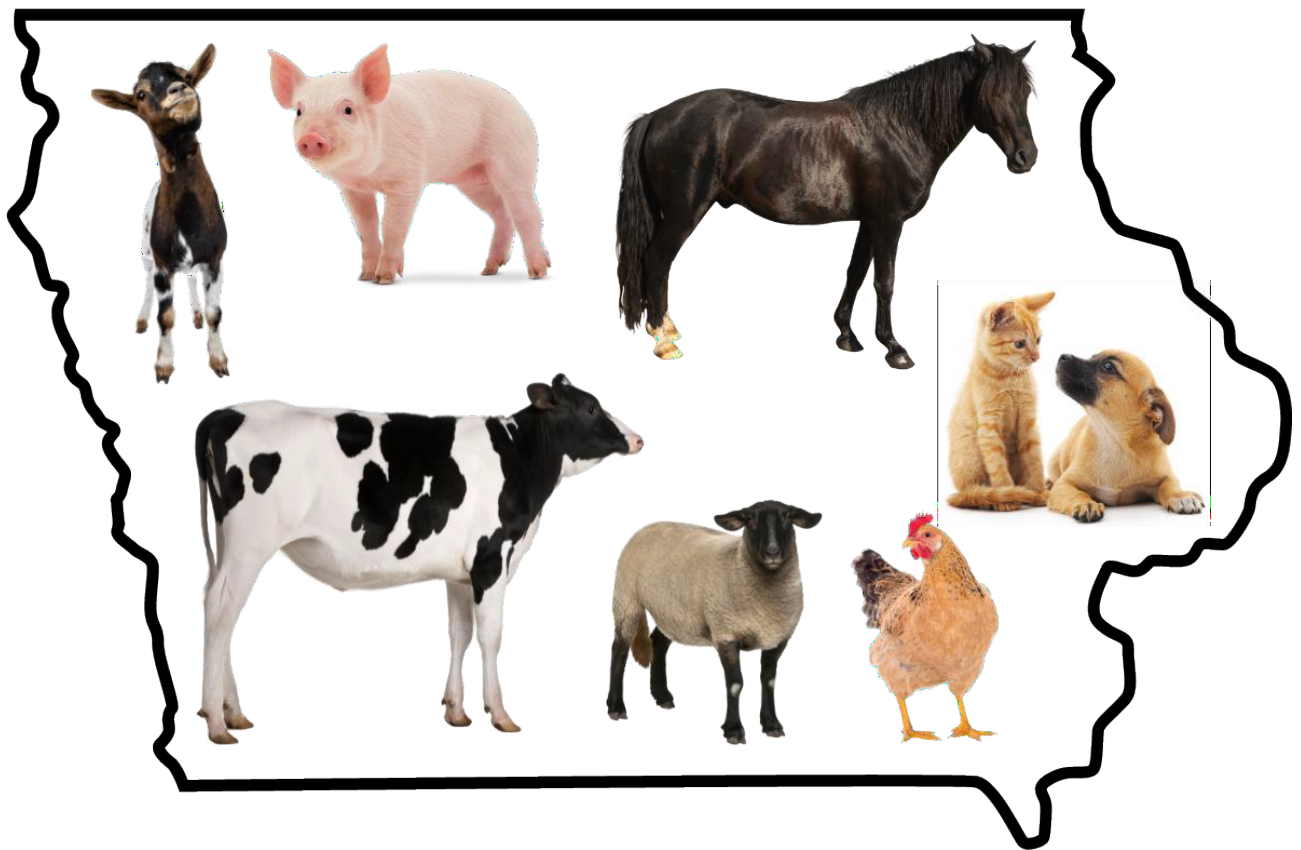


Iowa Veterinary Accreditation Handbook



Notice

Every effort is made to provide you accurate and up to date information, including contact information. However, phone numbers, policies and procedures can change. When important changes do take place, the current information can be acquired on the Iowa Department of Agriculture and Land Stewardship website:

<https://iowaagriculture.gov/>

Important changes can also be acquired on the USDA-APHIS Veterinary Services website:

<https://www.aphis.usda.gov/veterinary-services>

Please check frequently for updates!

****Google Chrome is the best Internet browser for this document****

**** Any font in blue is a hyperlink to an applicable website****

Table of Contents

Useful Information and SAHO Office Information.....	5
Laboratory Contact Information	6
Iowa State University Veterinary Diagnostic Laboratory (ISU VDL)	7
National Veterinary Accreditation Program (NVAP)	8
Potential Accreditation Violations	9
Accreditation Compliance Regulations	10
State & Federal Regulatory Responsibilities	11
Iowa Federal VMO Sections	12
State Veterinarian Districts	13
State/Federal Co-op VMO Sections	14
Iowa Federal AHT Sections	15
State Livestock Inspector Districts.....	16
Iowa Reportable Diseases	17
USDA APHIS Reportable Diseases	20
Animal Disease Traceability (ADT)/Livestock Official ID	21
Animal Disease Traceability.....	22
Official Tags: Record, Do Not Remove or Replace	23
Cattle Breeds and Abbreviation Code Guide.....	24
Swine Breeds and Abbreviation Code Guide.....	25
Goat Breeds and Abbreviation Code Guide.....	25
Sheep Breeds and Abbreviation Code Guide	26
Equine Breeds and their Abbreviation Codes	27
NEUS Tag State and Tribal Codes	28
Premises Identification Number Application.....	29
Tips on Filling out CVIs.....	30
Request for Veterinary Supply Form.....	31
IDALS Form-O Livestock Interstate CVI.....	32
Form DC - Certificate of Veterinary Inspection for Cats/Dogs	33
Form M - Intrastate Certificate of Veterinary Inspection.....	34
Owner-Shipper Statement (OSS).....	35
VSPS – Certificates of Veterinary Inspection (CVIs)	36
Import and Export Requirements for Animals	37
How do I get a health certificate endorsed by USDA APHIS Veterinary Services?	39
USDA Veterinary Health Export Certification System (VEHCS)	40
APHIS Form 7001	41
APHIS VS Form 17-140 Livestock International Health Certificate	43

