



FY 2005 Training Catalog

Offered by:

- ❖ Professional Development Staff (PDS)
- ❖ Centers for Epidemiology and Animal Health (CEAH)
- ❖ National Veterinary Services Laboratories (NVSL)

**United States
Department of
Agriculture**

**Animal and
Plant Health
Inspection Service**

**Veterinary
Services**

**Professional
Development
Staff**

Training Courses

**Provided by the
Professional
Development
Staff**

**Professional Development Staff
Training Courses
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* These courses have a pre-determined audience where nominations are not requested. If you feel that you should attend a particular pre-selected course, please notify your supervisor and area Training Coordinator, listed on the first page of the catalog.

NOMINATION/APPLICATION PROCEDURES

Each field nominee must submit the enclosed nomination request through the Area Office to the Regional Office. Each headquarters nominee must submit the enclosed nomination request through the Associate Deputy Administrator's Office, National Animal Health Policy Programs (NAHPP). The Regional Office and/or the NAHPP, Associate Deputy Administrator's Office will then submit the prioritized nominations to the nomination address listed in the course description. First priority is given to those individual(s) who are in absolute need of the training. More than one person may be placed in priority one status.

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All training-related correspondence (select, non-select, cancellation, etc.) will be sent directly to the participants by email with copies to the VSMT, Training Coordinators, and supervisors. Hard copies will no longer be issued. Requests for exceptions may be made to the PDS Training Coordinators.

COURSE DESCRIPTION

Each course description gives the course title, dates, purpose, and in some cases, objectives, eligibility, location, source person, and nomination contact person.

The course dates do not include travel dates. Travel dates are normally the day before the start of the course and the afternoon and evening of, or the day after, the end of the course.

CANCELLATION AND SUBSTITUTION POLICY

Based on each particular course, it is important that PDS be notified as soon as possible in the case of a substitution and/or withdrawal of a course participant(s). We will accept substitutions and cancellations up to 1 week before the start of the course. Any changes in the status of nominees or course logistics will be communicated immediately through the Training Coordinators.

<i>Veterinary Services Careers Program (VSCP)</i>																													
Location	Orientation, Part B will be held in Riverdale, MD. The other courses will be held at various locations throughout the United States (see below).																												
Course Purpose	<p>The Veterinary Services Careers Program (VSCP) is an intensive orientation program for new Veterinary Medical Officers (VMO) and Animal Health Technicians (AHT). A new program is now open to Administrative Support Assistants (ASA). This will expand the program into a multi-level training module, or tracks.</p> <p>The Program begins with a two-part orientation. The first of which, Part A, is a web-based training course and is a prerequisite to Part B, the classroom orientation,. In addition to the Orientation Parts A and B, there are core courses listed below:</p> <table border="1"> <thead> <tr> <th><u>Course</u></th> <th><u>Location</u></th> <th><u>Date</u></th> <th><u>Track</u></th> </tr> </thead> <tbody> <tr> <td>1. Orientation, Part B</td> <td>Riverdale, MD</td> <td>Nov. 30 – Dec. 2, 2004 May 3 – 5, 2005 September 13 – 15, 2005</td> <td>I & II I & II</td> </tr> <tr> <td>2. Mentor Web Seminar/ Learning Contract</td> <td>Online</td> <td>December 7, 2004 May 12, 2005</td> <td></td> </tr> <tr> <td>3. Emerging Issues in Agriculture</td> <td>Fort Collins, CO Fort Collins, CO</td> <td>February 1 – 3, 2005 August 16 – 18, 2005</td> <td>I & II</td> </tr> <tr> <td>4. Communication and Manage Up Modules</td> <td>Raleigh, NC Fort Collins, CO</td> <td>April 19 – 21, 2005 July 26 – 28, 2005</td> <td>I</td> </tr> <tr> <td>5. Basic Epidemiology (AHT) (VMO)</td> <td>Raleigh, NC Fort Collins, CO</td> <td>April 18 – 22, 2005 July 25 – 29, 2005</td> <td>II</td> </tr> <tr> <td>6. Distance Learning</td> <td>Online</td> <td></td> <td></td> </tr> </tbody> </table> <p>For those hired through the VSCP, a learning contract, which includes electives and a rotational assignment, is also required.</p>	<u>Course</u>	<u>Location</u>	<u>Date</u>	<u>Track</u>	1. Orientation, Part B	Riverdale, MD	Nov. 30 – Dec. 2, 2004 May 3 – 5, 2005 September 13 – 15, 2005	I & II I & II	2. Mentor Web Seminar/ Learning Contract	Online	December 7, 2004 May 12, 2005		3. Emerging Issues in Agriculture	Fort Collins, CO Fort Collins, CO	February 1 – 3, 2005 August 16 – 18, 2005	I & II	4. Communication and Manage Up Modules	Raleigh, NC Fort Collins, CO	April 19 – 21, 2005 July 26 – 28, 2005	I	5. Basic Epidemiology (AHT) (VMO)	Raleigh, NC Fort Collins, CO	April 18 – 22, 2005 July 25 – 29, 2005	II	6. Distance Learning	Online		
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6. Distance Learning	Online																												
Target Audience	<p>Veterinary Medical Officers with no more than one year of experience and Animal Health Technicians with no more than three years of experience.</p> <p>Administrative Support Assistants who were employed by VS as of January 2004.</p>																												
Cost	For those accepted, costs will be paid by the Professional Development Staff.																												
Contact	Ms. Janet Marcella, VS/PDS, (301) 734-0007 or Dr. Jason Baldwin, VS/PDS, (970) 494-7225																												
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. Selections will be prioritized by the Regional Office and submitted to the Professional Development Staff.																												

Veterinary Services Careers Program (VSCP)

Course Descriptions

1. Distance learning:

- a. **Orientation, Part A: CD-ROM** - This CD-ROM is Part I of the VSCP Orientation. It contains material that is informative about the U. S. Government, the U. S. Department of Agriculture (USDA), the Animal and Plant Health Inspection Service (APHIS) and its organizational units and programs, including Veterinary Services (VS), the unit of APHIS which is most relevant to your work and learning needs. You should be familiar with the information contained in the CD-ROM before attending Orientation, Part B.
- b. **Program Diseases: On-line** - This course provides an overview of the major VS disease eradication and control programs, such as those for TB, brucellosis, pseudorabies, scrapie, and Johne's disease. Equine and poultry disease initiatives will also be addressed. Discussions about the various regulated industries, including their roles and perspectives, may be included.
- c. **Foreign Animal Disease Awareness: On-line** - This course addresses major foreign animal disease threats to the U.S., including their history and etiology; effects on animal and human health; economical and political influences and impact; current status; preventive programs; and the critical role of APHIS, the States, Industry, and Public Health Officials.

2. Core training for VMOs and AHTs:

- a. **Orientation, Part B:** In this session participants will apply the information gained through the CD-ROM instruction in a series of interactive activities surrounding the VS strategic goals. Participants will also meet and engage in discussion with those in key positions, using the knowledge of APHIS, VS, and its mission, strategic goals, and objectives, which participants have gained through their study of the CD-ROM.
- b. **Emerging Issues:** This course addresses new or emerging diseases, such as West Nile Virus; wildlife disease transmission; APHIS services to new animal industries, such as aquaculture, farmed elk, or bison; dealing with the threat of deliberate disease introduction; and future trends. Participants will also be introduced to the Western Regional Office, which is one of the two APHIS regional "hubs", and meet staff members.
- c. **Basic Epidemiology:** This course uses a problem-based approach to teach the fundamentals of epidemiology. During this period, participants will also be introduced to the Centers for Epidemiology and Animal Health (CEAH).

3. Core classroom training for ASAs:

- a. **Communication and Manage up Modules:** This course is designed to develop the Administrative Support Assistant (ASA) to meet increasing customer demands and enhance career marketability. The participant will develop technical, interpersonal, and communication skills needed to improve self-confidence and help create team building opportunities.
- b. **Introduction to Administrative Procedures:** This course introduces administrative processes and procedures, such as accounting, payments, accounts receivable, travel, personal property and motor vehicles, employee and tort claims, realty, worker's compensation, procurement, security clearances, leave and compensation, and staffing.

<i>ASA Advantage Net Conference</i>		<i>December 16, 2004</i> <i>February 17, 2005</i> <i>April 14, 2005</i> <i>June 16, 2005</i> <i>August 11, 2005</i>
Location	On-line	
Course Purpose	The Veterinary Services Careers Program (VSCP) is proud to announce a new series called ASA Advantage. This is a series of one hour net conferences which reviews the following processes and procedures; Accounting, Payments, Accounts Receivable, Travel, Personal Property and Motor Vehicles, Employee and Tort Claims, Realty, Workers Compensation, Procurement, Security Clearances, Staffing, and Leave and Compensation.	
Target Audience	Administrative Support Assistants and other support staff personnel.	
Cost	N/A	
Contact	Ms. Janet Marcella, VS/PDS, (301) 734-0007	
Nominations	N/A	

<i>Foreign Animal Disease Diagnosticicians' Course</i>		<i>February 21 – March 4, 2005</i> <i>April 18 – 29, 2005</i> <i>June 6 – 17, 2005</i>
Location	Foreign Animal Disease Diagnostician Laboratory, Plum Island, NY	
Course Purpose	This intensive two week course will train foreign animal disease diagnosticicians in investigating a potential foreign or emerging animal disease. Global impacts and trade considerations will also be addressed.	
Target Audience	APHIS field VMOs, state, and military veterinarians	
Cost	Travel costs only	
Contact	Mr. John Coakley, VS/PDS, (631) 323-3344	
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/Emergency Programs Staff and the Emergency Management Leadership Team. State Veterinary nominees should be submitted to the Regional Offices by the AVIC, as well.	
Nomination Deadline	To the Regional Office:	November 26, 2004 (February Course) January 25, 2005 (April Course) March 23, 2005 (June Course)
	To VS/PDS:	December 15, 2004 (February Course) February 15, 2005 (April Course) April 15, 2005 (June Course)

