultural well-being.
- Each Scientist has initiated regional meetings and other communications with stakeholders to discuss strengths, weaknesses, opportunities and threats.
- Two of the scientists established and co-chair the AAVLD Next Generation Diagnostics Subcommittee.
- In May and July of 2025, members of the NAHLN and scientists of the NAHLN -NBAF Partnership hosted and provided training for the Next-Generation Sequencing Symposia at Michigan State University (88 participants from 49 NAHLN laboratories) and Colorado State University (96 participants from 46 NAHLN laboratories) to gather NAHLN member laboratories for hands-on training in sequencing and bioinformatics.
- A Strategic Plan for the Partnership is being finalized with plans to share by Quarter 2 of FY2026.

APHIS Laboratory Portal (NAHLN Portal)

- The APHIS Laboratory Portal continues to be an important asset for NAHLN through a continued and successful partnership with Datastream Connexion funded through a cooperative agreement managed by the Kansas Veterinary Diagnostic Laboratory, a Level 1 member of the NAHLN.
- The Portal is the main means of identifying the correct contacts at NAHLN laboratories. It is crucial for NAHLN laboratories to maintain and verify personnel information.
- The portal provides additional support for SOP distribution, Deviation Request management, PT registration and completion (NAHLN and APHIS PTs), Library with access to presentations and information, Management of NAHLN Drills.
- Recent improvements include the development of Automated Account Creation and Security Role Updates as well as PT registration self-updates.



NAHLN IT Committee

- Assisted in the development of a QC dashboard that offers feedback to the NAHLN laboratories on issues with data quality.
- Helped evaluate QC dashboard results to determine what data points should (and could) be required to be validated in the data processing pipeline. As of March 2025, messages not meeting the established QC criteria are either rejected at the gate or in secondary processing. The message monitoring tool is critical to checking secondary failures.
- Met regularly to help develop the curricula and focus for the September 2025 HL7 Messaging Symposium.
- Assisted in developing base requirements for a Universal Submission Portal- a strategic initiative designed to support the submission of official samples to NAHLN laboratories by streamlining workflows and enhancing standardization and accuracy.

NAHLN Methods Technical Working Group (MTWG)

- Six (6) dossiers were reviewed in FY2025
 - Automated extraction process: Indical IndiMag2 – accepted
 - BSE NSP2 – provisionally accepted
 - Magnetic Induction Cyclor (MIC) for low-through-put testing – pending
 - Quantstudio 5 for FMD/SVA multiplex testing – pending
 - Performance characteristics for mastermixes used in ASF assay - pending
 - Idexx CWD ELISA - pending
- A White Paper was developed to evaluate Low-Through-Put testing options and included a review of 6 extraction and 2 PCR platforms based on cost, reagents, training requirements, vendor support and reliability, and lab compatibility.
- The MTWG continues to evaluate the benefits of NAHLN Farm Bill project deliverables. A report of those evaluated to date is expected by FY2026 Quarter 3.
- Develop a process utilizing NAHLN laboratories for Methods Comparisons to evaluate newly proposed PCR platforms.
- The NAHLN Coordinator is participating in the newly formed Validation and Methods Policy Council along with the Director of NVSL and Directors of the individual NVSL Reference Laboratories. The charge is to harmonize the evaluations coming from the NAHLN MTWG and implementation of the various assays and methods across diseases and Reference Laboratories.

Exercises and Drills Working Group (EDWG)

- Six (6) Drills were completed in FY2025 to quickly receive information from NAHLN laboratories regarding specific disease testing capacity, usefulness of the Data Quality Dashboard and capabilities for support in a potential response to New World Screwworm.
- NAHLN Annual Exercise: FAD Investigation in the Laboratory- 50 NAHLN laboratories participated. An Emergency Use Approval tabletop exercise was included. Hot wash and AAR are pending.
- Four (4) Informational Webinars were held in FY2025 that focused on Aquaculture Diseases and FAD Investigations, High Through-Put Capacity, Cyberbiosecurity, HPAI Livestock Response: State Perspective (CA & CO).
- The first session of the FBI Biosecurity and Emerging Agrosecurity Threats Workshop was held in Manhattan, KS in January 2025 and was a joint effort from the EDWG and the FBI to deliver agrosecurity training tailored to NAHLN laboratories and their associated universities and departments of agriculture.