USDA APHIS Order Form	47
Equine Infections Anemia	48
Tuberculosis Overview	52
Tuberculosis Testing Information.....	53
Tuberculin and its Application.....	54
Completing Tuberculosis Test Records/VS Form 6-22.....	55
Cervid TB Testing and Certification.....	57
Tuberculosis Accreditation Uniform Methods & Rules	58
Brucellosis Program	59
Brucellosis Testing Information	60
VS Form 4-33 Brucellosis Test Record	61
Completing Brucellosis Test Records	62
VS Form 4-24 Brucellosis Vaccination Record	64
Completing Brucellosis Vaccination Records	65
Brucellosis Accreditation Uniform Methods & Rules.....	66
Iowa Scrapie Program	67
Genetics of Scrapie Resistance for Rams.....	68
Official Scrapie Resistance Genotype Testing	69
VS Form 5-29 Scrapie Test Record	70
Completing Scrapie Test Records	71
Pseudorabies Program	73
Johne's Disease	74
Johne's C-Punch Verification Form	81
Johne's Owner-Shipper Statement.....	82
Bovine Trichomoniasis	83
Iowa's Chronic Wasting Disease (CWD) Herd Certification Program (HCP)	86
Rabbit Hemorrhagic Disease.....	90
Canine Brucellosis.....	91
Keeping Brucellosis Out of Your Dog Kennel	94
Helpful Links	95

Useful Information and SAHO Office Information

Kevin L. Petersburg, Area Veterinarian In Charge

USDA/APHIS/VS

210 Walnut St, Room 891

Des Moines, IA 50309

Phone: (515) 284-4140

Fax: (515) 323-2108

Kevin.L.Petersburg@aphis.usda.gov



Jeff Kaisand, State Veterinarian

IDALS, Animal Industry

Wallace Building, 2nd Floor

502 E 9th Street

Des Moines, IA 50319

Phone: (515) 281-0866

Fax: (515) 281-4282

Jeff.Kaisand@iowaagriculture.gov



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

[USDA APHIS Veterinary Services Homepage](#)

[IDALS Animal Industry Bureau Homepage](#)

24-Hour Emergency Hotline: 515-242-0247

Laboratory Contact Information

For specific information on samples required, samples accepted and special handling and mailing instructions, please contact the laboratory directly.

[For more information on National Animal Health Laboratories](#)

[For a list of all NAHLN labs](#)

National Veterinary Services Laboratory (NVSL)

USDA-APHIS-VS-NVSL

1920 Dayton Ave.

Ames, IA 50010

Phone: (515) 337-7212 and (515) 663-7551

Fax: (515) 337-7569

Email: NVSL_Concerns@aphis.usda.gov



[For more information on NVSL](#)

[Frequently asked questions NVSL](#)

[Lab Related Forms](#)

[VS Form 10-4 Submission Form](#)

[NCAH Online Portal](#)

Iowa State University Veterinary Diagnostic Laboratory (ISU VDL)

IOWA STATE UNIVERSITY
College of Veterinary Medicine
Veterinary Diagnostic Laboratory

<https://vetmed.iastate.edu/vdl>

1850 Christensen Dr.
Ames, IA 50011-1134

Phone: (515) 294-1950 (Monday-Friday 8am-5pm)

Phone: (515) 290-1969 (**after hours**)

Fax: (515) 294-3564 (Main office)

Fax: (515) 294-6961 (Submission desk)

Email: isuvdl@iastate.edu



[ISU VDL Client Web Portal](#)

[ISU Forms](#)

[Diagnostic Tests](#)

[Submission Information](#)

[Rabies Testing Information](#)

[ISU VDL EZ-Ship Program](#)



National Veterinary Accreditation Program (NVAP)



The National Veterinary Accreditation Program (NVAP) has many varied facets. Therefore, we deemed it more appropriate to provide links to common parts of the program. As always, you may contact the APHIS, VS Iowa Area Office at (515) 284-4140 with questions.

[NVAP Homepage](#)

[APHIS Approved Supplemental Training Modules](#)

[NVAP Accreditation Renewal](#)

[Accreditation Application Form1-36A](#)

[NVAP CFR](#)

[Check My Accreditation Status](#)

[USDA NVAP Coordinator](#)

[VSPS Interstates Module-Electronic Certificates of Veterinary Inspection](#)

[VSPS User Manual](#)

[VSPS Network Associate Group for assistance with VSPS](#)



Potential Accreditation Violations

Failure to comply fully with the standards may cause removal from the list of accredited veterinarians.