<i>Johne's Disease Coordinators Training</i>		<i>April 19 – 20, 2005</i> <i>May 17 – 19, 2005</i>
Location	April session – TBD May session – TBD	
Course Purpose	The training provides Veterinary Medical Officers with the information and tools needed to collaborate with the industry in designing Johne's control programs. Emphasis is placed on the practical application of risk assessments in developing a Johne's Disease herd management plan. Participants have the opportunity to practice skills in real or simulated (video-taped) farm visits. Topics of discussion include Johne's Disease pathogenesis and epidemiology; available diagnostic test/procedures and interpretation of results; regulatory issues; voluntary programs; and public health concerns.	
Target Audience	Federal and State VMOs who are, or will be, involved in Johne's Disease program activities	
Time Requirements	<ul style="list-style-type: none"> ◆ 4 – 6 hours of online pre-course, self-paced study ◆ 2 days of onsite training that includes: <ul style="list-style-type: none"> ● 2 four-hour periods of instruction and group discussions ● 2 four-hour periods of farm visits and group presentations 	
Cost	Travel costs only	
Contact	Mr. Raymond Francis, VS/PDS, (301) 734-0023	
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/NAHPP.	
Nomination Deadline	To the Regional Office:	January 24, 2005 {April session} February 28, 2005 {May session}
	To VS/PDS:	February 2, 2005 {April session} March 10, 2005 {May session}

Basic Brucellosis Epidemiology*April 26 – 28, 2005*

Location	NVSL, Ames, Iowa
Course Purpose	The purpose of this course is to train state or federal regulatory veterinarians in the principles of the brucellosis eradication program, including the organism, the disease, the epidemiology, the vaccines, etc.
Target Audience	Federal and State VMOs who are, or will be, actively involved in the Bovine Brucellosis Eradication Program
Time Requirements	3 days
Cost	Travel costs only
Contact	Dr. Jason Baldwin, VS/PDS, (970) 494-7225
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/NAHPP.
Nomination Deadline	To the Regional Office: February 14, 2005 To VS/PDS: February 24, 2005

<i>FAD in Wildlife</i>		<i>May 17 – 19, 2005</i>
Location	Athens, Georgia	
Course Purpose	To familiarize participants with foreign and emerging animal diseases in wildlife and their implications.	
Target Audience	Foreign Animal Disease Diagnosticians and Wildlife Biologists	
Time Requirements	3 days	
Cost	Travel costs only	
Contact	Mr. Michel Dixon, VS/PDS, (301) 734-4872	
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/Emergency Programs Staff and the Emergency Leadership Team. State Veterinary nominees should be submitted to the Regional Offices by the AVIC, as well.	
Nomination Deadline	To the Regional Office:	February 21, 2005
	To VS/PDS:	March 3, 2005

Location	TBD
Course Purpose	This training will provide information on biosafety principles and proper facility procedures. Participants will have the opportunity to practice inspection procedures. Participants will also be equipped with the information and skills needed to effectively and consistently perform laboratory inspections for biosafety levels 2 and 3 certification.
Target Audience	VMOs and others who are, or will be, performing these inspections
Cost	Travel costs only
Contact	Mr. Michel Dixon, VS/PDS, (301) 734-4872
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/NCIE.
Nomination Deadline	To the Regional Office: February 28, 2005 To VS/PDS: March 10, 2005

<i>Animal Identification Coordinator's Workshop (Eastern & Western Regions)</i>		<i>June 7 - 9, 2005</i>
Location	TBD	
Course Purpose	This workshop introduces new animal identification concepts and provides current information resources relevant to animal identification initiatives needed to support VS programs. The training addresses significant new issues, trends, and developments affecting VS programs and the implementation strategies designed to achieve program goals. The training serves as an open forum in which Animal Identification Coordinators can network to share successes and challenges.	
Target Audience	Animal Identification Coordinators (AICs)	
Time Requirements	3 days	
Cost	Travel costs only	
Contact	Mr. Raymond Francis, VS/PDS, (301) 734-0023	
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/NAHPP.	
Nomination Deadline	To the Regional Office:	March 14, 2005
	To VS/PDS:	March 24, 2005

Location	NVSL, Ames, Iowa
Course Purpose	Upon course completion, the participant will fulfill the requirements and responsibilities involved in the Federal-State Bovine Tuberculosis (TB) Eradication Program and the TB Eradication Program in Cervidae. The course provides information on TB pathology, immunology, testing, epidemiology, and surveillance. Current Program status and strategic goals, as well as issues such as TB in wildlife will also be addressed. The participant will gain skills in TB testing (comparative cervical tuberculin), interpretation of herd testing results, epidemiological investigations, and slaughter surveillance.
Target Audience	Federal and State VMOs who are, or will be, actively involved in the Bovine TB Eradication Program.
Time Requirements	3 days
Cost	Travel costs only
Contact	Mr. Michel Dixon, VS/PDS, (301) 734-4872
Nominations	All nominations must be sent from the Area Offices to the Regional Offices. The Regional Office will fax the approved prioritized nominations to VS/PDS, at (301) 734-4964. Selections will be made by VS/NAHPP.
Nomination Deadline	To the Regional Office: April 18, 2005 To VS/PDS: April 28, 2005

Location	Emmitsburg, MD
Course Purpose	This broadcasted seminar will provide USDA personnel with the latest information from the Emergency Programs organization of Veterinary Services.
Target Audience	Foreign Animal Disease Diagnosticians, Emergency First Responders, and anyone with an interest in the subject matter
Cost	N/A
Contact	Mr. Edward Oliver, VS/PDS, (970) 494-7219
Nominations	N/A
Nomination Deadline	Check the APHIS/VS/PDS training web site, www.aphis.usda.gov/vs/training/ , to download a Local Coordinator's Guide, obtain satellite coordinates, and to receive other pertinent information.

Pre-Determined Participant Courses Offered by the Professional Development Staff (PDS)*

Training Course	Dates of Training	Location
FAD Pathologists Course	November 1 – 5, 2004	Plum Island, NY
Live Bird Market Training (AHT)	December 6 – 10, 2004	Trenton, NJ
Ticks on Reptiles Training	December 6 – 10, 2004	Houston, TX
Live Bird Market Training (AHT)	January 13, 2005	TBD
Designated Tuberculosis Epidemiology	January 19 – 20, 2005	Ames, IA
Ag Emergency Responder Training (AgERT)	January 25 – 27, 2005	Anniston, AL
Ag Emergency Responder Training (AgERT)	February 15 – 17, 2005	Anniston, AL
Poultry FAD School	March 21 – 24, 2005	Ames, IA
Ag Emergency Responder Training (AgERT)	April 5 – 7, 2005	Anniston, AL
Live Bird Market Training (AHT)	April 14, 2005	TBD
Designated Transmissible Spongiform Encephalopathy (TSE) Epidemiology	April 26 – 28, 2005	Ames, IA
Smith-Kilborne Program	May 31 – June 7, 2005	Cornell University/Plum Island, NY
Ag Emergency Responder Training (AgERT)	June 21 – 23, 2005	Anniston, AL
FAD School	June 26 – July 1, 2005	Knoxville, TN
Live Bird Market Training (AHT)	July 14, 2005	TBD
Ag Emergency Responder Training (AgERT)	September 21 – 23, 2005	Anniston, AL

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NOMINATION REQUEST

COURSE TITLE:

DATE OF THE COURSE:

PLEASE PRINT CLEARLY

1. Participant's name, social security number, mailing address, phone and fax number, and e-mail address:

(Dr. Mr. or Ms.) Name **Social Security Number**

Mailing address (street, city, state, and zip code)

Phone number **Fax number** **E-mail address**

2. Job Title: _____

3. Participants Official Duty Station: _____

4. Estimated costs (This information is needed for the preparation for the Quarterly Travel Plan):

No. of days for per diem: _____

POV (need # of miles round trip): _____

Miscellaneous expenses (round trip estimates): _____
 {shuttle, parking, taxi, etc.}

Common carrier fare: _____

Method of purchase for common carrier (GTR, GVTS, CC, etc.): _____

GOV (Check if this mode of transportation will be used): _____

Car Rental: _____

5. Method of Transportation: _____

6. Please check the following if it pertains to you. Are you a FADD, DBE, or DTBE

7. Supervisor's signature for approval: _____

Signature **Print Name**

- 8 Director's approval: _____

PLEASE FAX TO THE REGIONAL OFFICE. THE REGIONAL OFFICE WILL FAX TO THE NOMINATIONS CONTACT PERSON NOTED AT THE END OF EACH COURSE DESCRIPTION.

To assure accurate completion of data for the APHIS Travel Plan, please indicate all aspects of your trip, such as combining personal travel with business, or driving rather than flying, etc.