United States Department of Agriculture

FY2025 NAHLN Budget					
Funding Source	Disease	Activities include	FY2025 Requested	FY2025 Allocated	FY2025 Obligated
BASELINE FUNDING					
Cattle Health (2525VSDN0319CTTLH8SE101USDA)	BSE	Fee-for-service testing	\$500,000	\$500,000	\$470,181
Equine Cervid Small Ruminant (2525VSDN0319ECSRHS CRE01USDA)	Scrapie	Fee-for-service testing	\$730,000	\$730,000	\$640,050
Swine (2525VSDN0319SWINHNAHL01USDA)	CSF/ASF; FMD/SVA	Fee-for-service testing	\$891,000	\$891,000	\$890,995
Zoonotics (25XXVSDN0319ZOODSNAHL01USDA)	IAV-S	Fee-for-service testing	\$408,000	\$408,000	\$408,000
FAD (23XXVSDN0319EMGYPNHL01USDA)	FAD Investigations	Fee-for-service testing; moved from Vet. Dx.	\$200,000	\$200,000	\$200,000
Vet Diagnostics	not disease or commodity specific	Lab infrastructure support LIMS Integration APHIS Portal NAHLN Program Office operating costs	\$7,034,657	\$7,034,657	\$7,066,893
Interagency Agreement with NIFA	Level 1 labs (17)	\$250,150/lab	\$4,252,550	\$4,252,550	\$4,252,550
BASELINE FUNDING TOTAL			\$14,016,207	\$14,016,207	\$13,928,669
ADDITIONAL FUNDING					
AMR (25XXVSDN0319ZOODSAMRE01USDA)	AMR	Fee-for-service testing Sequencing at NVSL	\$300,000	\$300,000	\$293,500
Avian Health (24XXVSDN0319CCCEMAVIN05HPAI)	HPAI	Fee-for-service testing	\$0	\$8,000,000	\$8,375,152
Dairy Cattle Emerging Event (24XXVSDN0319CCCEMAVIN05CLSV)	HPAI	Fee-for-service testing	\$0	\$14,840,000	\$17,633,967
Farm Bill		Competitive funding Non-competitive funding (added to Infrastructure)	\$0 \$6,000,000	\$0 \$6,000,000	\$0 \$5,973,700
ADDITIONAL FUNDING TOTAL			\$6,300,000	\$29,140,000	\$32,276,319
TOTAL FUNDING			\$20,316,207	\$43,156,207	\$46,204,988

FY2025 NAHLN Budget-Vet Diagnostics Detailed Break Down				
Activity	FY2025 Requested	FY25 Allocated	FY2025 Obligated	Comments
Laboratory Infrastructure Support Agreements	\$5,055,000	\$5,055,000		
Level 1 labs (7)			\$1,751,050	\$250,150/lab
Level 2 labs (22)			\$3,303,300	\$150,150/lab
Level 3 labs (1)			\$0	\$75,000 of NAHLN Farm Bill funding
	\$5,055,000	\$5,055,000	\$5,054,350	
LIMS Integration Agreement ISU	\$122,000	\$122,000	\$122,000	
APHIS Laboratory Portal Agreement	\$262,000	\$272,000	\$271,952	Add \$25K from PPQ + \$12,000 of VetDx
	\$384,000	\$394,000	\$393,952	
COOPERATIVE AGREEMENT TOTAL	\$5,439,000	\$5,449,000	\$5,448,302	
NAHLN Program Office operating costs	\$1,585,657	\$1,585,657	\$1,618,591	
TOTAL	\$7,024,657	\$7,034,657	\$7,066,893	