Following are examples some of the acts which jeopardize accreditation:

1. Failure to report private tuberculosis tests.
2. Accepting blood samples for regulatory diseases which were not drawn by an accredited veterinarian.
3. Failure to palpate the site of injection for the reading of the tuberculosis skin test.
4. Brucellosis vaccination of calves of improper age.
5. Brucellosis vaccination of calves without (a) proper tattoo and (b) official ear tag or registration tattoo number.
6. Issuing health certificates containing incomplete information or data not based on facts.
7. Issuing health certificates for livestock or poultry which have not been examined on the day indicated by the certificate.
8. Failure to submit proper copies of interstate health certificates to the State office within 7 days.
9. Advising persons to commit acts contrary to applicable State / Federal laws and regulations.
10. Failure to immediately report to State or Federal officials all diagnosed or suspected cases of foreign animal diseases such as classical swine fever, foot and mouth disease, vesicular stomatitis, rinderpest, African swine fever, Avian Influenza and Newcastle disease of poultry or any other foreign animal disease.
11. Failure to cooperate with County / State / Federal regulatory employees; in furnishing information and records in relation to all work coming within the scope of accreditation.
12. Participation in false monetary claims, against the State or Federal agency or making false statements on official forms.

Accreditation Compliance Regulations

What happens when a veterinarian violates the Accreditation Standards?

Most of the time when an error has been made, a Veterinary Medical Officer (VMO) or State District Veterinarian (SDV) is asked to talk to the veterinarian. At the time of that visit, the two will determine what happened and how best to avoid the error in the future. The VMO or SDV is required to write a report to the AVIC concerning the meeting and what was decided in order to avoid the situation in the future. Once the AVIC receives the report, it is reviewed, and a file is made. Alternatively, the AVIC may send a Letter of Information or a Letter of Warning, depending on the nature of the error. These letters are also placed in the veterinarian's file. If the same mistake is made again, repeatedly, or if several other problems arise concerning this veterinarian's accreditation, or if the AVIC has reason to believe that falsification of documents or other serious violations have occurred, the AVIC can request that an Investigator for APHIS visit the veterinarian to determine if there is sufficient evidence available to call the veterinarian in for an informal conference.

What will occur at the conference?

At the time of the conference, the following individuals will be present:

1. APHIS Compliance Officer (IES-Investigative Enforcement Services)
2. Area Veterinarian In-Charge (AVIC)
3. State Veterinarian or representative from that office
4. The veterinarian in question will be given the opportunity to explain exactly what had occurred and what actions the veterinarian has taken to prevent a recurrence of violation. The group will present a settlement offer to the accredited veterinarian.

The settlement offer may include:

1. Letter of Warning
2. Suspension of Accreditation

If the settlement offer is declined:

1. Referral of the case to the Office of General Counsel (government lawyers) to consider drafting a formal administrative complaint.

Additional possible consequences outside of an informal conference:

1. All closed accreditation cases are forwarded to the Board of Veterinary Medicine for them to consider taking any action regarding the veterinarian's license (such as a suspension of the license).
2. If the veterinarian's actions involved violations of sections of the CFR other than the section related to veterinary accreditation, the veterinarian may be subject to a stipulation (fine).
3. If a criminal violation occurred, the veterinarian may be subject to criminal penalties.

State & Federal Regulatory Responsibilities

State Responsibilities

1. Investigation of Swine TB
2. Chronic Wasting Disease
3. Inspections and licensing of:
 - a. Kennels and pet shops
 - b. Hatcheries
 - c. Rendering plants
4. Licensing of feeder pig and livestock dealers
5. Animal Welfare investigations
6. Investigations of other State reportable diseases (Trichonomiasis, Johne's, Canine brucellosis, etc.)
7. Investigations of public complaints that allege violation of State Animal Health Laws
8. Supplies such as ear tags and interstate health certificates
9. Horse and Dog Breeders Program



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

Federal Responsibilities

1. Export -- Approval of isolation facilities and endorsement of certificates
2. Approval of slaughtering establishments to handle imported animals
3. Approval and inspection of establishments that receive certain animal and poultry products that are imported to the United States
4. Animal Welfare -- This is handled by the Animal Care Staff at Ft. Collins, CO
5. Issuing tag numbers for plastic tags for breeding swine
6. Issuing premise ID numbers and tags for sheep flocks
7. Issuing feeder pig tattoos