**United States
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**Animal and
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Inspection Service**

**Veterinary
Services**

**Center for Animal
Epidemiology and
Animal Health**

Training

Courses

**Provided by the
Centers for
Epidemiology and
Animal Health**

**Centers for Epidemiology and Animal Health
Training Courses**

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Emergency Management Response System – Advanced Training for Responses to Animal Health Emergencies	December 7 – 9, 2004	6
Chronic Wasting Disease (CWD) Data Entry and Management	January 25 – 27, 2005 (CO) March 1 – 3, 2005 (NC)	7
Emergency Management Response System (EMRS) – Administrative Module	February 8 – 10, 2005	8
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Location	Ft. Collins, CO	
Course Purpose	<p>Participants will learn about the APHIS physical network (hardware and software), and how it uses regional, state, and local servers to provide database capabilities to each state in the U.S. They will also learn the terminology and basic concepts of the relational database model, and how the GDB implements this model. Participants will become familiar with the different Veterinary Services animal disease programs and how these programs utilize the GDB as a data repository, as well as the minimal data requirements for disease program reports routinely submitted to the National Animal Health Programs Staff (i.e., monthly reports for Brucellosis, TB, Pseudorabies, etc). Throughout this course the participants will also learn how to access data stored in the GDB and how to generate reports required by Veterinary Services or needed at the local level.</p> <p>This course primarily teaches the theoretical and functional organization of data in the GDB, with emphasis on specific disease programs. The disease programs to be covered in a particular class are determined by the needs and wishes of the participants in the class as expressed on their applications. Participants will be selected to try to group participants wanting information about the same programs into one class.</p>	
Target Audience	This course is recommended for epidemiologists, program records supervisors, AVICs, data entry operators, and any other data users. This class is highly recommended, but not required, as a preparation for those interested in the data retrieval class.	
Cost	Travel costs only	
Contact	Dr. Mike Dalrymple, VS/CEAH, (970) 494-7317	
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.	
Nomination Deadline	To the Regional Office:	September 27, 2004 {October session} May 9, 2005 {June session}
	To VS/CEAH:	October 4, 2004 {October session} May 16, 2005 {June session}

Discoverer Queries For Data Retrieval*November 2 – 4, 2004**March 15 – 17, 2005*

Location:	Fort Collins, Colorado	
Course Purpose:	Participants will learn data retrieval techniques, especially how to use Discoverer over the Internet to create and execute reports in the Generic Data Base (GDB). They will learn to format data from the GDB for reports. Techniques to create reports with functions, formulas, and multiple-table joins will be presented.	
Target Audience:	Federal and State Personnel	
Course Format:	<p>Day 1:</p> <p>8:00am – 12:00pm Overview of SQL and GDB architecture (or an Overview of Discoverer, if all participants have met the course prerequisites stipulated below)</p> <p>1:00pm – 5:00pm Fundamentals of Discoverer</p> <p>Days 2 & 3:</p> <p>All Day Basic and Advanced Discoverer Skills</p>	
Prerequisites:	<ol style="list-style-type: none"> 1. Understands and can proficiently write simple SQL queries. 2. Understands the Generic Data Base's structure (either by performing GDB data-entry work regularly as part of your job or by having attended the CEAH "GDB Data-Entry" workshop or "VS Databases" workshop). 	
Cost	Participants pay travel and hotel.	
Contact:	Sandy Hill, VS/CEAH, (970) 494-7298 Michael Durham, VS/CEAH, (970) 494-7295	
Nominations:	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.	
Nomination Deadline:	To the Regional Office:	October 4, 2004 {November session} February 7, 2005 {March session}
	To VS/CEAH:	October 11, 2004 {November session} February 14, 2005 {March session}

Location	Ft. Collins, CO
Course Purpose	Course will include EMRS Advanced Training in workflow management techniques using combinations of zone statuses and premises visits forms. Advanced data management, data extraction and manipulation, forecasting and report generation will be covered using a variety of techniques. Premises address validation using current Prem allocator and outside toolsets will be taught. New toolsets such as Intelliview for the client and Web will be covered in detail. Candidates will be expected to have a good working knowledge of all parts of EMRS and should have some previous experience at Taskforce levels with EMRS or a strong computer background and EMRS experience, as no entry level training will be covered.
Target Audience	Candidates should be prepared for interactive training and to provide input in areas where they have extensive taskforce experience and will be expected to be able to continue learning advanced techniques to be prepared to serve as DRO's or EPI section officers in future outbreaks fully utilizing EMRS to manage the outbreak.
Prerequisites	None
Cost	Travel costs only
Contact	Sherri Wainwright, VS/CEAH, (970) 494-7318 Fred Bourgeois, VS/CEAH, (318) 288-4083 Bob Carr, VS/CEAH, (970) 494-7297
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.
Nomination Deadline	To the Regional Office: November 1, 2004 To VS/CEAH: November 8, 2004

<i>Chronic Wasting Disease (CWD) Data Entry and Management</i>		<i>January 25 – 27, 2005 (CO)</i> <i>March 1 – 3, 2005 (NC)</i>
Location	Ft. Collins, CO Raleigh, NC	
Course Purpose	<p>This course focuses on usage of the Chronic Wasting Disease (CWD) national database (GDB). Emphasis will be on data entry and data management for the Chronic Wasting Disease certification program for captive cervids.</p> <p>Participants will learn about the APHIS physical network (hardware and software), and how the web-based database interface and network provide security to state data while allowing data to be held in a national repository. They will also learn the terminology and basic concepts of the relational database model, and how the GDB implants this model.</p> <p>Participants will become familiar with navigation and data entry for both the CWD database as well as the On-Line TSE Laboratory Submission (OTLS) system for submitting laboratory submission forms (10-4) electronically.</p> <p>Throughout this course the participants will also learn how to access data stored in the database, use worksheets to manage program tasks, and generate reports.</p>	
Target Audience	This course is recommended for individuals involved in entering and managing data used to manage the national CWD certification program for captive cervids (CWD data entry clerks, Epidemiologists, program managers).	
Prerequisites	None	
Cost	Travel costs only	
Contact	Dr. Steve Bengtson VS/CEAH (970) 494-7299	
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.	
Nomination Deadline:	<p>To the Regional Office: December 13, 2004 {January session} January 24, 2005 {March session}</p> <p>To VS/CEAH: December 23, 2004 {January session} February 1, 2005 {March class}</p>	

***Emergency Management Response System (EMRS) –
Administrative Module***

February 8 – 10, 2005

Location	Ft. Collins, CO
Course Purpose	<p>The EMRS is a web-based task management system designed to automate many of the tasks routinely associated with the disease outbreaks and animal emergencies. It is used for routine reporting of foreign animal disease (FAD) investigations, state outbreaks or control programs, classic national Animal Health Emergency responses, or natural disasters involving animals.</p> <p>Only personnel in a specific state or with a definite "need-to-know" are given access to a specific EMRS data base. Typically, only data entry personnel, section leaders, epidemiologists, and GIS personnel and, depending on the particular response, field emergency response personnel, need access to the EMRS. This can be USDA, APHIS, VS employees, state animal health officials, or temporary hires. Information is managed in the EMRS using views for task force management personnel or it can be exported for use with other applications.</p> <p>The purpose of this class will be to show personnel how to log into the EMRS, input data to the system, and how to get information out of EMRS for their specific job.</p>
Target Audience	This EMRS class will be geared towards admin people. This class will give students a detailed overview of the administrative module of EMRS and a general overview of the in investigation module.
Prerequisites	None
Cost	Travel costs only
Contact	Sherry Wainwright, VS/CEAH, (970) 494-7318 Fred Bourgeois, VS/CEAH, (318) 288-4083 Bob Carr, VS/CEAH, (970) 494-7297
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.
Nomination Deadline	To the Regional Office: January 3, 2005 To VS/CEAH: January 10, 2005

**Workshop on the Fundamentals of Risk Analysis for
Decision Makers and Technical Risk Analysts**

March 8 – 10, 2005

Location	Ft. Collins, CO
Course Purpose	<p>The primary focus of this 3-day workshop is to introduce the fundamentals of risk analysis from the perspectives of both decision makers and technical risk analysts. Participants will discuss the fundamentals of risk analysis, how it is conducted and how it can be used effectively in evaluating trade-related animal health risks and making regulatory decisions. The workshop will consist of two parts: (1) a non-technical but extensive overview of the risk analysis process and (2) an in-depth technical discussion of quantitative risk analysis, probability and probability distributions.</p> <p>The non-technical part will be given on the first day of the course and should take up to 5 hours followed by a 2 hour informal discussion. Decision makers and those who are interested in how to use risk analysis results to make more informed decisions will benefit the most from this part of the course and may continue to attend the technical part of the course only if they wish to do so.</p> <p>The technical part of the workshop will take 2 days and is independent of the non-technical part of the first day so that participants may chose to attend either parts or both parts of the course. The technical part covers (1) how to conduct a quantitative risk analysis and evaluate it critically, (2) the fundamental laws of probability on which risk analysis is based, and (3) probability mass and probability distribution functions and how they are used to model data and expert opinions in a risk analysis model. Real life examples will be presented and discussed throughout the course from, formulating the problem to running the model using @Risk software and to interpreting results.</p>
Target Audience	Decision makers and intermediate to technical risk analysts investigation module detailed overview of the administrative module investigation general investigation module.
Prerequisites	None
Cost	Travel only
Contact	Ziad Malaeb, Ph.D. (A.B.D) VS/CEAH, (970) 494-7288
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.
Nomination Deadline	<p>To the Regional Office: February 1, 2005</p> <p>To VS/CEAH: February 14, 2005</p>

Location	Ft. Collins, CO
Course Purpose	<p>The EMRS is a web-based task management system designed to automate many of the tasks routinely associated with the disease outbreaks and animal emergencies. It is used for routine reporting of foreign animal disease (FAD) investigations, state specific disease outbreaks or control programs, classic national Animal Health Emergency responses, or natural disasters involving animals.</p> <p>Only personnel in a specific state or with a definite "need-to-know" are given access to a specific EMRS data base. Typically, only data entry personnel, section leaders, epidemiologists, and GIS personnel, and depending on the particular response, field emergency response personnel need access to the EMRS. This can be USDA, APHIS, VS employees, state animal health officials, or temporary hires. Information is managed in the EMRS using views for task force management personnel or it can be exported for use with other applications.</p> <p>The purpose of this class will be to show personnel how to log into the EMRS, input data to the system, and how to get information out of EMRS for their specific job.</p>
Target Audience	<p>This EMRS class will be geared towards the VMO's and other field emergency response personnel. It will give participants a detailed overview of the investigation module of EMRS and a general overview of the administrative module. The focus is more on how veterinarians, in their different jobs at their different jobs at a disease outbreak emergency response, will use the investigating data base in EMRS. Also, how they'll use EMRS for the routine reporting of foreign animal diseases.</p>
Prerequisites	None
Cost	Travel only
Contact	<p>Sherri Wainwright, VS/CEAH, (970) 494-7318 Fred Bourgeois, VS/CEAH, (318) 288-4083 Bob Carr, VS/CEAH, (970) 494-7297</p>
Nominations	<p>Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.</p>
Nomination Deadline	<p>To the Regional Office: April 1, 2005</p> <p>To VS/CEAH: April 7, 2005</p>

