Veterinary Accreditation Core Orientation 2013

National Veterinary Accreditation Program
Completion of this Orientation and holding a veterinary license do not make you an accredited veterinarian.
Elements of Core Orientation

- Federal animal health laws, regulations, and rules
- Ethical and professional responsibilities of an accredited veterinarian
- Interstate movement requirements for animals
- Import and export requirements for animals
- USDA animal disease eradication and control programs
- Animal health emergency management
- Foreign animal disease awareness
- Laboratory support in confirming disease diagnoses
Federal animal health laws which convey authority to accredited veterinarians

- Animal Health Protection Act
- Commercial Transportation of Equine for Slaughter Act
- Swine Health Protection Act
- 28 Hour Law (49 US Code 80502)
Animal Health Protection Act

BRUCELLOSIS
Commercial Transportation of Equine for Slaughter Act
Swine Health Protection Act

in IL
28 Hour Law

28 = 5

- Rest
- Food
- Water
Federal animal health regulations affecting accredited veterinarians

- Subchapter B-Cooperative control and eradication of livestock or poultry diseases
- Subchapter C-Interstate transportation of animals (including poultry) and animal products
- Subchapter D-Exportation and importation of animals (including poultry) and animal products
What is Accreditation?

Accreditation is government approval of private veterinarians to perform official regulatory functions.

Authorization is granting accredited veterinarians the right to work in additional States.
Most countries use government veterinarians

- to examine animals
- to issue health certificates

**APHIS relies on you to:**

- Act as agents of Federal government
- Test for program diseases
- Issue health certificates
- Perform examinations
- ID animals
- Conduct surveillance activities
- Act as the nation’s first line of defense against exotic and emerging diseases of animals
- Assist with animal emergency response efforts
Accredited Veterinarians . . .

Assess and document animal health through

- Physical examinations
- Diagnostic testing (e.g. TB tests)
- Diagnostic sample submission
- Documentation
Accredited Veterinarians . . .

- Assist with interstate and international movement of animals and animal products
Accredited Veterinarians . . .

Are first line of surveillance for program and foreign animal diseases
Accredited Veterinarians . . .

Complete various official documents, which are reviewed by Federal and/or State officials, and may require additional endorsements or stamps.
Veterinary Accreditation
Investigation & Enforcement
Purpose of Veterinary Accreditation

- In 1921, the U.S. Department of Agriculture (USDA) established the veterinary accreditation program so private practitioners could assist Federal veterinarians in controlling animal diseases.
- Accredited veterinarians are crucial to U.S. regulatory programs for livestock and poultry diseases. The United States depends extensively on accredited veterinarians for official functions, such as inspecting, testing, and certifying animals.
- More than 80 percent of all U.S. veterinarians are accredited.
National Veterinary Accreditation Program (NVAP)

- This voluntary program certifies private veterinary practitioners to work cooperatively with Federal veterinarians and State animal health officials.
- Producers that export animals rely on the expertise of accredited veterinarians to help ensure that exported animals will not introduce diseases into another State or country.
- **Voluntary Participation** - Participation in the NVAP is voluntary. It is not mandated by the Federal Government. Accredited veterinarians participating in NVAP must carry out their duties according to the Standards for Accreditated Veterinarian Duties in Title 9, Code of Federal Regulations, Part 161.
Vets applying for accreditation must now choose an accreditation category that is based upon the species of animals with which they wish to perform accredited duties.

- **Category I** – Any animals other than Category II animals. (e.g. dogs and cats)
- **Category II** – Food and fiber species, horses, birds, farm raised aquatic animals, all other livestock species, and zoo animals that can transmit exotic animal diseases to livestock
Accreditation Categories

- If accredited under Category I - only authorized to perform accredited duties on Category I animals.
  - Performing accredited work with Category II animals could result in accreditation suspension or revocation.
- If accredited under Category II – authorized to perform accredited duties on Category I and II animals.
Accreditation Requirements

1. Must be graduate with a DVM or equivalent.

2. Must be **licensed** to practice veterinary medicine within a particular State to perform accredited work in that State.
   
a) License reciprocity between states may exist, but must be documented.

3. Must complete APHIS accreditation training.

4. Must complete an orientation program in the state where the veterinarian wishes to perform accredited duties.
To become accredited, you must complete a core orientation that covers:

- Federal animal health laws, regulations, and rules;
- Interstate movement requirements for animals;
- Import and export requirements for animals;
- USDA control and eradication programs for animal diseases;
- Laboratory support in confirming animal disease diagnoses;
- Ethical and professional responsibilities;
- Animal Health Emergency Management; and
- Animal Health issues, procedures and resources relevant to the State in which the veterinarian wishes to perform accredited duties.
Applying for Accreditation

- For national accreditation, a licensed veterinarian must apply using VS Form 1-36A, Application for Veterinary Accreditation
- The applicant certifies that they are able to perform tasks listed under 9 CFR 161.1(g)
Important!