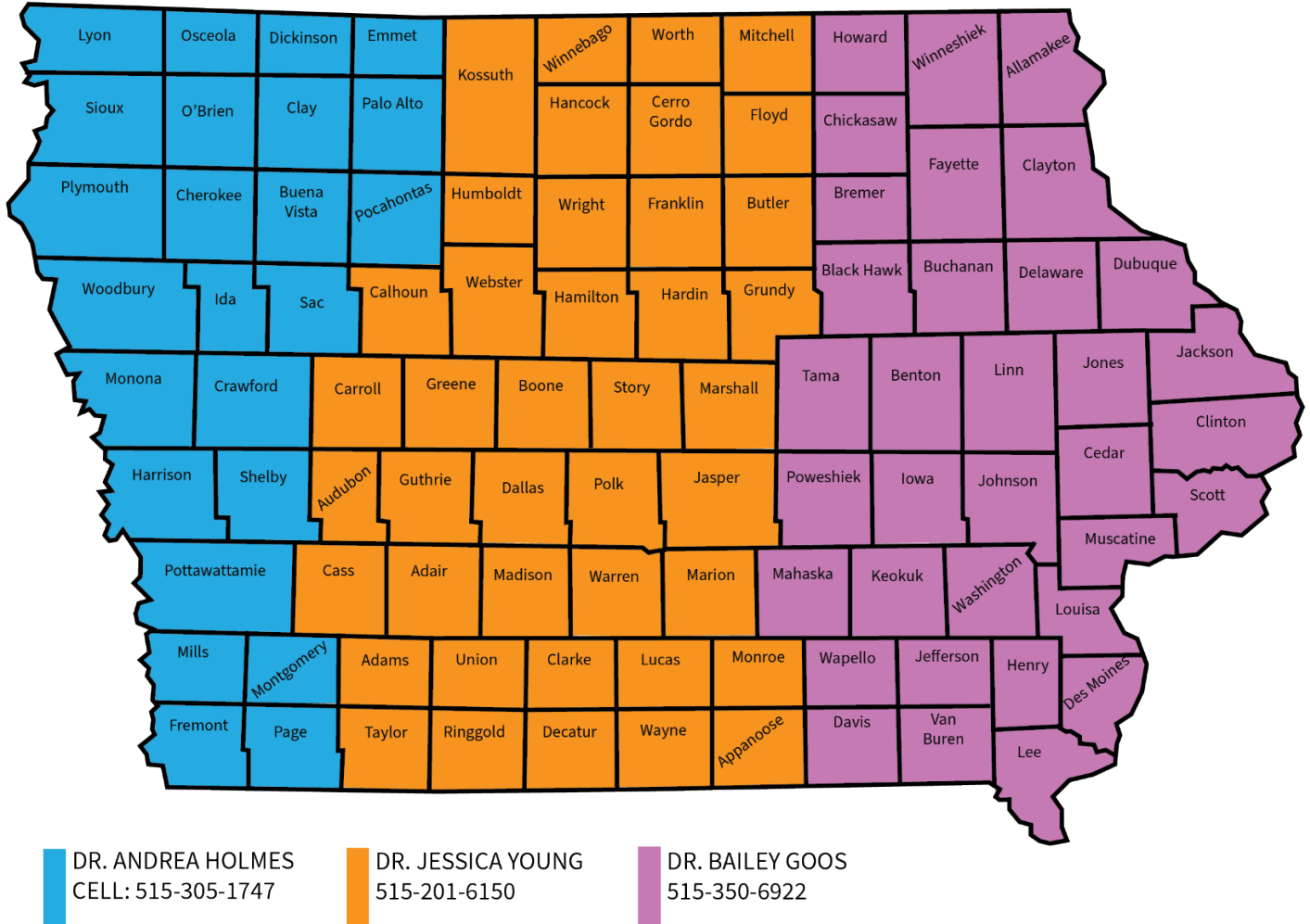


Cooperative Between State and Federal

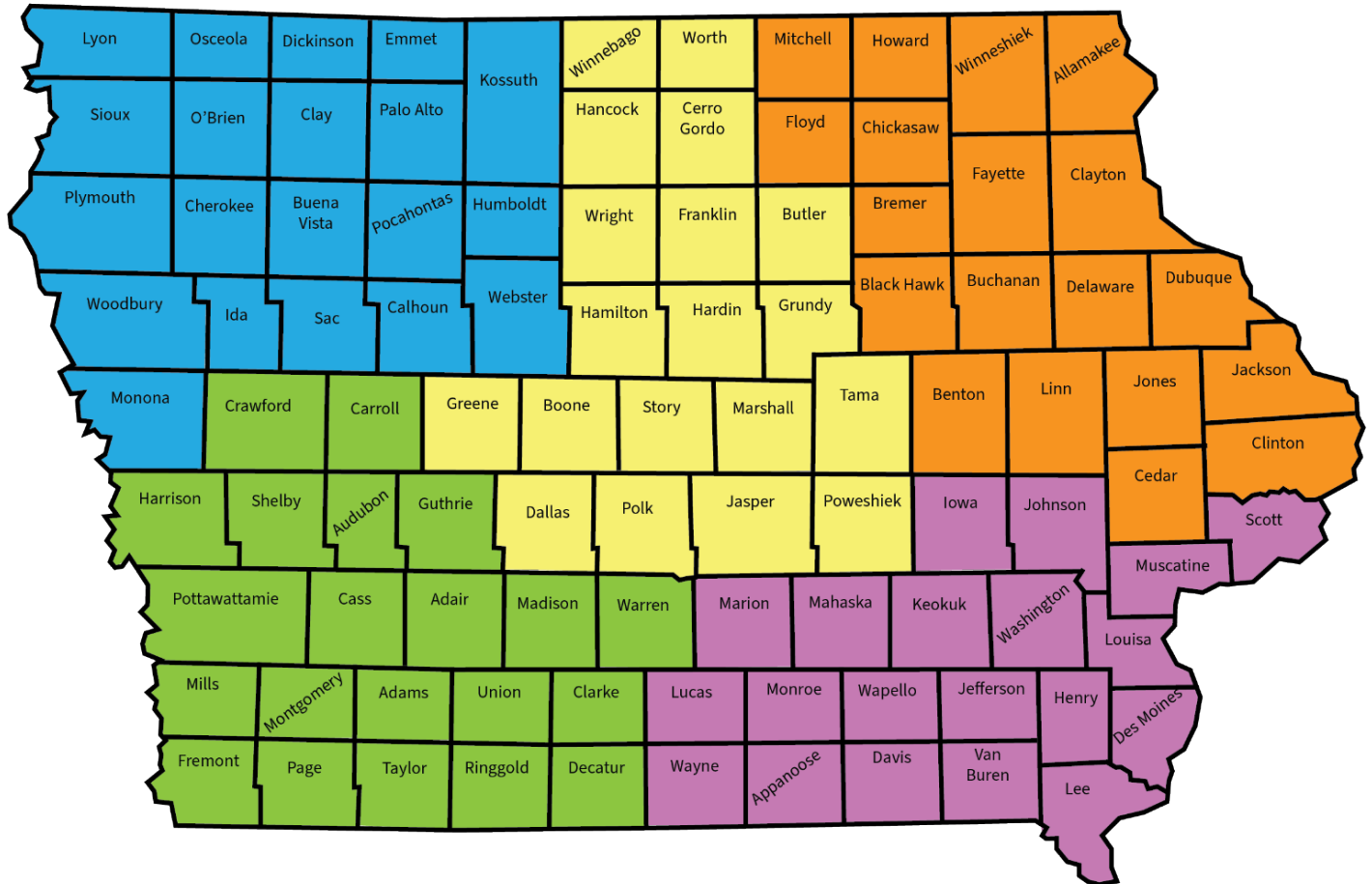
1. Pseudorabies investigations and herd clean-up plans
2. Brucellosis investigation and testing
3. Bovine and Cervidae Tuberculosis, including comparative-cervical testing
4. Auction Market inspections and regulatory work involving movement of livestock
5. National Animal Health Monitoring and Surveillance
6. Foreign animal disease investigations
7. Scrapie
8. Animal Disease Traceability (ADT) 30 days nor more than 60 days after the show.