User Created Queries for Data Retrieval (SQL)*July 12 – 14, 2005*

Location	Ft. Collins, CO
Course Purpose	Participants will learn data retrieval techniques, especially how to use Structured Query Language (SQL) and the Graphical User Interface (GUI) Browser, to create and execute queries in the Generic Data Base (GDB). They will learn to format data from the GDB for reports and for importing into other software, such as Epi-Info, for further analysis. Techniques to create macros with functions, formulas, and multiple-table joins will be presented.
Target Audience	Federal or State Program Records Supervisors, Program Managers, Computer Specialists, and Epidemiologists with a need to access GDB or other program data bases for Tuberculosis Brucellosis, Pseudorabies, Scrapie, and other diseases for program management, data quality control and data analysis.
Prerequisites	Knowledge of the structure of the Oracle 6/7 national program databases, especially the GDB.
Contact	Dr. Mike Dalrymple, VS/CEAH, (970) 494-7317
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.
Nomination Deadline	To the Regional Office: June 6, 2005 To VS/CEAH: June 17, 2005

<i>Spread Model</i>		<i>July 12 – 14, 2005</i>
Location	Ft. Collins, CO	
Course Purpose	To familiarize participants with the disease simulation model, SpreadModel, with a focus on Foot and Mouth Disease. The course will include detailed descriptions of model inputs, calculations and outputs. It will focus on information the user will need to enter, and appropriate interpretation of results. Exercises during class will help participants to understand how the model can help in efforts to prepare and educate individuals about spread of a foreign animal disease through animal populations.	
Target Audience	Epidemiologists, emergency coordinators, decision makers with an interest in knowing more about the model.	
Prerequisites	None	
Cost	Travel costs only	
Contact	Barbara Corso, VS/CEAH, Barbara.A.Corso@aphis.usda.gov Mark Schoenbaum, VS/CEAH, Mark.A.Schoenbaum@aphis.usda.gov	
Nominations	Nominations are to be sent to the Regional Director's Office. The Regional Office will forward the nominations to CEAH.	
Nomination Deadline:	To the Regional Office:	June 6, 2005
	To VS/CEAH:	June 17, 2005

NOMINATION REQUEST

PLEASE PRINT CLEARLY

COURSE TITLE: _____

DATE OF THE COURSE: _____

1. Participant's name, social security number, mailing address, phone and fax number, and e-mail address:

___ Dr. ___ Mrs. ___ Mr.

Name Social Security Number

Mailing address (street, city, state, and zip code)

Phone number Fax number E-mail

2. Job Title: _____

3. Participants Official Duty Station: _____

4. Estimated costs (This information is needed for the preparation for the Quarterly Travel Plan):

No. of days for per diem: _____

POV (need # of miles round trip): _____

Miscellaneous expenses (round trip estimates): _____
{shuttle, parking, taxi, etc.}

Common carrier fare: _____

Method of purchase for common carrier (GTR, GVTS, CC, etc.): _____

GOV (Check if this mode of transportation will be used): _____

Car Rental: _____

5. Method of Transportation: _____

6. Supervisor's signature for approval: _____

7. Region's approval: _____

PLEASE FAX TO THE REGIONAL OFFICE. THE REGIONAL OFFICE WILL FAX TO THE NOMINATIONS CONTACT PERSON NOTED AT THE END OF EACH COURSE DESCRIPTION.

**United States
Department of
Agriculture**

**Animal and
Plant Health
Inspection Service**

**Veterinary
Services**

**National Veterinary
Services Laboratories**

Training

Courses

Provided by the

**National
Veterinary
Services
Laboratories**

TRAINING COURSES AT THE NATIONAL VETERINARY SERVICES LABORATORIES

(For FISCAL YEAR 2005 – October 1, 2004 – September 30, 2005)

(For courses offered more than once, all dates are listed)

Some courses may require additional fees for special supplies and equipment. *Fees are subject to change.

COURSE TITLE	LENGTH	DATES	COST – FY 2005 Prices	PAGE NO.
Anaplasmosis Complement-Fixation Test	4 ½ days	January 10-14, 2005	\$1395	11
<i>Brucella abortus</i> Complement-Fixation Test	4 ½ days	January 10-14, 2005	\$1395	11
Avian Influenza (AI) Virus Isolation, Subtyping, and Agar Gel Immunodiffusion	5 days	April 11-15, 2005	\$1550	18
Bluetongue (BT) and Epizootic Hemorrhagic Disease (EHD) Virus Isolation	5 days	January 31 – February 4, 2005	\$1550	20
Bovine/Porcine Virus Isolation Techniques	2 days or 5 days	February 17-18, 2005 September 12-16, 2005	\$620 or \$1550	21
<i>Brucella</i> Isolation and Identification	5 days	January 24-28, 2005	\$1550	8
<i>Brucella</i> Reagent Production	5 days	January 31 - February 4, 2005	\$1550	10
Complement-Fixation Test	4 ½ days	January 10-14, 2005	\$1395	11
Equine Infectious Anemia (EIA) Agar Gel Immunodiffusion (AGID) and Enzyme-Linked Immunosorbent Assay (ELISA) Laboratory Methods	1 ½ days	As Scheduled	\$465	22
Equine Viral Arteritis (EVA) Virus Neutralization (VN)	2 days 2 days	October 15 & 18, 2004 April 22 & 25, 2005	\$620 \$620	23
Fluorescent Antibody (FA) Conjugate Production	5 days	April 4-8, 2005	\$1550	24
Foreign Animal Diseases	Varies	As scheduled	\$450/day	37
Hemagglutinating Encephalomyelitis Hemagglutination-Inhibition (HI) Test	1 day	April 6, 2005	\$310	25
Johne's Complement-Fixation Test	4 ½ days	January 10-14, 2005	\$1395	11
Johne's Isolation and Identification	4 days	April 11-14, 2005	\$1240	12
<i>Leptospira</i> Microscopic Agglutination	2 days	As scheduled	\$620	14
<i>Mycobacteria</i> Isolation and Identification	10 days	March 28 - April 8, 2005	\$3,100	15
Newcastle Disease (ND) Virus Isolation and Serology	5 days	October 18-22, 2004	\$1550	26
Paratuberculosis (Johne's) Complement-Fixation Test	4 ½ days	January 10-14, 2005	\$1395	11
Porcine Parvovirus (PPV) Hemagglutination-Inhibition (HI) Test	2 days	May 5-6, 2005	\$620	28
Porcine Reproductive and Respiratory Syndrome (PRRS) Indirect Fluorescent Antibody (IFA) Test	2 days	April 20-21, 2005	\$620	29
Pseudorabies (PR) Virus Neutralization Test	3 days	On Request	Non-Billable	30
Pseudorabies (PR) Virus Enzyme-Linked Immunosorbent Assay (ELISA) and Latex Agglutination Test	2 days	On Request	Non-Billable	31
Swine Influenza (SI) Hemagglutination-Inhibition (HI) Test	2 days	March 10-11, 2005	\$620	32
Vesicular Stomatitis (VS) Virus (New Jersey and Indiana Serotypes) Complement-Fixation Test	2 days	April 18-19, 2005	\$620	33
Vesicular Stomatitis (VS) Virus (New Jersey and Indiana Serotypes) Virus Neutralization Test	3 days	April 20-22, 2005	\$930	34

*An application for training should be submitted as soon as possible, but no later than 2 months before the course.

*For specialized training or training not listed, contact the Training Office

email: Denise.L.Macdonald@aphis.usda.gov or Nancy.K.Platter@aphis.usda.gov

Phone: (515) 663-7475/7501 FAX: (515) 663-7332

In response to requests from our customers for more specific information on diagnostic training to protect the health of animals, the National Veterinary Services Laboratories (NVSL) is pleased to provide you with this catalog which outlines some of the training courses provided by the NVSL. We hope this catalog will be helpful to you in identifying your training needs and in determining how the NVSL can assist you in meeting those needs.

While a number of courses are listed, this catalog is not all inclusive as we do provide training in other diseases. Feel free to contact us regarding your training requirements, and the NVSL will be glad to customize training to meet your specific needs. For information on the daily rate for training in Ames, Iowa and Greenport, New York, contact the NVSL training office below.

Requests for training or for more information on training should be sent to:

TRAINING OFFICE
NATIONAL VETERINARY SERVICES LABORATORIES
P.O. BOX 844
AMES, IA 50010

The NVSL Training Office can be reached by e-mail at NVSL_Training@aphis.usda.gov, by phone at (515) 663-7475/7501, or by fax at (515) 663-7332.

Information can also be accessed through the Internet at www.aphis.usda.gov/vs/nvsl/.

Let us know how we can meet your training needs.

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Mission and History of the National Veterinary Services Laboratories

MISSION: TO PROTECT THE HEALTH OF ANIMALS AND CONTRIBUTE TO PUBLIC HEALTH BY PROVIDING TIMELY, ACCURATE, AND RELIABLE LABORATORY SUPPORT TO OUR CUSTOMERS.

The National Veterinary Services Laboratories (NVSL) performs animal disease testing for Veterinary Services (VS) and is the only laboratory system in the Animal and Plant Health Inspection Service (APHIS) dedicated to the testing of diagnostic specimens for diagnosis of domestic and foreign animal diseases. The NVSL provides analytical services, disseminates scientific information, conducts developmental activities, and provides training for APHIS programs. It also works closely with APHIS' International Services to provide consultation, reagents, and training for foreign governments. Laboratory support services are provided for many APHIS programs. [Specific responsibilities of the individual laboratories are listed on pages 11, 25, 55, and 57.] The NVSL works closely with VS specialists in program development and program monitoring, and personnel are active on many animal health organization committees. NVSL clients and stakeholders include private, state, Federal, university and various diagnostic laboratories, and other groups, both domestic and international.