- An accredited veterinarian may not perform accredited duties in a particular State until after receiving written authorization from APHIS.
Standards for Veterinary Accreditation require the Accredited Veterinarian to:

- Inspect livestock in advance of issuing health certificates.
  - Health maintenance programs allowed.
- Issue complete and accurate certificates, test reports, etc.
- Distribute certificates and test reports in a timely fashion.
- Identify work performed by another veterinarian on certificates issued.
- Perform accredited work in accordance with State and Federal regulations and instructions.
Standards for Veterinary Accreditation
Cont’d

- Ensure that livestock are properly identified when tested and when issuing interstate and international health certificates.
- Immediately report to the AVIC and State Vet all suspected cases of reportable diseases.
- Perform accredited work in a manner that prevents the spread of disease.
- Keep self current on Federal and State regulations and instructions.
- Avoid dispensing drugs and biologicals in contravention of Federal and State statutes.
- Maintain security of, and ensure proper use of, all documents and ID devices.
Non-Compliance is Reported

1. Non-compliance reported.
2. Alleged violation is investigated.
3. Evidence is gathered.
4. Investigative report prepared by IES and sent to Area Veterinarian in Charge.
Violation Activity Can Be Reported By:

- AVIC - Federal VS Office
- State Lab
- Clients
- Competitors
- Former employers
- Other states
- Other sources
Investigation Involves:

- Determining the Main Question: Was 9 CFR, Part 161 Violated?
  - Must relate to activity falling within 9 CFR Subparts B, C & D!
- Contact with All Persons Involved (clients, witnesses, etc.)
- Contact with the Alleged Violator (Accredited Veterinarian)
- Gathering of All Evidence (Paperwork, Statements, Test Reports, Certificates, Etc.)
  - Immediately collect and preserve all physical evidence
- May involve other 9 CFR violations depending upon the circumstances
  - Particularly Part 78
Sample Violations Include:

- Not accurately completing controlled forms
- Leaving blanks in controlled forms
  - E.g. Incomplete description of animal, no ID
- Issuing blank, pre-signed health certificates
- Improper testing procedures (tuberculosis, brucellosis, pseudorabies, etc.)
- Failure to report results (testing, vaccinations, etc.)
- Failure to maintain control of samples
- Losing control of accredited forms and ID
Resolving Accreditation Violations:

- If there is no violation, the investigation is terminated
- If a violation is substantiated, then
  - A Letter of Information (LOW) may be issued by AVIC, OR
  - An Informal Conference is scheduled by the AVIC
- Summary Suspension
  - Usually involves egregious activity by accredited vet.
  - Necessary to prevent disease spread
  - Administrator may immediately suspend accreditation orally or in writing, pending final determination at proceeding
Informal Conference

- Participants: Accredited Veterinarian, AVIC, State Veterinarian, & Investigator
  - Accredited Veterinarian is not entitled to have an attorney present
- Evidence is presented by the Investigator
- Accredited Veterinarian is permitted to speak on his own behalf
- AVIC decides sanctions (based upon guidelines provided in VS Memo 576.1)
  - A LOW can be issued OR
  - a Voluntary suspension of accreditation (1 day to 2 years) is accepted OR
  - Voluntary permanent revocation of accreditation
Formal Adjudication

- If terms offered by AVIC are not accepted, the case will be forwarded for prosecution by the USDA, Office of General Counsel.
- Successful prosecution usually results in revocation of accreditation.
- No monetary penalties are assessed for Veterinary Accreditation violations.
Evidence of Fraud

- Submitting fraudulent certificates or test reports, or submitting fraudulent test specimens for program diseases or export certification are criminal offenses.
- Very likely that the USDA, Office of Inspector General, Investigations will get involved.
Unauthorized Performance of Accredited Duties

- **Anyone** who performs accredited veterinarian duties that he or she is not authorized to perform will be subject to criminal and civil penalties as are provided by the Animal Health Protection Act.
  - Includes Accredited vets under suspension.
  - Includes veterinarians who have never been accredited.
  - Includes non-veterinarians.
Additional Notes:

- All suspensions and revocations can be and usually are forwarded to the State Veterinarian & the State Licensing Board!!
- The State’s Department of Agriculture may also investigate for possible state violations!!
Scenario 1:

You are in a multi veterinarian practice that handles small animals and livestock. All vets in the practice share in the large animal – small animal clients. Each vet is provided a supply of interstate health certificates, vaccination certificates and animal ID (official eartags) that are issued specifically to them. Since you are all accredited veterinarians these items are stored in a common locked closet at the clinic where only you and your partners can draw from them as needed.

Two months later you receive a call from the AVIC advising you that some of the official ear tags issued to you were purchased by a cattle dealer over “EBAY”! You, however, are very diligent in keeping track of the items that you remove from the closet so you figure it must have been the result of carelessness by one of your partners.

Should you be concerned?
Yes! It is Accountable Property

Health Certificates, Tags, Bands, etc.

PREVENT . . .
Misuse of official biologics, certificates, tags, etc.
Scenario 2

You recently moved to Maryland from Pennsylvania where you have been a licensed and accredited veterinarian for five years, doing primarily large animal work. You’re now working for a poultry company on the Eastern Shore and no longer in private practice. By coincidence, one of your former clients has also moved to your area and happened to see your name in the phone book. He calls you up and asks if you could come out to his farm to TB test some 4H club calves for an upcoming fair.

What must you do before you can perform the TB test, complete the TB Test Record, and submit it to the state Dept. of Agriculture laboratory?
Obtain APHIS authorization

- You must first be licensed to practice in MD.
- If your accreditation has expired you must reapply.
- If you accreditation is still active, you must get authorization to perform accredited duties from the AVIC. Usually requires attending an Orientation.
Scenario 3:

You have operated a small animal clinic in mid-town Philadelphia, PA for 15 years. One day, a man comes in with his pet pot-bellied pig. He explains that his neighbor advised him to have the pig tested for pseudorabies to prevent possible spread of infection to his pet poodle. You received your veterinary accreditation shortly after graduating from the University of Pennsylvania 16 years ago, but you vaguely remember that there is a blood test for pseudorabies.