Iowa Federal VMO Sections



State Veterinarian Districts



DR. GREG SCHMITT
LE MARS, IA
CELL: 515-669-5633

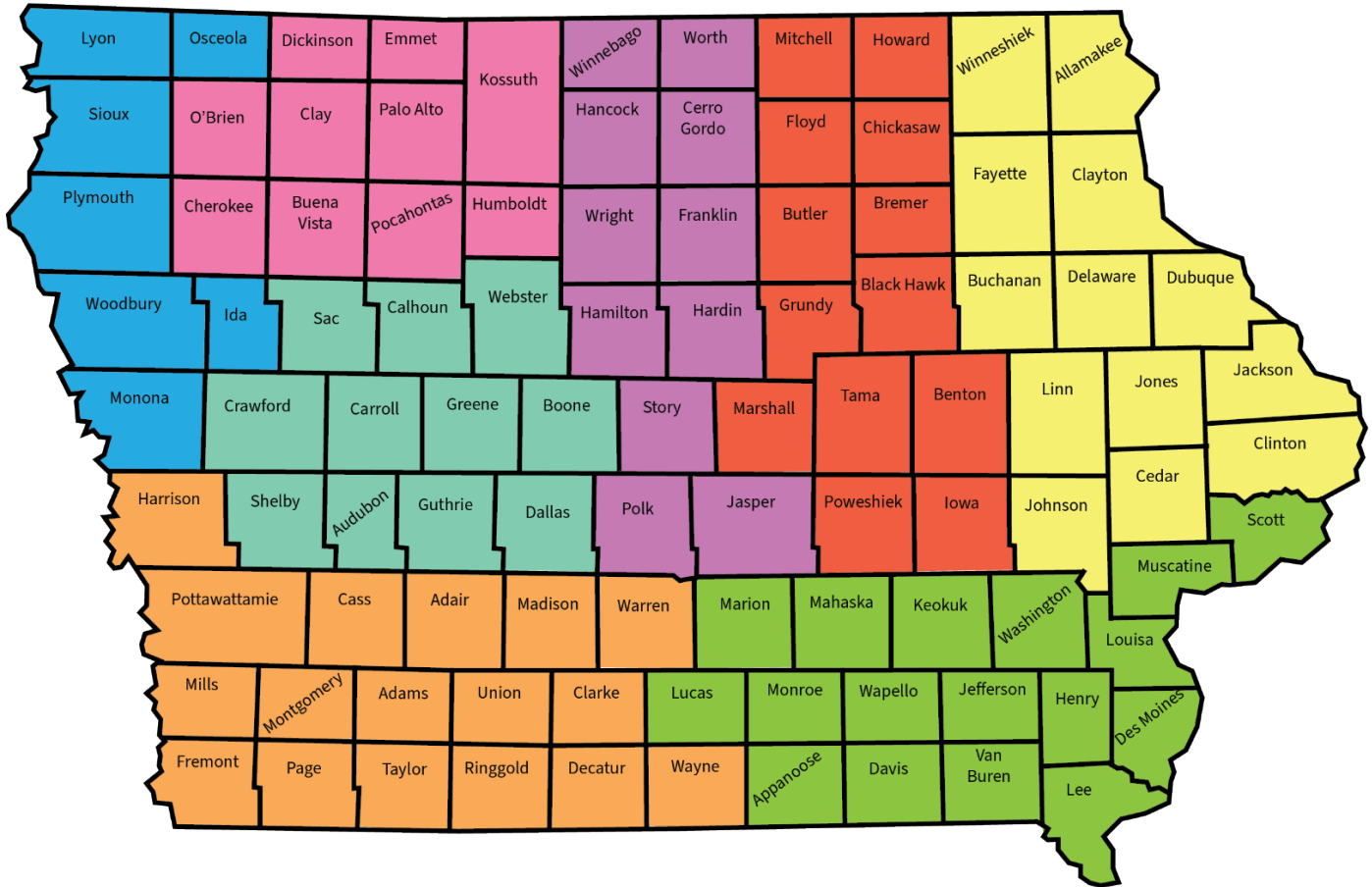
DR. GLENN RINGENBERG
DUNLAP, IA
CELL: 515-971-7391