HISTORY: The origin of the NVSL can be traced to the Bureau of Animal Industry (BAI). Some of the significant events include:

1961 – Opening of the National Animal Disease Laboratory (NADL) at Ames, Iowa. The original organizational structure provided for a Director and Assistant Director for Research and an Assistant Director for Regulatory Laboratories. The Regulatory Laboratories were assigned 20 percent of the space and were to provide diagnostic services for the Animal Disease Eradication Division. Within a few years, reorganization resulted in three independent units for research, biologics, and diagnostics.

1971 – The Animal Health Division laboratory facilities in Beltsville, Maryland, were assigned to the Diagnostic Services group.

1972 – The Animal and Plant Health Inspection Service (APHIS) was formed as an Agency of the USDA. Diagnostic Services was a part of this Agency.

1973 – The Diagnostic Services Laboratory and the Biologics Laboratory were combined into one and named the Veterinary Services Laboratories.

1977 – The name of the laboratory was changed to NVSL. Growth and planning for construction of a new facility continued.

1978 – Phase I of the NVSL central facility was completed. The biologics laboratory personnel along with administrative services and support personnel moved into the new facility. Personnel from Beltsville along with their testing responsibilities moved to Ames.

1984 – Diagnostic activities at the Plum Island Animal Disease Center, Plum Island, New York, were transferred to APHIS and made a part of the NVSL. The diagnostic laboratory was named Foreign Animal Disease Diagnostic Laboratory (FADDL).

1996 – The NVSL's focus is exclusively on diagnostic activities due to the transfer of biologics testing responsibility to the Center for Veterinary Biologics. The eventual goal is to house all diagnostic personnel at the NVSL Central.

GENERAL INFORMATION

Nomination Procedure

Refer to the course outlines as some training requires the approval of the Federal and/or State Veterinarian in your state. All requests for training should be sent to:

Director's Office
USDA, APHIS, VS
National Veterinary Services
Laboratories (NVSL)
P.O. Box 844
Ames, IA 50010

Register Early

Mail or fax your registration early but no later than 2 months prior to the course to assure availability.

Telephone Registration

Registration will not be accepted by telephone; however, registrations sent by fax to (515) 663-7332 will be accepted if authorizing signature is included.

Confirmation Notification by the NVSL

A letter confirming receipt of the nomination will be sent to the individual submitting the request. Approximately 1 month before the course, an informational packet containing specific materials on the course will be sent directly to the trainee. The packet will contain an agenda, specifics on the course, an invoice, logistical details on motels and transportation to Ames, etc., a form to be returned to the NVSL to confirm attendance, and any other appropriate information.

Confirmation and Payment by the Trainee

The informational packet will contain a confirmation form that should be returned by the trainee as soon as possible but no later than the date indicated on the form. The full tuition payment is due at this time. Payment can be made by VISA, MasterCard, check, or money order (U.S. dollars payable to the USDA, APHIS). Instructions for paying the tuition will be included in the informational packet.

Substitutions

We encourage substitutions if you cannot attend a course. Employers may substitute another participant until the beginning of the course.

Withdrawals

You may withdraw from the class up to 2 weeks before the course begins with a full refund of tuition. After that date, refunds will be reduced by 1 day's tuition. Substitutions will be accepted up until the beginning of the course with no change to the tuition.

Accessibility

Participants needing special arrangements due to visual, hearing, or mobility impairment should contact the NVSL Training Office at least 4 weeks before the course to discuss specific needs and accommodations.

Interpreters

All courses are taught in English. The trainee must provide his/her own interpreter if one is needed.

Transportation/Housing

Participants are responsible for making their own travel arrangements and paying for their own costs for transportation, housing and food. The NVSL will provide appropriate information on motels and transportation along with the course information prior to the course. Assistance will also be provided in making motel reservations.

Purchasing Reagents

Unless otherwise indicated by the course outline, reagents for use during the course will be provided. If you want to purchase any reagents to take with you after the course, **arrangements must be made prior to the course.** Costs for reagents going to foreign countries must be prepaid. A Department of Commerce license may be required for reagents leaving the country. In addition, either a permit for importation into the receiving country or a letter from the foreign Ministry of Agriculture stating that a permit is not necessary is also required. For information on purchasing reagents, call (515) 663-7571, or fax (515) 663-7402.

Equal Opportunity

Training will be provided without discrimination for any nonmerit reason such as race, color, religion, sex, national origin, age, marital status, physical or mental handicap, or membership or nonmembership in an employee organization.

To contact the NVSL Training office

by email: NVSL Training@aphis.usda.gov
by phone: (515) 663-7475/7501
by fax: (515) 663-7332

OVERVIEW OF THE DIAGNOSTIC BACTERIOLOGY LABORATORY (DBL)

The DBL provides assistance to state, Federal, university, and foreign laboratories through the isolation and identification of pathogenic bacteria from animal tissues and fluids and through serologic examination for evidence of exposure to diseases caused by bacteria, fungi, and protozoa. Laboratory support is provided for brucellosis, tuberculosis, *Salmonella enteritidis*, horse importation, and other programs such as the National Animal Health Monitoring System and the National Poultry Improvement Plan by the following sections:

Bacterial Identification Section

- Zoonotic Agent Isolation and Identification
- *Salmonella spp.* Isolation and Serotyping
- Leptospira and Poultry *Mycoplasma* Reagents
- *Salmonella* and *Taylorella* Reference Laboratories
- *Pasturella Multocida* Typing and Reagents

Brucella & Mycobacterium Reagents Team

- *Brucella* & *Mycobacterium* Reagent Production
- *B. abortus* Strain 19 World Health Organization Reference (Seed)
- Proficiency Testing Reagents and Panels

Mycobacteria and Brucella Section

- *Brucella* and *Mycobacteria* Isolation & Identification
- Proficiency Testing of State Laboratories for Johnes Disease and Brucellosis
- Johnes' Disease Isolation and Identification

Serology Section

- Brucellosis Program Testing
- Import/Export Program Testing
- Proficiency Test of State Laboratories
- Tuberculosis and *Brucella spp.* Serum Banks

Technical Support Section

- Prepares/sterilizes all bacterial, viral, and other media, buffers, and solutions
- Maintains 900 computerized formulations for media and solutions
- Cleans and provides special treatment to glassware and other laboratory instruments

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◆ <i>Brucella abortus</i> Complement-Fixation Test.....	11
◆ <i>Brucella</i> Isolation and Identification.....	8
◆ <i>Brucella</i> Reagent Production.....	10
◆ Complement-Fixation Test.....	11
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◆ Johnes' Isolation and Identification.....	12
◆ <i>Leptospira</i> Microscopic Agglutination Test.....	14
◆ <i>Mycobacteria</i> Isolation and Identification.....	15
◆ Paratuberculosis (Johnes') Complement-Fixation Test.....	11

Description	This training will provide practical hands-on experience enabling participants to process tissue specimens for the isolation and identification of <i>Brucella spp.</i>
Objectives	<p>At the conclusion of this training, participants will be able to perform the following skills:</p> <ul style="list-style-type: none"> • Process tissue, milk, and blood specimens for the isolation of <i>Brucella spp.</i> • Identify the colonial morphology of <i>Brucella</i> on various media • Obtain pure cultures of <i>Brucella</i> and perform various biochemical tests required for identification • Interpret the biochemical results and identify the species and biovars of the genus <i>Brucella</i> • Obtain a basic understanding of the procedures used in a Biosafety Level III laboratory
Topics to be Covered	<p>The following laboratory sessions will be provided:</p> <p>Demonstrations and hands-on laboratory activities including:</p> <ul style="list-style-type: none"> • Processing various animal specimens including tissue, milk, blood, and swabs • Sample preparation • Biochemical tests required for the isolation of <i>Brucella</i> • Observing bacterial growth characteristics • Cellular morphology • Biotyping various species of <i>Brucella</i> • Media used • Identifying unknowns <p>Lectures and/or discussions will include:</p> <ul style="list-style-type: none"> • Clinical and epidemiological aspects of bovine brucellosis • Interpretation of atypical biochemical results • Laboratory safety • Trouble shooting • Emerging technologies • Animal inoculations • Quality assurance

(continued on next page)

	<p>Demonstrations and tours (optional):</p> <ul style="list-style-type: none"> • NVSL/DBL – Media preparation laboratory • NVSL/PL – Pathobiology Laboratory • NADC – Brucellosis Laboratory • ISU – Pathology and Microbiology
Target Audience	Technicians, technologists, microbiologists, laboratory supervisors, laboratory trainers other scientists who desire current knowledge of the brucellosis diagnostic procedures. Class is limited to 2 trainees.
Time Requirements	5 days
Restrictions	The training is conducted in a Biosafety Level III laboratory that requires a brucellosis blood test before admittance. Laboratory clothing will be provided for use during this course. Persons who are immunocompromised or immunosuppressed may be at risk of acquiring infections.
Contact Person	<p>For technical information: Head, Mycobacteria and Brucella Diagnostic Bacteriology Laboratory (515) 663-7676</p> <p>For logistical information: NVSL Training Office (515) 663-7475/7501</p>