How will you handle this?
Tread Cautiously

- You must determine if you are authorized to handle Category II animals. Most likely you are not if you are not sure.
- Consider referring the client to an accredited colleague who you know handles farm animals. (A pig is a pig!)
- Since your last recollection of accreditation was 16 years ago it could be that your accreditation expired when you did not select a Category.
Questions???????????
ANIMAL MOVEMENT
Why Regulate Animal Movement

- Stop disease spread
- Provide traces of movement
- Protect export markets
- Open new emerging markets
What is Your Role?

Accredited Veterinarians assist with interstate and international movement

BY:

- Advising owners
- Performing exams & administering vaccines
- Collecting samples for lab work
- Completing certificates
- Check with the State of destination to verify entry requirements
Types of Animal Movement

- Interstate
  - Between U.S. States and territories

- International
  - Outside of U.S. States and territories
Interstate Movement

- Requirements vary by destination State
- Federal requirements:
  - Healthy and fit to travel
  - Properly identified
Interstate Movement

- Where to find requirements:
  - State vet in destination State
  - Your local VS Area Office
International Movement

- Health requirements vary by country
  - Disease protection
  - Political & economic factors
  - Trade agreements

- Check with VS Area Office
International Movement

- Where to find requirements
  - Vet officials in country of destination
  - Your local VS Area Office

_Exporter is responsible for making sure all requirements are being met._
Pre-Export Isolation

- As required by destination country
- Different types:
  - In-home
  - Isolation facility
  - USDA-approved isolation facility
  - USDA isolation facility
Pre-Export Isolation

- Accredited vet responsibilities
  - Oversee facility and work done
  - Conduct testing and other work as needed
International Certification Process

Accredited Veterinarian
- Examines & tests animals
- Completes certificate

Approved Laboratories
- Test samples
- Report results

Federal Veterinarian
- Performs final inspection
- Endorses certificate
Export Health Certificate

- SMALL ANIMALS
  - Pets
    - Dogs and cats
    - Birds – CITES, U.S. Fish and Wildlife Service
  - Research animals
  - Working animals
  - APHIS Form 7001, country-specific cert., small animal CVI
Export Health Certificate

- LARGE ANIMALS
  - Poultry
  - Livestock species
  - APHIS Form 17-140, APHIS Form 17-145, APHIS Form 17-6, country-specific cert., large animal CVI
Completing the Health Certificate

- Basic Information:
  - Consignor
  - Consignee
  - Official ID/description
  - Tests, vaccinations, treatments
Completing the Health Certificate

- Basic information
  - Certification statements
  - Date
  - Signature – original, correct color

*One species per certificate*
Completing the Health Certificate

A health certificate is a legal document!
Validity of Certificate

- Time Limits
  - Time a cert. is good for varies
  - Timing of work on animals
  - Airline requirements
  - Plan ahead
Validity of Certificate

- Work recorded on cert.
  - Done by signing vet
  - If done by another vet need to document:
    - Name of vet
    - Date & location
    - Work performed
Submitting Int’l Certs to APHIS-VS

- Correct form
- Lab results
- Vx records (e.g. rabies)
- Certification statements
Submitting Int’l Certs to APHIS-VS

- Accurately recorded test results, Vx, etc.
- Accreditation status
- Original signature
- User fee
Common Mistakes on Certificates

- User fee not included
- Signature missing
- Outdated information
- Improper ID of animal
- Improper test performed
- No import permit
DO NOT . . .

- DO NOT issue pre-signed certificates
- DO NOT issue certificates without examinations
- DO NOT split blood samples
- DO NOT ship animals with pending test results

These are illegal actions. Is risking your license, accreditation, and reputation really worth it?
Sample Health Certificates
### CERTIFICATE OF VETERINARY INSPECTION

**Illinois Agriculture**

**Certificate of Veterinary Inspection**

**Owner or Consignor:**

**Consignee:**

**Address:**

**Origin Address:**

**Destination Address:**

**City:**

**State:**

**Zip Code:**

**County of Origin:**

**Premises ID:**

**No. Animals in Shipment:**

**Species:**

- [ ] Cattle
- [ ] Poultry
- [ ] Goat
- [ ] Horse
- [ ] Bison
- [ ] Sheep
- [ ] Cervid
- [ ] Swine
- [ ] Other

**Purpose of Movement:**

- [ ] Breeding
- [ ] Feeding
- [ ] Sales
- [ ] Show
- [x] Slaughter
- [ ] Other

**Herd or Flock Status:**

- [ ] TB Accepted
- [ ] Bruc., Certified
- [ ] Bruc., Vaccinated
- [ ] PRV Qualified
- [ ] Johne's
- [ ] Scrapie
- [ ] CWD
- [ ] Other

**Last Test Date:**

**Vaccination and/or Treatment:**

**Product:**

**Ear Tag, Tattoo or Other Permanent Identification:**

**Registry Name and Number and/or Description:**

**Age** | **Sex** | **Breed** | **TB Test** | **BRUCELLOSIS** | **PRV Test** | **Other Tests**
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10 | | | | | | |

**Certification of Issuing Veterinarian:**

I certify, as an accredited veterinarian, that the above-described animals have been inspected by me and that they are not showing signs of infectious, contagious, and/or communicable disease, except where noted. The vaccinations and results of tests are as indicated on the certificates. To the best of my knowledge, the animals listed on this certificate meet the standards of destination and federal interstate requirements. Any animals listed are of age.