DR. GARY E. EIBEN
COLESBURG, IA
CELL: 515-669-6095

DR. CHELSEA HAMILTON
REASNOR, IA
CELL: 515-330-8221

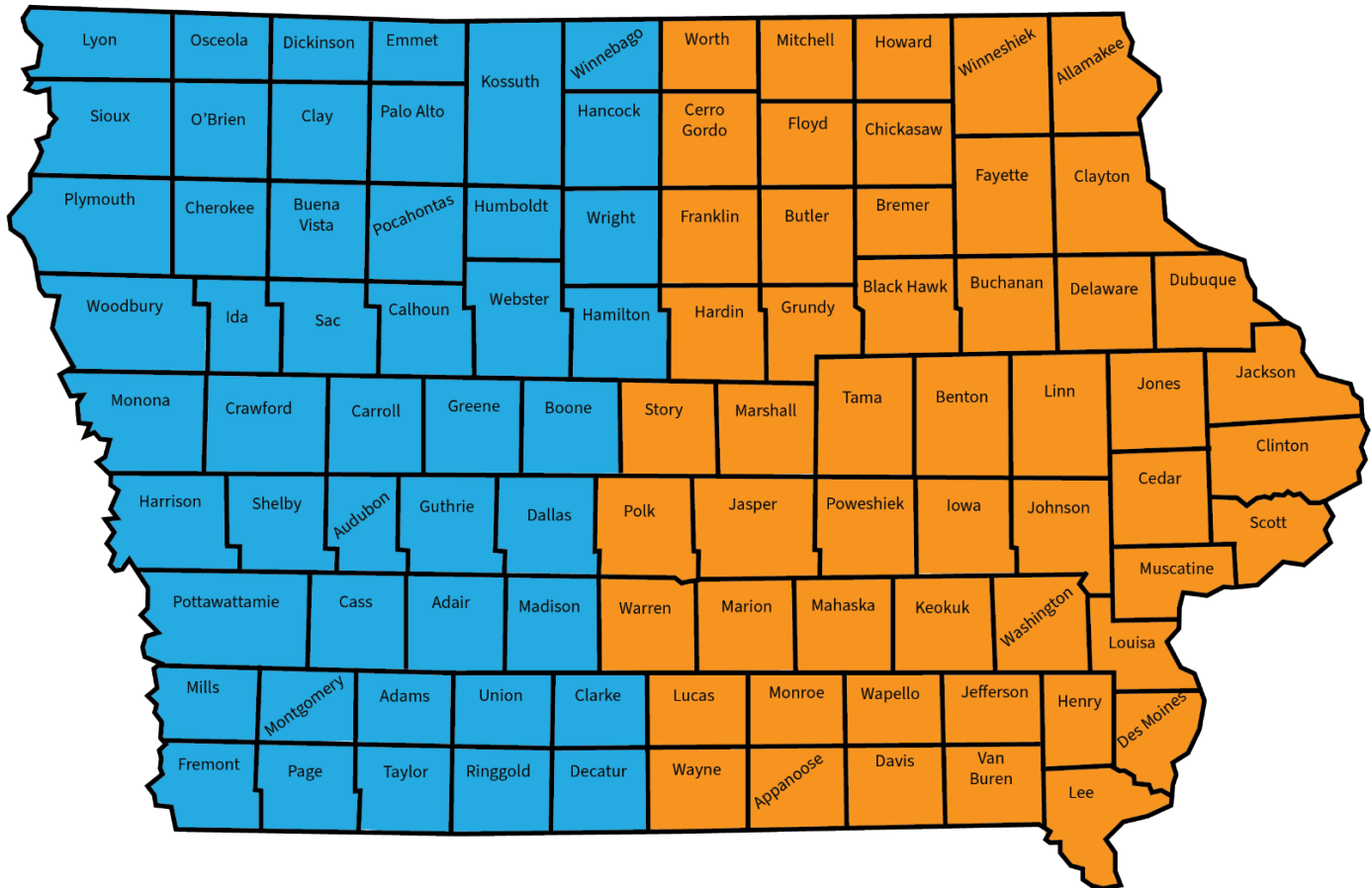
DR. KEVIN TAYLOR
BLOOMFIELD, IA
CELL: 515-669-5929

State/Federal Co-op VMO Sections



DR. GARY E. EIBEN CELL: 515-669-6095	DR. GREG SCHMITT CELL: 515-669-5633
DR. CHelsea HAMILTON CELL: 515-330-8221	DR. BAILEY GOOS CELL: 515-350-6922
DR. ANDREA HOLMES CELL: 515-305-1747	DR. KEVIN TAYLOR CELL: 515-669-5929
DR. GLENN RINGENBERG CELL: 515-971-7391	DR. JESSICA YOUNG CELL: 515-201-6150