Brucella Reagent Production

January 31 – February 4, 2005

Description	This training will provide information and experience necessary for participants to propagate, process, standardize, and evaluate <i>Brucella abortus</i> cells and antigens
Objectives	<ul style="list-style-type: none">• To produce and evaluate antigens for the detection of antibodies to <i>B. abortus</i>
Topics to be Covered	Overview of antigen production and evaluation including: <ul style="list-style-type: none">• Background information on the various antigens produced and their applications in laboratory and field settings• Preparation of seed stock• Propagation of cells on solid and in liquid media• Purity and dissociation of cells repairing dyes and straining cells• Standardization of cell concentration• Sterility testing• Serologic evaluation of antigens
Target Audience	Technicians, technologists, microbiologists, laboratory supervisors, laboratory trainers other scientists who desire current knowledge of the <i>brucella</i> reagent production. Class size limited to 2.
Time Requirements	5 days
Contact Person	For technical information: Leader, Brucella & Mycobacterium Reagents Team Diagnostic Bacteriology Laboratory (515) 663-7317 For logistical information: Training Office (515) 663-7475/7501

<i>Complement – Fixation Test [Anaplasmosis, Brucella Abortus, and/or Paratuberculosis (Johne’s)]</i>		<i>January 10 – 14, 2005</i>
Description	This is a hands-on training course that provides the opportunity for participants to learn the complement-fixation technique for the detection of antibodies against anaplasmosis, brucellosis, and/or paratuberculosis (Johne’s).	
Objective	Participants will review and update their knowledge of the complement-fixation test by observing and practicing specific techniques for the detection of antibodies against anaplasmosis, brucellosis, and/or paratuberculosis (Johne’s).	
Topics to be Covered	Testing procedures including: <ul style="list-style-type: none"> • Complement-fixation principles • Hemolysin titrations • Complement titrations • Complement-fixation tests for anaplasmosis, brucellosis, and/or paratuberculosis (Johne’s) 	
Target Audience	Diagnostic laboratory technicians, supervisors, and epidemiologists. Class size is limited to 6.	
Time Requirements	4½ days	
Contact Person	For technical information:	Head, Serology Section Diagnostic Bacteriology Laboratory (515) 663-7565
	For logistical information:	Training Office (515) 663-7475/7501

<p>Description</p>	<p>This training will provide practical hands-on experience enabling participants to process fecal or tissue specimens for the isolation and identification of <i>Mycobacterium paratuberculosis</i>.</p>
<p>Objective</p>	<p>Upon successful completion of this course, the student will be able to:</p> <ul style="list-style-type: none"> • Indicate the current significant epidemiological trends of paratuberculosis in the United States • Demonstrate laboratory practices for safely working with <i>mycobacteria</i> • Discuss important aspects of quality assurance • Discuss specimen collection and transport • Perform acid-fast microscopy • Perform specimen processing • Discuss effective communication with clinicians • Discuss reporting laboratory results • Perform the IDEXX <i>M. paratuberculosis</i> DNA test kit • Describe new testing methods giving applications and limitations
<p>Topics to be Covered</p>	<p>Laboratory sessions include the following demonstrations and hands-on laboratory activities:</p> <ul style="list-style-type: none"> • Processing fecal and tissue specimens • Sample preparation • Ziehl-Neelsen stain procedures • Observing bacteriological growth characteristics • Media used • Using DNA probes • Identifying unknowns <p>Lectures/Discussions Include:</p> <ul style="list-style-type: none"> • Clinical and epidemiological aspects of paratuberculosis • Test interpretations • Laboratory safety • Quality assurance • Trouble shooting • Emerging technologies

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	<p>Demonstration and tours (optional)</p> <ul style="list-style-type: none"> • NVSL-DBL media laboratory • NADC paratuberculosis laboratory and library • NVSL-DBL serology laboratory • ISU paratuberculosis laboratory and library
Target Audience	Technicians, technologists, microbiologists, laboratory supervisors, laboratory trainers and/or other scientists who desire current knowledge of the Johne's diagnostic procedures. Class is limited to 4 trainees.
Time Requirements	4 days
Contact Person	<p>For technical information: Head, Mycobacteria and Brucella Diagnostic Bacteriology Laboratory (515) 663-7676</p> <p>For logistical information: Training Office (515) 663-7475/7501</p>

Description	This training will provide practical hands-on experience enabling participants to process tissue specimens for the isolation and identification of <i>Mycobacterium bovis</i> .
Objective	<p>Upon successful completion of this course, the student will be able to:</p> <ul style="list-style-type: none"> • Indicate the current significant epidemiological trends of bovine tuberculosis in the United States • Demonstrate laboratory practices for safely working with <i>mycobacteria</i> • Discuss important aspects of quality assurance • Discuss specimen collection and transport • Perform acid-fast microscopy • Perform specimen processing • Discuss effective communication with clinician • Discuss reporting laboratory results • Perform Gen Probe <i>M. tuberculosis</i> complex DNA test kit • Describe new testing methods giving applications and limitations
Topics to be Covered	<p>Laboratory sessions include the following demonstrations and hands-on laboratory activities:</p> <ul style="list-style-type: none"> • Processing tissue specimens • Sample preparations • Ziehl-Neelsen stain procedures • Observing bacteriological growth characteristics • Media used • Using DNA probes • Identifying unknowns • Using Bactec media • Gas chromatography for identifying <i>mycobacteria</i> • Drug susceptibility testing • Biochemical tests required for identifying <i>mycobacterial</i> species • Colonial morphology • Cellular morphology

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OVERVIEW OF THE DIAGNOSTIC VIROLOGY LABORATORY (DVL)

The DVL provides diagnostic support for APHIS programs and foreign animal diseases (FAD) as well as diagnosis of domestic diseases by virus isolation and identification, serologic tests, and electron microscopy. The DVL conducts surveillance, import/export testing, and reference and reagent production. They provide diagnostic assistance in domestic diseases for private, state, Federal, and university laboratories, and train scientists from national and international laboratories.

The DVL is a national reference laboratory for bluetongue (BT), equine infectious anemia (EIA), highly pathogenic avian influenza (HPAI), Newcastle disease (ND), pseudorabies (PR), and vesicular stomatitis (VS) viruses. The DVL is also an Office International des Epizooties reference laboratory for BT, EIA, HPAI, exotic ND, PR, Venezuelan equine encephalomyelitis and VS viruses.

Avian Viruses Section

- Isolation and Identification of Avian Virus Pathogens
- Reference Laboratory for Highly Pathogenic Avian Influenza and Exotic Newcastle Disease

Bovine and Porcine Viruses Section

- Isolation and Identification of Bovine and Porcine Viruses, and viruses from aquatic organisms such as fish and shrimp
- Reference Laboratory for Pseudorabies Virus and Vesicular Stomatitis Virus

Equine and Ovine Viruses Section

- Isolation of Equine and Small Ruminant Viruses, Equine Encephalomyelitis, and West Nile Virus
- Reference Laboratory for Equine Infectious Anemia, Bluetongue, and Epizootic Hemorrhagic Diseases Viruses

COURSES OFFERED

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Description	This training will provide the participant(s) hands-on experience in the isolation, identification, and characterization of an avian influenza virus and in the detection of antibodies by the agar gel immunodiffusion test.
Objective	Upon successful completion of this course, the student will be able to: <ul style="list-style-type: none">• Demonstrate laboratory safety practices in handling avian influenza virus• Discuss important aspects of quality assurance related to the procedures used• Perform virus isolation using chicken embryos• Perform the hemagglutination test• Perform the hemagglutination-inhibition test• Perform the agar gel immunodiffusion test• Discuss pathogenicity criteria• Discuss and understand subtyping methods including hemagglutination-inhibition and neuraminidase-inhibition tests
Topics to be Covered	Laboratory sessions will include the following demonstrations and hands-on training: <ul style="list-style-type: none">• Tissue selection and preparation for virus isolation• Antibiotic and media formulations• Embryo inoculation via allantoic sac route• Embryo candling and collection of allantoic fluid• Hemagglutination test• Hemagglutination-inhibition test for virus identification• Agar gel immunodiffusion test• Subtype (hemagglutination-inhibition and neuraminidase-inhibition tests) determination by determination

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	<p>Discussions will include:</p> <ul style="list-style-type: none"> • Epidemiology of avian influenza • Good laboratory practices • Techniques to prevent laboratory contamination • Quality assurance • Trouble shooting • Test interpretations • Pathogenicity tests and interpretations • Reagent preparation • Subtyping procedure
Target Audience	Technicians, microbiologists, and veterinarians who wish to improve current laboratory skills or who will actually perform the test in the laboratory. Class size is limited to 2.
Time Requirements	Training will be provided Monday through Friday. Trainee should be prepared to be in the laboratory for 5 full days.
Restrictions	The training will be conducted in a high security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	<p>For technical information: Head, Avian Viruses Section Diagnostic Virology Laboratory (515) 663-7551</p> <p>For logistical information: Training Office (515) 663-7475/7501</p>

Bluetongue (BT) and Epizootic Hemorrhagic (EHD) Virus Isolation

January 31 – February 4, 2005

Description	This hands-on training allows the participants an opportunity to isolate and identify BT and EHD viruses from field specimens.
Objective	To enable participants to follow and perform procedures to isolate and identify BT and EHD.
Topics to be Covered	<p>Overview of virus isolation techniques including:</p> <ul style="list-style-type: none"> • Processing of specimens • Preparation and inoculation of cell cultures • Preparation and inoculation of embryonating chicken eggs • Fluorescent antibody procedures • Serotyping procedures
Target Audience	Laboratory personnel familiar with virus isolation techniques. Class size is limited to 2.
Time Requirements	5 days
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	<p>For technical information: Head, Equine and Ovine Viruses Diagnostic Virology Laboratory (515) 663-7551</p> <p>For logistical information: Training Office (515) 663-7475/7501</p>