**Date Issued:**

**Signature of Accredited Veterinarian:**

**Address:**

**Date Impacted:**

**Printed Name:**

**Telephone Number:**

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**Large Animal CVI**
APHIS Form 17-140 cont.
**U.S. ORIGIN HEALTH CERTIFICATE FOR THE EXPORT OF HORSES FROM THE UNITED STATES TO CANADA**

<table>
<thead>
<tr>
<th>PERMANENT EXPORT</th>
<th>TEMPORARY EXPORT (NOTE BELOW)</th>
</tr>
</thead>
</table>

**CERTIFICATION STATEMENTS**

1. The animal identified below was inspected within 30 days prior to export and found to be healthy and free from evidence of communicable diseases and exposure thereto.

2. The animal has resided in the United States or Canada since birth.

3. The animal has met all of the import requirements of the United States and has resided in the United States for the past 60 days.

4. The animal was authorized for importation by the Animal Health Division, Agriculture Canada (subject to the exception that the U.S. has authorized horses from countries other than Canada that have resided in the United States less than 60 days).

5. The animal was tested negative for equine infectious anemia using the agar gel immunodiffusion (Coggins) test at:

   - **Name of Laboratory**
   - **Sample Drawn**
   - **State**

   **Laboratory Accession No.**

**HEALTH CERTIFICATE NUMBER**

**Issuing Veterinarian**

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
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</thead>
</table>

**Endorsing Federal Veterinarian**

<table>
<thead>
<tr>
<th>Name (Type of Print)</th>
<th>Date</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
</table>

**White Markings and Whorls Must be Shown!**

Left Side:

- **Fore**
- **Muzzle**

Right Side:

- **Hind**

Please ensure that the diagram and written description agree.

<table>
<thead>
<tr>
<th>Name</th>
<th>Breed</th>
<th>Age</th>
<th>Color</th>
<th>Sex</th>
</tr>
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</table>

**Written Description:**

<table>
<thead>
<tr>
<th>HEAD</th>
<th>LIMBS</th>
</tr>
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<tbody>
<tr>
<td>LF</td>
<td>RF</td>
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</table>

<table>
<thead>
<tr>
<th>BODY</th>
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</thead>
<tbody>
<tr>
<td>LF</td>
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<table>
<thead>
<tr>
<th>ACQUIRED MARKS ( scars, tattoos, etc.)</th>
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<tbody>
<tr>
<td>LH</td>
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</tbody>
</table>

**Instructions:** Mark the diagram with the exact position of any distinguishing marks, scars or brands. Brains to be drawn in position. Scars to be marked and indicated with an arrow (→). Stars or blazes on the face and any other markings to be drawn in on the diagrams showing position and shape as accurately as possible. Whorls should be marked with a cross (X). If no markings - this fact should be stated.

**NOTE:** The original copy of the health certificate must remain with the horse if the horse is being temporarily exported. Any clearance by Customs, such as a stamp, must be affixed on the reverse side of the original health certificate.

**NOTE:** The date of issuance must be the date of veterinary inspection. Exporter must furnish four (4) copies for USDA endorsement. The original and two (2) copies accompany the shipment, the fourth copy is for the AVIC's office.
APHIS Form 7001
**APHIS Form 17-6**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0575-0096. The time required to complete this form is estimated to average 6 minutes. Your comments are invited on: (1) the need for the information in order to carry out the agency functions; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the burden of the collection of information on persons subject to the collection. If you have comments, send them to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), U.S. Department of Agriculture, Washington, DC 20250. This certificate is authorized by law (7 U.S.C. 110). While you are not required to respond, no health certificate can be validated unless the data required are provided.

### U.S. DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE VETERINARY SERVICES
CERTIFICATE FOR POULTRY OR HATCHING EGGS FOR EXPORT

<table>
<thead>
<tr>
<th>No.</th>
<th>Date of Shipmen</th>
<th>Name &amp; Address of Exporter</th>
<th>Name &amp; Address of Importer</th>
</tr>
</thead>
<tbody>
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<td></td>
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<table>
<thead>
<tr>
<th>FIPS STATE CODE (for USDA use only)</th>
<th>FIPS STATE CODE (for USDA use only)</th>
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<td></td>
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<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Product Code (if check)</td>
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<tr>
<td>2.</td>
<td>Type (if check)</td>
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<tr>
<td>3.</td>
<td>Health Clearance (if check)</td>
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</tr>
<tr>
<td>4.</td>
<td>Quantity (if check)</td>
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</tr>
<tr>
<td>5.</td>
<td>Hatchery Name or Poultry Farm</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

### 12. CHECK APPROPRIATE CERTIFICATION BELOW (A OR B)

- [ ] Certificate for Hatching Eggs and Newly Hatched Poultry, which have not been fed or watered. This is to certify that (1) the flock or hatches and the hatching or hatching equipment have been inspected by a qualified person at least six (6) hours before the expected time of departure, and (2) the hatching of the eggs has been completed and that the hatching eggs must be certified and that the shipmen must be made in new, clean containers.

- [ ] Certificate for Poultry other than Newly Hatched Poultry Specified in Certificate A. This is to certify that (1) on the date all poultry shown in item 6 above, including all other poultry maintained in the flock, were inspected by a qualified person at least six (6) hours before the expected time of departure, and (2) the hatching of the eggs has been completed and that the hatching eggs must be certified and that the shipmen must be made in new, clean containers.

