Diagnostic Testing at the NVSL

Last Modified:

The National Veterinary Services Laboratories (NVSL) has laboratories in two locations: Ames, IA, and the Foreign Animal Disease Diagnostic Laboratory (FADDL) at Plum Island, NY. Diagnostic test services range from a single laboratory test to comprehensive laboratory services covering many pathogens for a suspected disease outbreak.

Browse our services conducted at each location and other resources below.

Catalogs

Text in the following PDF-format catalogs is fully searchable. When the catalog displays, click the Search feature (binoculars icon) in the Adobe Acrobat toolbar or CTRL + F to type in keywords.

Items requested from the NVSL catalog may not be available or may be limited in quantity at any time due to domestic testing or production priorities.

Plum Island, NY (FADDL) Diagnostic Catalog
Ames, IA Diagnostic Catalog

Unfamiliar with an abbreviation or acronym in the catalogs? See catalog definitions. (9.06 KB)

Unfamiliar with an abbreviation or acronym in a diagnostic test report? See report definitions. (37.55 KB)

More Resources

- Current User Fee Rates (9 CFR 130.14–19)
- Animal Disease Information (Iowa State University)

Submitting Diagnostic Samples to the NVSL

Samples received on weekends, on holidays, and after hours are refrigerated until the next business day, unless previous arrangements have been made with the laboratories.

Ownership of Specimens: All diagnostic specimens and all agents/isolates submitted to the NVSL will become the property of the NVSL unless arrangements are made in writing at, or prior to, the time of submission. Proprietary restrictions must be stated at, or prior to, the time of submission.

VS Notice 10-07: Diagnostic Submissions to the NVSL

(PDF, 222.6 KB)

View procedures for efficient submission of diagnostic samples to the NVSL.

General Specimen Submission Form

(PDF, 306.81 KB)

Download VS Form 10-4, Specimen Submission.

Other Submission Forms

Find more lab-related forms.

Expand All

Authorization for Submitting Specimens

Domestic Submissions

In general, the Assistant District Director authorizes incoming specimen submissions of U.S.-origin samples to the NVSL. Authorization is assumed for routine program submissions made by regulatory field veterinarians, State or university diagnostic laboratories, or USDA Food Safety and Inspection Service veterinarians, when such submissions are accompanied by the proper submission forms. Major exceptions to this assumption of authorization occur during emergency field operations or with regard to suspected exotic diseases.

Samples Originating Outside the United States

Samples received from other countries must be accompanied by a valid USDA import permit; the laboratory conducting the analyses should be contacted to obtain a copy of the permit to enclose with the sample shipment. Additionally, samples originating from non-government laboratories outside the United States must be accompanied by an authorization letter from the submitting country's Minister of Agriculture (or equivalent).

Suspected Exotic Diseases

Investigations of suspected exotic diseases are conducted according to Veterinary Services (VS) Guidance 12001 (274.92 KB). If an exotic disease is suspected, contact the Assistant District Director and the Emergency Programs staff to obtain the information necessary to submit samples for testing and to acquire the Investigation Control Number that must be included with the submission. **Approval by a Regional Director or an Emergency Programs staff member is required for shipment of any specimens originating from animals suspected of having an exotic disease. DO NOT ship any such specimens until approval is received and a control number is assigned. The receipt of an unauthorized shipment of specimens containing exotic disease agents can cause substantial disruption of work at the laboratory.** If clearance is given, the proper priority designation should be used. Telephone the NVSL, as directed by Emergency Programs, to notify the lab of priority 1 or 2 shipments. There is no charge for this testing.

Primate Samples

The NVSL will receive primate samples for serology, bacterial culture, and histopathology **only**. The NVSL will **not** accept primate samples for diagnosis of any suspected viral etiology.

Please contact the lab (515-337-7266) prior to submitting primate samples and provide the tracking number of the shipment. Having prior notice will help ensure proper handling and the safety of our staff. This policy does not apply to *Salmonella* cultures originating from primates, which may be sent without prior notification.

Proper Collection of Specimens

The selection and submission of materials collected in the field will vary according to the type and extent of laboratory support desired by the submitter. Contact the NVSL for assistance determining the type of samples to collect.

- Avian Sample Collection for Influenza A and Newcastle Disease (403.92 KB)

Collecting Samples for Diagnostic Unknowns

Not all cases of an exotic disease run a typical course or have classical lesions. In addition, insidious disease forms may enter a susceptible population and spread without notice because they do not show the expected clinical picture. Therefore, a comprehensive collection of specimens is the most useful in providing a diagnosis. View a Table of Specimen Collection, which is intended to supply the field diagnostician with lists of specimens for various animal species. The specimen listings are minimum recommended lists, designed to include samples necessary for diagnostic confirmation of foreign animal diseases for each of the animal species, as well as the differential diagnosis of domestic diseases that might be confused with a foreign animal disease. The lists are not intended to replace the field diagnostician's judgment concerning the collection of additional specimens.

- General Guidelines for Necropsy (91.38 KB)
- Disease-Specific Guide to Sample Collection— (174.69 KB)Foreign Animal Diseases (2022)
- Procedures Manual for BSE Ongoing Surveillance Plan (2.58 MB)

- Material Safety Data Sheets for Sample Media Provided by the NVSL

Sampling Materials and Shipping Kits for Program Diseases *(authorized personnel only)*:

- Request Form (2.58 MB)
- NVSL Kit and Instrument Catalog

Packaging, Labeling, and Shipping Specimens

For information on packing and labeling, visit Packaging and Labeling Submissions to the NVSL.

To find contact information and instructions for shipping specimens to each of our locations, visit:

- Shipping Specimens to NVSL-Ames
- Shipping Specimens to NVSL-FADDL

User Fees and Payment Options

For information on this topic, visit User Fees for Services at the NVSL.

Special Instructions Associated With Outbreak Samples

- Testing Animals for Equine Piroplasmosis Prior to Interstate or Intrastate Movement (26.46 KB)
- Testing Animals for Vesicular Stomatitis Prior to Interstate or International Movement (20.19 KB)

Quality Assurance at the NVSL

The NVSL Quality Management System is accredited to ISO 17025, ISO 17043, and ISO 17034. Visit Quality Assurance at the NVSL to learn more about the NVSL Quality Management System and the scope of accreditation.

APHIS-Approved Laboratories

Testing for certain types of diseases is required to be performed at either NVSL or APHIS-approved, non-USDA facilities. Visit APHIS-Approved Testing Laboratories approved to perform corresponding tests.

Related Links

- NVSL Home
- About the NVSL
- Reagents and Proficiency Tests
- NCAH Portal Guidance for NVSL Submitters
- NBAF Scientist Training Program

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