Bovine/Porcine Virus Isolation Techniques

February 17 – 18, 2005
September 12 – 16, 2005

Description	This training will provide practical, hands-on experience in techniques used to isolate common bovine and/or porcine viral agents from tissues, swabs, and other diagnostic specimens.
Objective	To learn procedures for the isolation of bovine and/or porcine viruses
Topics to be Covered	An overview of techniques including: <ul style="list-style-type: none">• Tissue selection, preparation, and homogenization techniques• Cell culture preparation and inoculation• Observation of cultures for cytopathic effects• Procedures for blind passage• Identification strategies, including direct and indirect immunofluorescence assays, serum-virus neutralization, and electron microscopy
Target Audience	Technicians, microbiologists, and veterinarians who are performing or who wish to perform virus isolation in cell culture from bovine and/or porcine diagnostic specimens. Class size is limited to 2.
Time Requirements	2 days or 5 days* *Note: The general overview of basic virus isolation techniques for bovine or porcine viruses requires 5 days. Training for isolation techniques for one type of virus, e.g., porcine reproductive and respiratory syndrome (PRRS) virus isolation techniques, can be completed in 2 days.
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	For technical information: Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551 For logistical information: Training Office (515) 663-7475/7501

<i>Equine Infectious Anemia (EIA) Agar Gel Immunodiffusion (AGID) and Enzyme-linked Immunosorbent Assay (ELISA) Laboratory Methods</i>		<i>As Scheduled</i>
Description	This is a hands-on course that gives participants complete training in EIA AGID setup and interpretation as well as the opportunity to set up demonstrations on the currently approved ELISA systems.	
Objective	To provide trainees with the information and skills to set up and interpret EIA AGID reactions and earn certification to do USDA-approved testing.	
Topics to be Covered	Topics include: <ul style="list-style-type: none"> • EIA testing and regulatory concerns • Status reports • Pouring, cutting, and inoculating immunodiffusion (ID) plates • Reading and interpretation of ID plates • Agar preparation • Setup and interpretation of EIA ELISA tests 	
Target Audience	Technicians, microbiologists, and/or veterinarians who want EIA testing certification. Class size is limited to 12.	
Time Requirements	1 ½ days	
Purchasing Reagents to Take With You	EIA reagents must be purchased from an approved manufacturer. Information on purchasing EIA reagents is provided with pre-course material sent to trainees. Participants desiring to hand-carry any other reagents with them after completion of the course must make arrangements prior to the course. See page 4 for instructions.	
Nomination Procedure	Requests for training must be co-signed by the applicant's State Veterinarian and Federal Veterinarian before sending to the Director's Office, National Veterinary Services Laboratories.	
Contact Person	For technical information:	Head, Equine & Ovine Viruses Diagnostic Virology Laboratory (515) 663-7551
	For logistical information:	Training Office (515) 663-7475/7501

<i>Equine Viral Arteritis (EVA)Virus Neutralization (VN)</i>		<i>October 15 & 18, 2004</i> <i>April 22 & 25, 2004</i>
Description	A hands-on training course designed to give students an opportunity to learn microtiter VN techniques and successfully complete an EVA check test set.	
Objective	To enable trainees to successfully perform the EVA VN test	
Topics to be Covered	Topics include: <ul style="list-style-type: none"> • Overview of microtiter VN testing • Overview of tissue culture techniques • Specific procedures and requirements for EVA VN testing 	
Target Audience	Technicians, microbiologists, and veterinarians who will actually perform the test in the laboratory. Class size limited to 2.	
Time Requirements	The test requires 2 days – 1 day for overview and setup and 1 day to read results. Results are read 72 hours later. Training will be provided on Friday, with results read the following Monday.	
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.	
Contact Person	For technical information:	Head, Equine & Ovine Viruses Diagnostic Virology Laboratory (515) 663-7551
	For logistical information:	Training Office (515) 663-7475/7501

Fluorescent Antibody (FA) Conjugate Production

April 4 – 8, 2005

Description	Hands-on training to prepare an FA conjugate using flourescein isothiocyanate (FITC) dye. Serum antibody used in this course was produced against a viral agent, but the FA-labeling technique can also be applied to antiserum produced against other agents.
Objective	To enable participants to conjugate and evaluate FITC-labeled antibody.
Topics to be Covered	The production and evaluation of conjugate including: <ul style="list-style-type: none">• Discussion of antiserum production• Preparation of reagents used in procedure• SAS fraction of serum• Dialysis• Protein determination• Gel filtration with Sephadex• Evaluation of FA conjugates
Target Audience	Technicians, microbiologists, and/or veterinarians who want training in FA conjugate production. Restricted to 2 trainees.
Time Requirements	5 days
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	For technical information: Reagent Production Unit Diagnostic Virology Laboratory (515) 663-7551 For logistical information: Training Office (515) 663-7475/7501

*Hemagglutinating Encephalomyelitis
Hemagglutination-Inhibition (HI) Test*

April 6, 2005

Description	Explanation of the complete procedure and hands-on practical experience will enable the trainee to perform the HI test for detection of antibodies against hemagglutinating encephalomyelitis virus (HEV).
Objective	At the conclusion of the training, course participants will be able to perform the HI for detection of antibodies against HEV.
Topics to be Covered	<p>Overview of test procedures including:</p> <ul style="list-style-type: none"> • Propagation of virus stocks • Virus titration to determine virus concentration • Sample preparation and titration for determination of endpoint titer • Challenge virus dilution and preparation of back titrations • Reading and evaluation of test plates • Use of controls to monitor performance of the test • Reporting of test results
Target Audience	Laboratory personnel who wish to conduct testing to qualify animals for export or interstate shipment. Class size limited to 6.
Time Requirements	1 day
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	<p>For technical information: Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551</p> <p>For logistical information: Training Office (515) 663-7475/7501</p>

<i>Newcastle Disease (ND)</i> <i>Virus Isolation and Serology</i>		<i>October 18 – 22, 2004</i>
Description	This training will provide hands-on experience enabling participants to process samples for isolation, identification, and characterization of the ND virus.	
Objective	<p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> • Demonstrate laboratory safety practices in handling the ND virus • Discuss important aspects of quality assurance related to the procedures used • Perform virus isolation using chicken embryos • Perform the hemagglutination test • Perform the hemagglutination-inhibition test • Determine the mean death time(MDT) in embryos as a measure of pathogenicity • Discuss pathogenicity criteria 	
Topics to be Covered	<p>Laboratory sessions include the following demonstrations and hands-on training:</p> <ul style="list-style-type: none"> • Selection and processing of tissue specimens • Antibiotic and media formulations • Embryo inoculation via allantoic sac route • Egg candling and collection of allantoic fluid • Hemagglutination test • Hemagglutination-inhibition test for virus identification • Hemagglutination-inhibition test for detection of antibodies • Determination of MDT <p>Discussions include:</p> <ul style="list-style-type: none"> • Epidemiology of ND • Laboratory Safety Practices • Techniques to prevent laboratory contamination • Quality assurance • Trouble shooting • Test interpretations • Pathogenicity tests and interpretations • Reagent production and preparation 	

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Target Audience	Technicians, microbiologists, and veterinarians who wish to improve current laboratory skills or who will actually perform the test in the laboratory. Class size limited to 2.
Time Requirements	Training will be provided Monday through Friday. Trainees should be prepared to be in the laboratory for 5 full days.
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	<p>For technical information: Head, Avian Viruses Section Diagnostic Virology Laboratory (515) 663-7551</p> <p>For logistical information: Training Office (515) 663-7475/7501</p>

<i>Porcine Parvovirus (PPV)</i>		<i>May 5 – 6, 2005</i>
<i>Hemagglutination-Inhibition (HI) Test</i>		
Description	Explanation of the complete procedure and hands-on practical experience will provide trainee the opportunity to perform the HI test for detection of antibodies against PPV.	
Objective	At the conclusion of the training, course participants will be able to perform the HI test for detection of antibodies against PPV.	
Topics to be Covered	<p>An overview of the HI test including:</p> <ul style="list-style-type: none"> • Propagation of virus stocks • Virus titrations to determine virus concentration • Sample preparation and titration for determination of endpoint titer • Challenge virus dilution and preparation of back titrations • Reading and evaluation of test plates • Use controls to monitor performance of the test • Reporting of test results 	
Target Audience	Laboratory personnel desiring to learn and implement the HI test in order to offer this procedure to serologically diagnose PPV infection. Class size is limited to 6.	
Time Requirements	2 days	
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.	
Contact Person	For technical information:	Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551
	For logistical information:	Training Office (515) 663-7475/7501

Porcine Reproductive and Respiratory Syndrome (PRRS) Indirect Fluorescent Antibody (IFA) Test

April 20, 2005

Description	This training will provide an explanation of the testing procedure and provide practical hands-on experience which will enable participants to conduct the IFA test for detection of antibodies against PRRS virus.
Objective	To perform the IFA test for detection of antibodies against PRRS.
Topics to be Covered	<p>Overview of testing procedures including:</p> <ul style="list-style-type: none"> • Propagation of virus stocks • Virus titrations to determine virus concentration • Preparation of IFA slides • Sample preparation and titration for determination of endpoint titer • Reading and evaluation of slides • Use of controls to monitor performance of the test • Reporting of test results
Target Audience	Laboratory personnel who wish to conduct testing to qualify animals for export or interstate shipment and serologically diagnose PRRS virus infections. Class size is limited to 3.
Time Requirements	2 days
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	<p>For technical information: Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551</p> <p>For logistical information: Training Office (515) 663-7475/7501</p>

<i>Pseudorabies (PR) Virus Neutralization Test</i>		<i>On Request</i>
Description	This training will provide an explanation of the complete testing procedure and provide practical hands-on experience to enable the participants to conduct the virus neutralization test for detection of antibodies against PR virus.	
Objective	To perform the virus neutralization test for detection of antibodies against PR virus.	
Topics to be Covered	Overview of virus neutralization testing procedures including <ul style="list-style-type: none"> • Propagation of virus stocks • Virus preparation and titration for determination of endpoint titer • Challenge virus dilution and preparation of back titrations • Cell culture methods • Reading and evaluation of test plates • Use of controls to monitor performance of the test • Reporting of the test results 	
Target Audience	Technicians, microbiologists, and/or veterinarians who wish to conduct testing to qualify animals for export or interstate shipment or for providing diagnostic assistance for disease diagnosis. Class size is limited to 6.	
Time Requirements	3 days	
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.	
Contact Person	For technical information: Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551 For logistical information: Training Office (515) 663-7475/7501	