### 13. REMARKS ON ADDITIONAL INFORMATION (if needed)

### 14. TYPE OF NAME OF ISSUING VETERINARIAN

### 15. SIGNATURE OF ISSUING VETERINARIAN

### 16. STATUS

- [ ] State
- [ ] Federal
- [ ] Accredited

### 17. DATE ISSUED

- [ ] Month
- [ ] Day
- [ ] Year

### 18. SIGNATURE OF ENDORSEING FEDERAL VETERINARIAN (if required)

### 19. DATE ENDORSED

- [ ] Month
- [ ] Day
- [ ] Year

**ORIGINAL TO ACCOMPANY STATEMENT**
Animal Import Information

Import Regulated by Several US Agencies

- Public Health: Primates, dogs, cats, turtles
- Fish and Wildlife: Rare/endangered species
- USDA: Livestock, horses, poultry, related species AND any animal

Basic Import Requirements:

- Import Docs, Tests, Treatments, Certificate
- Entry via Designated Port & Quarantine
USDA ANIMAL DISEASE PROGRAMS
VS Programs

Types of VS Programs you might work on:
- Eradication Programs
- Monitoring & Surveillance Programs
- Control & Certification Programs

Your responsibilities in VS Program work
- Know basic program requirements
- Recognize official animal ID
- Know state/country requirements
Program Disease Information

  - Animal Health
    - Animal Diseases
      - Scroll down to Status of Current Eradication Programs

- Or just Google “current VS eradication programs”
Current VS Eradication Programs

- Tuberculosis (Bovines & Cervids)
- Brucellosis (Bovines & Swine)
- Pseudorabies
- Scrapie
Your Role in TB in Cattle

- **Cattle**: Caudal Fold Test (CFT)
- Inspect injection site in 72 hrs
  - What is a response?
  - Injecting veterinarian must read
- Immediately report any response
  - CCT within 10 days of CFT
  - Must wait 60 days to retest
  - Expect 1-5% false positives
- Training/Practice with CFT
Your Role w/TB in Cervidae/Other

- Captive Cervidae include:
  - Whitetail, Mule, Fallow, Elk, Reindeer
- Single Cervical Test (SCT)
  - Only Designated AV can administer
  - Wait 90 days to retest
- Becoming Designated AV
- Goats, swine, other species
Your Role in Cattle Brucellosis

- Vaccination, ear tagging, tattooing
- Testing
- Reporting
“V Shield” Vaccination Tattoo

Tattoo (right ear)

- 3: 1st digit—Quarter of the year
- 4: 2d digit—Official shield
- 2: 3d digit—Last digit of the year

R 2

USDA

APHIS USDA

Veterinary Services
Brucellosis Vaccination Eartags

Eartag in Right Ear

Orange vaccination tag

73 State code

VUP1569 Individual ID
US Shield
Your Role in Swine Brucellosis

- All free except Texas
- Feral swine impact total eradication
  - >4 million feral swine
  - Known herds in 39 states
- Your responsibility
  - Certificates
  - Permits
  - Sample collection
Your Role in Pseudorabies

- Status in U.S.: All states in Free status
- Your responsibility
  - Certificates
  - Permits
- Feral swine effect
  - Serological evidence
  - All considered positive
  - Depopulation approach
Your Role in Scrapie

Educate clients:

- To recognize clinical suspects
- To use official ID
  1-866-USDA-TAG
- To practice prevention strategies by:
  - Using genetic resistance in sheep
  - Maintaining closed ewe flocks
  - Enrolling in SFCP

Report all scrapie suspects!
Signs

- Emaciation
- Lack of coordination
- Weakness
- Difficulty feeding & resting
- Intense pruritus \(\rightarrow\) fleece loss
Official Identification

Premier’s logo (who imprinted the tags)
Your official flock/premise number
Printed on every male scrapie tag
USDA’s official seal
Male side
Unlawful To Remove
Your individual animal number
Female side
UNLAWFUL TO REMOVE
XX1234567
123456
XX1234567
123456

LEFT EAR
BIRTH YEAR & KID NO.

RIGHT EAR
HERD ID
Your Role in Scrapie

- Collect & submit samples to USDA-approved lab
  - Live animals: Federal/State vet, usually
  - Dead animals: Accredited vet
    - brainstem, lymph nodes, tonsil
- Submission forms and instructions
- Conduct genetic testing
Additional surveillance activities (examples):

- Infectious Salmon Anemia
- Screwworm
- Cattle Tick Fever
- Classical Swine Fever
- CWD

Goals of surveillance:

- Enhance current eradication efforts (for TB in bovines & cervids, Brucellosis in bovines & swine, Pseudorabies and Scrapie)
- Detect emerging diseases and FADs
- Improve marketability
- Reduce consumer & animal risk
- Monitor animal health trends
Certification Programs

Diseases with Certification Programs
- Scrapie and Johne’s: existing programs
- CEM, CWD, Swine Health/Trichinae, & Aquaculture: pending programs

What to do if you are interested?
- Get certification training
- Check with your VS Area Office
Animal Health Emergency Management
Overview

- What are animal disease emergencies
- Who may be involved
- What to expect
- Importance of preparing at the local level
- How you can prepare
# Preparing and Responding to an Animal Disease Emergency

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Animal Disease Emergencies

- What are they?
  - Affect large numbers of livestock
  - Highly contagious/easily spread
  - Animal health impact
  - Economic consequences
  - Human health impact

- How do they occur?
  - Intentional or accidental introduction of foreign disease agents
  - Emerging or re-emerging diseases
PREPAREDNESS

AWARENESS AND METHODOLOGY
Impact of Animal Disease

- Animal Health
  - Death, illness, loss of production

- Economics
  - Loss or disruption of trade
  - Loss of consumer confidence
  - Movement restrictions

