

# National Veterinary Services Laboratories



USDA, James Fosse

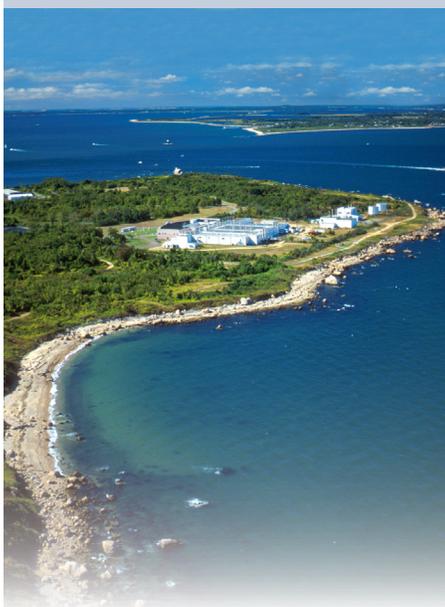
## Contact Information

### USDA-APHIS-VS-NVSL

1920 Dayton Ave. (for packages)  
P.O. Box 844 (for letters)  
Ames, IA 50010  
Phone: (515) 337-7266  
Fax: (515) 337-7397

### USDA-APHIS-VS-NVSL-FADDL

40550 Route 25 (for packages)  
Orient Point, NY 11957  
P.O. Box 848 (for letters)  
Greenport, NY 11944-0848  
Phone: (515) 323-3256  
Fax: (631) 323-3366



Plum Island

The mission of the National Veterinary Services Laboratories (NVSL), a unit within the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), is to safeguard U.S. animal health and contribute to public health by providing timely and accurate diagnostic laboratory support directly or through a national laboratory system that includes the National Animal Health Laboratory Network (NAHLN).

The NAHLN is a partnership between USDA-APHIS, the USDA National Institute of Food and Agriculture (NIFA), and the American Association of Veterinary Laboratory Diagnosticians (AAVLD). The network consists of a group of State- and university-funded veterinary diagnostic laboratories that work with animal diseases, including those that are endemic, exotic, zoonotic, or emerging. NVSL coordinates NAHLN activities, participates in methods validation, and provides training, proficiency testing, assistance, materials, and protocols for diagnostic tests.

## Quality Diagnostic Services

At the very core of the NVSL mission is customer-based service as a veterinary diagnostic laboratory. NVSL scientists and support personnel perform diagnostic tests on nearly a quarter million samples each year.

NVSL offers nearly 500 specific diagnostic tests covering everything from basic screening tests for the importation of horses (equine infectious anemia testing) to elephant trunk wash



USDA, James Fosse

cultures to detect tuberculosis. NVSL also provides diagnostic support to foreign animal disease investigations both at Ames, IA, and at the Foreign Animal Disease Diagnostic Laboratory (FADDL) located on Plum Island, NY. Further, NVSL offers over 500 reagents, many of which are not available from any other source. The NAHLN laboratories play a key role by performing initial screening tests for several foreign animal diseases.

ISO/IEC<sup>1</sup> 17025 is the international standard for testing and calibration laboratories. In order to demonstrate confidence in quality, NVSL has attained ISO/IEC 17025 accreditation for 252 of nearly 500 tests (as of 2010). New tests are added to NVSL's accreditation scope annually, with the goal of having at least 95 percent of all reported results originating from accredited tests by 2013. NVSL was the first laboratory in the world to be accredited to new international veterinary standards by the American Association for Laboratory Accreditation (A2LA) accrediting body. In fiscal year (FY) 2011, NVSL began working to accredit proficiency tests and reference materials.

### NVSL Testing Statistics, 2009–2011

Fiscal Year	Accessions* Received	Tests Conducted	Samples Tested
2009	> 61,000	> 439,000	> 221,000
2010	> 60,000	> 490,000	> 222,000
2011	> 66,000	> 531,000	> 211,000

\* Requests for testing from a single entity

<sup>1</sup> International Organization for Standardization (ISO)/  
International Electrotechnical Commission (IEC)



U.S. Department of Homeland Security,  
Kathleen Apicelli

### A Center of Expertise

NVSL serves as a reference laboratory—a center of expertise and guidance on diagnostic techniques—both nationally and internationally. NVSL is the reference laboratory for USDA Veterinary Services “program diseases” (i.e., those designated as necessary to bring under control or eradicate from the United States). NVSL also provides reference assistance to other U.S. and international veterinary diagnostic laboratories as requested.

In addition, NVSL is a World Organization for Animal Health (OIE) reference laboratory for 12 diseases, including: avian influenza; anthrax; bluetongue; contagious equine metritis; eastern, western, and Venezuelan encephalomyelitis; equine infectious anemia; leptospirosis; Newcastle disease; pseudorabies; swine influenza; vesicular stomatitis; and West Nile encephalitis. For the Food and Agriculture Organization (FAO), FADDL, which is a part of NVSL, is a reference center for vesicular diseases, African swine fever, avian influenza and Newcastle disease, classical swine fever, and foot-and-mouth disease.

### Collaboration and Training

NVSL collaborates with and provides scientific advice to other Federal and State government agencies that are also developing new tests and technologies. In addition, NVSL partners with other reference laboratories around the world and works with other countries to obtain diagnostic specimens from naturally infected animals. These collaborative efforts result in enhanced expertise at NVSL and extensive reference collections that are available for test development and validation.

Training for State and Federal field veterinarians to detect foreign animal diseases and training for laboratory diagnosticians are critical functions of NVSL. In FY 2011, NVSL provided technical training courses in the following areas:

- Equine Infectious Anemia (EIA) Agar Gel Immunodiffusion (AGID) and Enzyme-Linked Immunosorbent Assay (ELISA) Laboratory Methods (*offered five times*)
- Bovine/Porcine Virus Isolation Techniques/Application Testing
- Real-Time RT-PCR Testing for Swine Influenza Virus, Avian Influenza Virus, and Newcastle Disease

In addition, NVSL hosted several international trainees and visitors at its facilities in Ames, IA, and Plum Island, NY. For a current list of available training, download a copy of NVSL’s course catalog at [www.aphis.usda.gov/NVSL](http://www.aphis.usda.gov/NVSL) **Training**. NVSL also offers customized training (as resources allow) to meet specific needs.

### National Centers for Animal Health

The National Centers for Animal Health (NCAH) is a diagnostics, biologics regulation, and research center in which NVSL, USDA’s Center for Veterinary Biologics, and the USDA Agricultural Research Service’s (ARS) National Animal Disease Center are co-located, each with unique and complementary missions for animal health. The NCAH contains both biosafety level (BSL)-2 and BSL-3 laboratory space, as well as animal facilities and administrative space. NCAH employs a diverse staff of professionals to provide the laboratories with support services essential to their success.



**United States Department of Agriculture**  
Animal and Plant Health Inspection Service

Program Aid No. 2099  
Issued September 2011  
Slightly revised January 2012

USDA is an equal opportunity provider and employer.

#### NVSL Web site:

[www.aphis.usda.gov/animal\\_health/lab\\_info\\_services/](http://www.aphis.usda.gov/animal_health/lab_info_services/)

#### NAHLN Web site:

[www.aphis.usda.gov/animal\\_health/nahln/](http://www.aphis.usda.gov/animal_health/nahln/)