<i>Pseudorabies (PR) Virus Enzyme-linked Immunosorbent Assay (ELISA) and Latex Agglutination (LA) Test</i>		<i>On Request</i>
Description	This training will provide an explanation of the complete testing procedure and provide practical hands-on experience to enable the participants to conduct the latex agglutination test and enzyme-linked immunosorbent assay for detection of antibodies against PR virus.	
Objective	To perform the PR ELISA and LA test for detection of antibodies against PR virus.	
Topics to be Covered	Overview of ELISA and LA testing procedures.	
Target Audience	Technicians, microbiologists, and/or veterinarians who wish to conduct testing to qualify animals for export or interstate shipment or for providing diagnostic assistance for disease diagnosis. Class size is limited to 6.	
Time Requirements	2 days	
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.	
Contact Person	For technical information:	Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551
	For logistical information:	Training Office (515) 663-7475/7501

Swine Influenza (SI) Hemagglutination-Inhibition (HI) Test**March 10 – 11, 2005**

Description	This training will provide an explanation of the testing procedure and provide practical hands-on experience which will enable participants to conduct the HI test for detection of antibodies against SI virus (H1N1, H3N2).
Objective	To perform the HI test for detection of antibodies against SI virus.
Topics to be Covered	Overview of HI testing procedures including: <ul style="list-style-type: none"> • Propagation of virus stocks • Virus titrations to determine virus concentration • Sample preparation and titration for determination of endpoint titer • Challenge virus dilution and preparation of back titrations • Reading and evaluation of test plates • Use of controls to monitor performance of the test • Reporting of test results • Public health issues involved with these viruses
Target Audience	Laboratory personnel who wish to conduct testing to qualify animals for export or interstate shipment and serologically diagnose SI virus infections. Class size is limited to 6.
Time Requirements	2 days
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.
Contact Person	For technical information: Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551 For logistical information: Training Office (515) 663-7475/7501

<i>Vesicular Stomatitis (VS) Virus</i> <i>(New Jersey and Indiana Serotypes)</i> <i>Complement – Fixation Test</i>		<i>April 18 – 19, 2005</i>
Description	This training will provide an explanation of the testing procedure and provide practical hands-on experience which will enable participants to conduct the complement-fixation test for detection of antibodies against VS virus (New Jersey and Indiana serotypes).	
Objective	To perform the complement-fixation test for detection of antibodies against VS virus (New Jersey and Indiana serotypes).	
Topics to be Covered	Overview of complement-fixation testing procedures including: <ul style="list-style-type: none"> • Preparation and titration of test reagents • Sample preparation and test procedures • Reading and evaluation of test plates • Use of controls to monitor performance of the test • Reporting of the test results • Public health issues involved with this virus 	
Target Audience	Technicians, microbiologists, and/or veterinarians who wish to conduct testing to qualify animals for export or interstate shipment. Class size limited to 3.	
Time Requirements	2 days	
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.	
Contact Person	For technical information: Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551 For logistical information: Training Office (515) 663-7475/7501	

<i>Vesicular Stomatitis (VS) Virus</i> <i>(New Jersey and Indiana Serotypes)</i> <i>Virus Neutralization Test</i>		<i>April 20 – 22, 2005</i>
Description	This training will provide an explanation of the testing procedure and provide practical hands-on experience which will enable participants to conduct the virus neutralization test for detection of antibodies against VS virus (New Jersey and Indiana serotypes).	
Objective	To perform the virus neutralization test for detection of antibodies against VS virus (New Jersey and Indiana serotypes).	
Topics to be Covered	Overview of virus neutralization testing procedures including: <ul style="list-style-type: none"> • Propagation of virus stock • Virus titrations to determine virus concentration • Sample preparation and titration for determination of endpoint titer • Challenge virus dilution and preparation of back titration • Cell culture methods • Reading and evaluation of test plates • Use of controls to monitor performance of the test • Reporting of the test results • Public health issues involved with this virus 	
Target Audience	Technicians, microbiologists, and/or veterinarians who wish to conduct testing to qualify animals for export or interstate shipment. Class size limited to 3.	
Time Requirements	3 days	
Restrictions	The training will be conducted in a high-security laboratory. Trainees will be required to change clothing to enter and shower to leave. Participants must sign an agreement not to go near or handle livestock or poultry during the training and for 5 days after completion of the training.	
Contact Person	For technical information:	Head, Bovine & Porcine Viruses Diagnostic Virology Laboratory (515) 663-7551
	For logistical information:	Training Office (515) 663-7475/7501

OVERVIEW OF THE PATHOLOGY LABORATORY (PL)

The PL provides differential diagnostic studies of Foreign Animal Disease (FAD) and domestic animal diseases. The laboratory's clients and stakeholders include several Federal programs, various diagnostic laboratories, and other groups, both domestic and international.

This laboratory is the national reference center for confirmation and/or diagnosis of various VS program diseases (e.g., transmissible spongiform encephalopathies, bovine tuberculosis, screwworm myiasis, and cattle fever ticks). It is an international center for analytical services and provides pathology, clinical pathology, parasitology, entomology, and chemistry services.

General Pathology and Pathology Investigations Section

- Histopathology Support for the Bovine Tuberculosis Eradication/Control Program
- Gross Pathology/Histopathology Support for Diagnosis of Foreign Animal Diseases and Enzootic Diseases
- Histopathology/Immunohistochemistry for Scrapie and Chronic Wasting Disease Diagnosis
- Surveillance Histopathology IHC for Bovine Spongiform Encephalopathy
- Gross Pathology/Histopathology Reference Support for State Diagnostic Laboratories
- Histological and Immunohistochemical Preparations

Chemistry and Analytical Services (CAS) Section

- Chemical Identification and Quantitation of Program-related Agents
- Analysis of Pesticide Concentrations for APHIS Programs
- Chemical Analysis of Veterinary Biologics Products
- Standardization of Analytical Methodologies
- Coordination of Veterinary Services Disinfectant Issues
- Coordination of Comprehensive Diagnostic Cases

Parasitology and Clinical Pathology Team

- Exotic and Domestic Parasite Identification (e.g., Ticks, Myiasis Flies, Mites, Hemoparasites)
- Center for National Tick Surveillance Program
- Hematology and Clinical Chemistry
- Fraudulent Blood Screening

Animal Resources Section

- Animal Care, Handling, and Management
- Staff Members Have American Association for Laboratory Animal Science Certification
- Operation of Biosafety Level II and III Animal Housing Facilities
- Accredited by the American Association for Assessment and Accreditation of Laboratory Animal Care since 1994

COURSES OFFERED

- ◆ Specialized training available upon request. Contact the Training Office, telephone (515) 663-7475/7501 or email: NVSL Training@aphis.usda.gov

OVERVIEW OF THE FOREIGN ANIMAL DISEASE DIAGNOSTIC LABORATORY (FADDL)

The FADDL is responsible for the diagnosis of animal diseases foreign to the United States by testing samples submitted from within and outside the United States. Tests are also conducted on imported animals and animal products for the presence of exotic animal disease agents.

Diagnostic Services Section

- Diagnosis of Foreign Animal Diseases (FAD)
- Testing of Imported Animals for FAD
- Safety Testing of Imported Biological Materials
- Gamma Irradiation Sterilization of Biomaterials
- Histologic Studies on Diagnostic Cases
- Electron Microscopic Examination of Pathogen

Reagents and Vaccine Services Section

- New Methods Evaluation and Implementation
- Production, Maintenance, and Distribution of Diagnostic Reagents
- Maintenance of North American Foot-and-Mouth (FMD) Vaccine Bank

TRAINING OFFERED

Foreign Animal Diseases.....	37
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<i>Foreign Animal Diseases</i>		<i>As Scheduled</i>
<p>Training in the diagnosis and recognition of diseases not present in the United States is offered at the Foreign Animal Disease Diagnostic Laboratory (FADDL) on a request basis. The primary areas of interest in the past have included:</p>		
<p>1. Vesicular Disease Diagnosis</p>	<p>Detection of antibodies to foot-and-mouth disease virus (FMDV), vesicular stomatitis virus (VSV), vesicular exanthema of swine (VES), and swine vesicular disease virus (SVDV) by agarose gel immunodiffusion, virus neutralization, and/or ELISA.</p> <p>Detection of viral antigens of FMDV, VSV, VES, and SVDV by ELISA, complement-fixation, polymerase chain reaction (PCR), virus isolation (using tissue culture and/or live animal systems), and electron microscopy (EM).</p>	
<p>2. Swine Disease Diagnosis</p>	<p>Detection of classical swine fever (CSF) (hog cholera) and African swine fever (ASF) virus by indirect florescent antibody (IFA) staining of cut tissue sections and/or virus isolation in tissue culture or live animals.</p> <p>Detection of CSF virus and ASF virus by avidin-biotin complex (ABC) staining and IFA staining of cut tissue sections and/or virus isolation in tissue culture or live animals.</p>	
<p>3. African Horse Sickness</p>	<p>Detection of antibodies to African horse sickness (AHS) virus by ELISA, complement-fixation, virus neutralization, and IFA.</p>	
<p>4. Rinderpest and Peste des Petits Ruminants (PPR)</p>	<p>Detection of antibodies to Rinderpest virus and PPR virus by virus neutralization and detection of virus by virus isolation in tissue culture.</p>	
<p>5. Histopathology</p>	<p>Training in the recognition of important microscopic lesions present in tissues from animals infected with agents exotic to the United States.</p>	
<p>6. Others</p>	<p>Training in the diagnosis of other foreign animal diseases can be arranged.</p>	