- Human Health
  - Zoonoses
  - Mental health
Vulnerabilities

- High density husbandry
- Mixing at auction markets or transport by vehicles
  - Over 5 million cattle each year
- Poor traceability of animals
- No immunity to foreign animal diseases
- Centralized feed supply and distribution
Vulnerabilities

- Diseases are widespread in other countries
- Expanded international trade and travel
- Border penetration: People, wild birds, mammals
- Inadequate on-farm biosecurity
- Inadequate foreign animal disease awareness
How disease can enter

- Food products
  - smuggled
  - unintentional
- Decorative objects
- Live animals
- Vectors/insects
- Terrorists
- Feral Swine
Smuggling of animals and animal products is rampant
Foreign Animal Disease: Control

- Keep them out
  - Regulations in the import of live animals and animal products
  - APHIS inspection of travelers at ports of entry
  - Disease surveillance on U.S. borders in Caribbean, Mexico, Central America

- Get rid of them if they get in
  - Emergency response programs in the U.S.
  - Policy of foreign animal disease eradication
Development of National Plans: Homeland Security Presidential Directives (HSPDs)

- HSPD-5: Management of Domestic Incidents
- HSPD-8: National Preparedness

Mandates

National Incident Management System (NIMS)
NIMS

What? . . . NIMS provides a consistent nationwide template . . .

Who? . . . to enable Federal, State, tribal, and local governments, the private sector, and nongovernmental organizations to work together . . .

How? . . . to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents regardless of cause, size, location, or complexity . . .

Why? . . . in order to reduce the loss of life and property, and harm to the environment.
NIMS Components & ICS

- Preparedness
- Communications and Information Management
- Resource Management
- Command and Management
- Ongoing Management and Maintenance

Incident Command System
- Multiagency Coordination Systems
- Public Information
Preparedness Planning

• Plans describe how resources will be used.
• Plans describe mechanisms for:
  ✓ Setting priorities.
  ✓ Integrating entities/functions.
  ✓ Establishing relationships.
  ✓ Ensuring that systems support all incident management activities.
The 15 National Planning Scenarios

1. Nuclear Detonation – 10-Kiloton Improvised Nuclear Device
2. Biological Attack – Aerosol Anthrax
3. Biological Disease Outbreak – Pandemic Influenza
4. Biological Attack – Plague
5. Chemical Attack – Blister Agent
6. Chemical Attack – Toxic Industrial Chemicals
7. Chemical Attack – Nerve
8. Chemical Attack – Chlorine Tank Explosion
9. Natural Disaster – Major Earthquake
10. Natural Disaster – Major Hurricane
11. Radiological Attack – Radiological Dispersal Devices
12. Explosives Attack – Bombing Using Improvised Explosive
13. Biological Attack – Food Contamination
14. Biological Attack – Foreign Animal Disease (Foot and Mouth Disease)
15. Cyber Attack
RESPONSE

TOOLS AND STRATEGIES
Response

- Preparedness plan in action
  - Expedient, safe, effective
- Level of response depends on:
  - Particular disease
  - Ability of disease to spread
  - Degree of spread
  - Resources available
### Detection
- Unusual sign noted by:
  - Producer, animal handler or processor, local veterinarian
  - Diagnostic laboratory
  - Processing plant

### Initial Response
- Local DVM contacts State Veterinarian or AVIC
- FADD sent to investigate (within 24 hours)
- Samples submitted to Federal Lab

### Risk and Response Assessment
- Response action levels determined based on disease suspected or diagnosed
- Activation of State Response Plan and/or National Response Framework

### Response Actions
- Quarantine; Stop movements
- Surveillance
- Depopulation and disposal
- Vaccination (?)
- Cleaning and disinfection

### Recovery
- Indemnity
- Business continuity
FADD Investigation

- **Foreign Animal Disease Diagnostician**
  - Visits premise within 24 hours
  - Inspects animals
  - Consults with State Veterinarian and AVIC on case priority and necessary actions
    - Sample collection, handling, submission
    - Control measures: movement restrictions, quarantine
USDA National FAD Responsibilities

- Minimize the impact of a real or perceived FAD event on the US
- Respond rapidly, appropriately, and efficiently
FAD Investigations Conducted Nationally

- ≈ 400 investigations per year nationwide
- 1-3% are Priority 1 submissions
  - Priority 1- High Suspicion
  - Priority 2- Intermediate Suspicion
  - Priority 3- Low Suspicion
  - Priority A- Need for rapid diagnostics
Animal Health Laboratory Submissions

- Routine (daily) testing
  - State or University Diagnostic Laboratory
  - Other Private Laboratory Facilities
  - National Animal Health Laboratory Network

- When a foreign animal disease is suspected
  - Foreign Animal Disease Diagnostic Laboratory, Plum Island, NY (cloven hoofed)
  - National Veterinary Services Laboratory – Ames (poultry, equine, fish)
Confirmation of FAD comes in

- Quarantines may be issued
- Stop movement orders could be issued
- Animals would need appraisals prior to euthanization
- Vaccines may be used to stop the spread
- Could be many animal mortalites and disposal issues
- If a zoonotic, public health departments would be involved
Reportable Diseases

What should you report?
- Diseases on State or Federal lists

Whom should you notify?
- VS Area Office
- State Animal Health Official
- Described in 9CFR 161.4(f)
Federal Regulation

9CFR, 161 defines disease-reporting responsibility.

- "An accredited veterinarian shall immediately report to the Veterinarian-in-Charge and the State Animal Health Official all diagnosed or suspected cases of a communicable animal disease for which a APHIS has a control or eradication program in 9 CFR chapter I, and all diagnosed or suspected cases of any animal disease not known to exist in the United States as provided by §71.3(b) of this chapter."
Illinois Diseased Animals Act

(510 ILCS 50/22) (From Ch. 8 par.189)

Sec.22. Any veterinarian having information of the existence of any contamination or reportable disease among animals in the State, who fails to promptly report such knowledge to the Department, shall be guilty of a business offense and shall be fined in any sum not exceeding $1,000 for each offense
Many Differences Between Illinois and USDA Reportable Diseases- Example

IL Reportable- Canine

- Bluetongue
- Brucellosis
- Q Fever
- Rabies
- West Nile

USDA Reportable- Canine

- Rabies
Current Outbreak Strategies

- Early diagnosis and quarantine
  - Rapid diagnostics in development
  - Infrastructure issues with quarantine

- Euthanize/Slaughter/Contingency Plans
  - Producers must be willing to participate in contingency planning
  - Environmental and public relations issues
  - Limited disposal options

- Ring vaccinate for some diseases
  - Vaccine availability?
  - Lag time to develop immunity

- Spray insecticides by air for arboviruses
  - 50 year old technology
  - Environmental and public relations issues
Additional resources, National Veterinary Stockpile

- Poultry depopulation foaming units
- Push packs of PPE and decon supplies
- Bulk PPE individual kits
- Antivirals
- AI vaccine
- AI field test kits
- Portable vaccine shipment / storage containers
- Depopulation, disposal, & decontamination (3D) commercial services
What **YOU** can do as a veterinarian in the community
- Join in on county emergency planning
- Keep informed of what diseases are a threat
- Plan with your clients on emergency situations
- Join IVERT (Illinois Veterinary Emergency Response Team)
- Join NAHERC (National Animal Health Emergency Response Corps)
NAHERC Purpose

To provide a ready, trained, and available cadre of veterinary medical professionals to assist in the federal response to domestic and international animal disease outbreaks, threats, or natural disasters.
NAHERC

- Reserve Temporary Federal Employment for
  - Veterinarians
  - Vet Techs, AHTs
  - Students
- Voluntary mobilization (right to refuse)
- Paid Federal salary, travel, lodging, overtime, and workman’s comp
NAHERC Deployments

145 deployed to the UK in 2001
71 deployed to the Low Pathogen Avian Influenza Task Force in Virginia 2002.
Why Should You Join NAHERC?

- Protect U.S. agriculture (and public health)
- Help animals (and people) in need
- Expand career options
- Network within the veterinary community
- Learn emergency response procedures
- Travel opportunities
- Paid Federal Salary
FOREIGN ANIMAL DISEASES
When should YOU be suspicious of an FAD

- High morbidity, High mortality
- Does not fit classical picture
- Vesicular lesions
- Severe abortion storms of unknown etiology
- Hemorrhagic septicemia
- Severe respiratory conditions
- Pox or lumpy skin conditions
- Poor or no response to treatment when response is expected
- Suspicious necropsy findings
When should You be suspicious of an FAD

- History of foreign travel, visitors, mail/gifts, importation of animals, embryos, semen.
- CNS diseases
- Mucosal Diseases
- Larvae in Wounds
- Unusual (Ornate) Ticks, Exotic ticks, mites, etc.
- Unusual or Unexplained Illness or Symptoms
What to do if you suspect a FAD?

CALL – CALL – CALL!

- Call the USDA/VS office at (217) 547-6030
- Have available:
  - Producer’s name address and phone number
  - Directions to the farm
  - Complete clinical history
  - Number and species of animals affected and number and species of animals susceptible
  - Any treatments given and response noted
  - Your contact information
Case History #1

- A dairyman calls to report
  - A sudden drop in milk production
  - Several cows drooling profusely
  - Many affected cows have fevers

- Your exam reveals...
Case #1 Lesions
Case #1 Lesions
Case #1 Lesions
Case #1 Lesions
Case #1 Lesions

- Further evaluation reveals some lame cows............
Case #1 Differential Diagnoses

- Infectious Bovine Rhinotracheitis (IBR)
- Bovine Viral Diarrhea (BVD)
- Bovine Papular Stomatitis
- Chemical Irritant
- Vesicular Stomatitis
- Foot-and-Mouth Disease (FMD)
- Malignant Catarrhal Fever (MCF)
- Rinderpest
Case #2 History

- Owner presents a 9 year-old Greyhound with an infected prepuce
- The family was recently transferred to CA from Panama
Case #2 Lesions

- On physical exam you see inflammation of the prepuce
- Closer examination of the prepuce reveals . . .
Case #2 Differential Diagnosis

- Blowfly Myiasis
- Screwworm Myiasis
Screwworm in the US

- 1998 Alabama
  - Ecotourist to Brazil
  - Sores on his scalp
- 2000 Florida
  - Cat from Cuba
  - Abscess - 1 larva
  - Gelding imported from South America
  - Preputial discharge – 50 – 100 larvae
- 2007
  - Dog in MS imported from Trinidad
  - Larvae in ocular orbit
  - Dog in MA imported from Singapore
Screwworm Life Cycle

Two days after emerging the fly is sexually mature.

The female fly lays an average of 4 batches of 400 eggs on the edge of a wound.

After 5 days, the larvae drop to the ground and develop into pupae for a period of 8 days.

After approx. 12 hours, the larvae hatch from the eggs and enter the wound for feeding.
Screwworm

- 1930s cost to the livestock industry was $400 million per year

- Losses today are estimated to reach $750 million per year
Case #3

- A client brings a listless game bird to your rural small animal practice.
- He believes his birds caught something from the chicken flock 4 miles from his property.
Case #3 History

- Bird has been sick for 2 days
- 2 other birds died last week
- Owner has 52 birds
- 6 to 8 other birds may be sick
  - Stopped laying
  - Stopped eating
  - Weak and off balance
Case #3

- Being the only vet in the area, you pay a visit to his home to look at his birds. . .
Case #3 Lesions

- You look at a few birds and see...
Case #3 What do you do?

- Wish you stayed awake during the poultry lectures in vet school
- Call your local State or Federal veterinarian
- Submit some birds to your State or USDA Lab for subsidized diagnostic testing
Case #3

- You’re not sure what it is, but it looks bad, so...

- You call your local State or Federal Office, which dispatches an FADD
Case #3 Lesions

- The FADD necropsies some sick birds and finds...
Case #3 Lesions
Case #3 Differential Diagnosis

- Laryngotracheitis (LT)
- Fowl Cholera (Pasteurellosis)
- Fowl Pox
- Avian Influenza (AI)
- Exotic Newcastle Disease (END)
Newcastle Disease 2002-2003

- Confirmed October 1, 2002
- Backyard flocks
- Commercial poultry
- CA, NV, AZ, NM, TX
- Almost 4.5 million birds euthanatized
- Over 2700 premises depopulated
Newcastle Disease 2002-2003

- Impact:
  - Over 50 countries imposed some form of trade restrictions
  - $395 million loss in direct trade and indirect trade
  - $138.9 million spent in the disease eradication effort
Where should I send laboratory samples?

Usually:
- State Diagnostic Laboratories
- Commercial Laboratories

Occasionally:
- National Veterinary Services Laboratories (NVSL)
Regulations

- **Title 9 Code of Federal Regulations (CFR), Parts 121 and 122**: These USDA regulations cover 1) the transfer of select agents/toxins and 2) the permits needed to ship organisms and vectors.

- **Title 42 CFR Part 72**: These Health and Human Services regulations define terms such as biological products, diagnostic specimens, and etiologic agents, and provide requirements for packaging and labeling these materials for transportation in interstate commerce.
Regulations

- **Title 49 CFR Part 173**: These Department of Transportation regulations contain general requirements for shipments and packaging. **49 CFR 173.134** defines infectious substances and related terms. **49 CFR 173.217** has additional requirements for shipments containing solid carbon dioxide (dry ice).

- Airline shipments also should be in compliance with current [International Air Transport Association (IATA) regulations](http://www.iata.org) for dangerous goods.
Categories

- **Biological Substance, Category A**: Materials known to contain certain *etiological agents* (i.e., an infectious substance transported in a form which, when exposure occurs, is capable of causing permanent disability or a life-threatening or fatal disease to humans or animals)

- **Biological Substance, Category B**: Excreta, secreta, blood and its components, tissue, tissue fluids, etc., which the shipper *reasonably believes* may contain an etiologic agent and that is being shipped for purposes of diagnosis (i.e., a diagnostic specimen)
Category B General Guidelines

- Packaged according to regulations in 42 CFR 72.3
- Place samples in a sealed primary container. Maximum volume per primary container is 1 L.
- Wrap the primary container in sufficient dry absorbent material (e.g., cotton) to absorb liquid contents in case of breakage. Do not use sawdust or vermiculite. Absorbent material is not required for solid shipments unless there is a risk of residual liquid.
Guidelines Continued

- Place the primary container in a secondary container. The primary or secondary container must be able to withstand a 95 kPa pressure test.

- Place the secondary container in a certified outer box that will pass a 1.2 meter drop test. The maximum liquid volume allowed per box is 4 L. Solids must not exceed 4 kg (or 8 lb) per box.

- Include an itemized list of contents between the secondary container and the outer box.
Guidelines Continued

- Label the box properly. Mark the proper shipping name (Biological Substance, Category B) in letters at least 6 mm high adjacent to a "UN3373" mark or label. Add the name, address, and telephone number of the shipper and the consignee.
- Add the NVSL Priority Designation to the shipping box and the submission form.
- Samples preserved in formaldehyde are exempt from Category B regulations provided that the concentration of formaldehyde does not exceed 10%.
POOR PACKAGING
PROPER PACKAGING

Packing and Labeling of Category B Substances

Primary Receptacle
Leakproof or Siftproof

Secondary Packaging
Leakproof or Siftproof
(e.g. Sealed Plastic Bag)

Rigid Outer Packaging

Package Mark (Label)

Biological Substance

Absorbent Material

Cross Section of Closed Package

Name and telephone number of a person responsible (This information may instead be provided on a written document such as an air waybill)
SUMMARY
Recap-Elements of Core Orientation

- Federal animal health laws, regulations, and rules
- Ethical and professional responsibilities of an accredited veterinarian
- Interstate movement requirements for animals
- Import and export requirements for animals
- USDA animal disease eradication and control programs
- Animal health emergency management
- Foreign animal disease awareness
- Laboratory support in confirming disease diagnoses
References

- Code of Federal Regulations: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=2feb34554aeb8d5fdec01c2d268760e3&c=ecfr&tpl=/ecfrbrowse/Title09/9cfrv1_02.tpl
References

- NAHERC (National Animal Emergency Response Corps):

- NIMS (National Incident Management System)
  - [http://www.fema.gov/emergency/nims/AboutNIMS.shtml](http://www.fema.gov/emergency/nims/AboutNIMS.shtml)

- National Association of State Departments of Agriculture
Credit

- Dr. David Barber  IL/IN VS
- Mr. Jeb Boyd  IL VS
- Dr. Susie Hexum  IL VS
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