Iowa Federal AHT Sections



STAN LAMOUREAUX
CHEROKEE, IA
515-669-5812

SIDNEY LYNK
MARSHALLTOWN, IA
515-423-3423

State Livestock Inspector Districts

BAYLEE CURRIE
C: 515-333-1578

MARC RUE
C: 515-250-3125

C: 515-313-8315

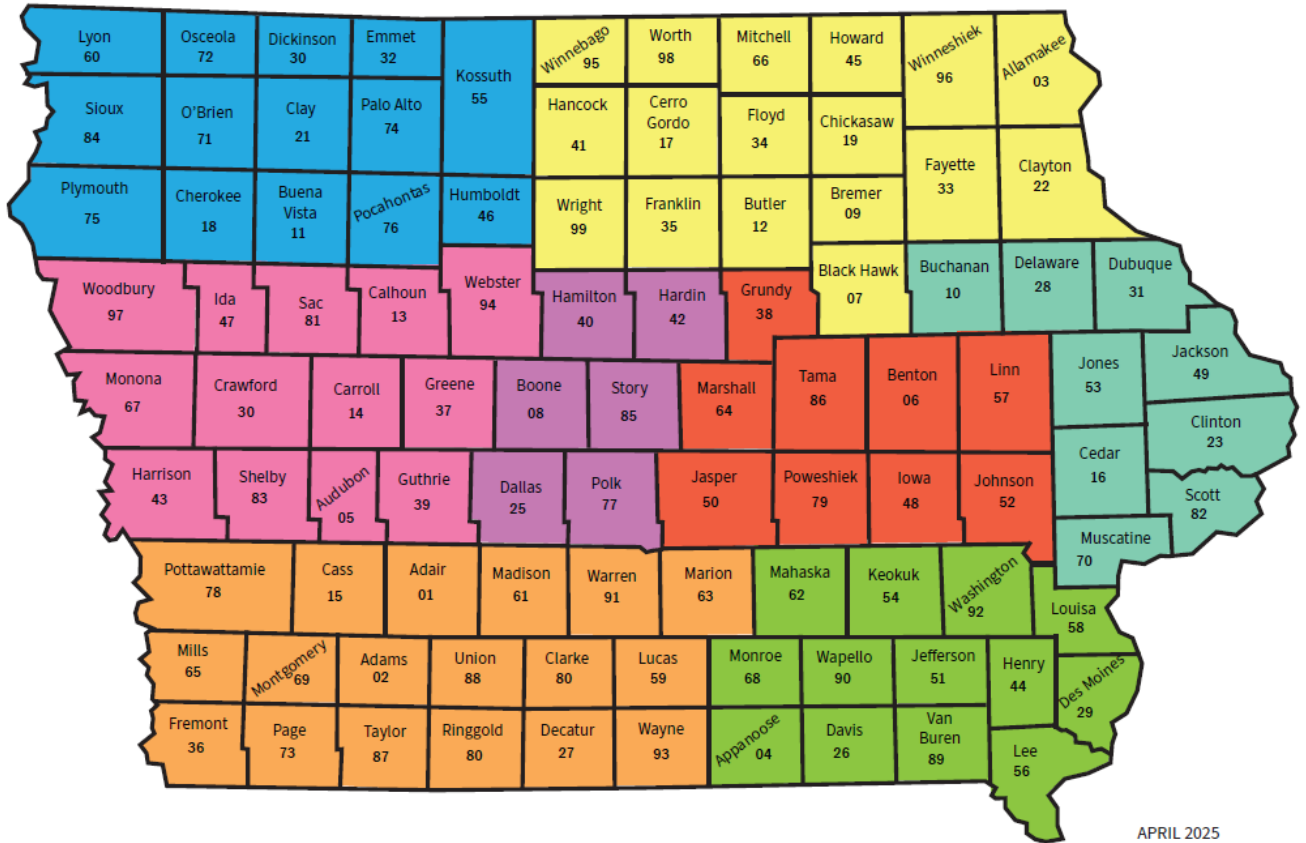
OLIVIA JOHNSON
C: 515-975-3385

KAY LUSCOMBE
C: 515-250-6108

STEPHANIE BLACK
C: 515-250-3597

BO GREENE
C: 515-326-1685

MORGAN DUMONT
C: 515-250-3013



APRIL 2025

Iowa Reportable Diseases

CHAPTER 64

INFECTIOUS AND CONTAGIOUS DISEASES

[Appeared as Ch I, 1973 !DR] [Ch 16, !AC 7/1/75 renumbered as 11.3, 12.1 to 12.33, and 16.24 and 16.25 renumbered 16.6 and 16.7 as per written instructions from Ag. Dept. IO/11177] [Prior to 7/27/88, see Agriculture Department 30-Ch 16]

21-64.1(163) Reporting disease. Whenever any person or persons who shall have knowledge of the existence of any infectious or contagious disease, such disease affecting the animals within the state or resulting in exposure thereto, which may prove detrimental to the health of the animals within the state, it shall be the duty of such person or persons to report the same in writing to the State Veterinarian, Bureau of Animal Industry, Wallace State Office Building, Des Moines, Iowa 50319, who shall then take such action as deemed necessary for the suppression and prevention of such disease. The diseases as classified by the Office International Des Epizooties are included. The following named diseases are infectious or contagious and the diagnosis or suspected diagnosis of any of these diseases in animals must be reported promptly to the Iowa department of agriculture and land stewardship by the veterinarian making the diagnosis or suspected diagnosis:

- **64.1(1) Multiple species diseases.**
 - Anthrax
 - Aujeszky's disease
 - Bluetongue
 - Brucellosis (*Brucella abortus*)
 - Brucellosis (*Brucella melitensis*)
 - Brucellosis (*Brucella suis*)
 - Crimean Congo haemorrhagic fever
 - Echinococcosis/hydatidosis
 - Epizootic haemorrhagic disease
 - Equine encephalomyelitis (Eastern)
 - Foot and mouth disease
 - Heartwater
 - Japanese encephalitis
 - Johne's disease
 - Leptospirosis
 - New world screwworm (*Cochliomyia hominivorax*)
 - Old world screwworm (*Chrysomya bezziana*)
 - Q fever
 - Rabies
 - Rift Valley fever
 - Rinderpest
 - Surra (*Trypanosoma evansi*)
 - Trichinellosis
 - Tularemia
 - Vesicular stomatitis
 - West Nile fever
- **64.1(2) Cattle diseases.**
 - Bovine anaplasmosis
 - Bovine babesiosis
 - Bovine genital campylobacteriosis
 - Bovine spongiform encephalopathy
 - Bovine tuberculosis
 - Bovine viral diarrhoea

- Contagious bovine pleuropneumonia
- Enzootic bovine leukosis
- Haemorrhagic septicaemia
- Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis
- Lumpy skin disease
- Theileriosis
- Trichomonosis
- Trypanosomosis (tsetse-transmitted)
- **64.1(3) Swine diseases.**
 - African swine fever
 - Classical swine fever
 - Nipah virus encephalitis
 - Porcine cysticercosis
 - Porcine reproductive and respiratory syndrome
 - Swine vesicular disease
 - Transmissible gastroenteritis
- **64.1(4) Sheep and goat diseases.**
 - Caprine arthritis/encephalitis
 - Contagious agalactia
 - Contagious caprine pleuropneumonia
 - Enzootic abortion of ewes (ovine chlamydiosis)
 - Maedi-visna
 - Nairobi sheep disease
 - Ovine epididymitis (*Brucella ovis*)
 - Peste des petits ruminants
 - Salmonellosis (*S. abortusovis*)
 - Scrapie
 - Sheep pox and goat pox
- **64.1(5) Equine diseases.**
 - African horse sickness
 - Contagious equine metritis
 - Dourine
 - Equine encephalomyelitis (Western)
 - Equine infectious anaemia
 - Equine influenza
 - Equine piroplasmosis
 - Equine rhinopneumonitis
 - Equine viral arteritis
 - Glanders
 - Venezuelan equine encephalomyelitis
- **64.1(6) Avian diseases.**
 - Avian chlamydiosis
 - Avian infectious bronchitis
 - Avian infectious laryngotracheitis
 - Avian mycoplasmosis (*M. gallisepticum*)
 - Avian mycoplasmosis (*M. synoviae*)
 - Duck virus hepatitis
 - Fowl cholera
 - Fowl typhoid
 - Highly pathogenic avian influenza and low pathogenic avian influenza in poultry
 - Infectious bursal disease (Gumboro disease)
 - Marek's disease

- Newcastle disease
- Pullorum disease
- Turkey rhinotracheitis
- **64.1(7) Lagomorph diseases.**
 - Myxomatosis
 - Rabbit haemorrhagic disease
- **64.1(8) Fish diseases.**
 - Epizootic haematopoietic necrosis
 - Epizootic ulcerative syndrome
 - Gyrodactylosis (*Gyrodactylus salaris*)
 - Infectious haematopoietic necrosis
 - Infectious salmon anaemia
 - Koi herpesvirus disease
 - Red sea bream iridoviral disease
 - Spring viraemia of carp
 - Viral haemorrhagic septicaemia
- **64.1(9) Mollusc diseases.**
 - Infection with abalone herpes-like virus
 - Infection with *Bonamia exitiosa*
 - Infection with *Bonamia ostreae*
 - Infection with *Marteilia refringens*
 - Infection with *Perkinsus marinus*
 - Infection with *Perkinsus olseni*
 - Infection with *Xenohaliotis californiensis*
- **64.1(10) Crustacean diseases.**
 - Crayfish plague (*Aphanomyces astaci*)
 - Infectious hypodermal and haematopoietic necrosis
 - Infectious myonecrosis
 - Taura syndrome
 - White spot disease
 - White tail disease
 - Yellowhead disease
- **64.1(11) Amphibian diseases.**
 - Infection with *Batrachochytrium dendrobatidis*
 - Infection with ranavirus
- **64.1(12) Other diseases.**
 - Camel pox
 - Chronic wasting disease
 - Leishmaniosis

Reporting is required for any case or suspicious case of an animal having any disease that may be caused by bioterrorism, epidemic or pandemic disease, or novel or highly fatal infectious agents or biological toxins and that might pose a substantial risk of a significant number of animal fatalities, incidents of acute short-term illness in animals, or incidents of permanent or long-term disability in animals.

USDA APHIS Reportable Diseases

Animal Disease Traceability (ADT)/Livestock Official ID

The U.S. Department of Agriculture (USDA) provides various programs that support the economic viability of animal agriculture. The Veterinary Services (VS) unit of the Animal and Plant Health Inspection Service (APHIS) works to improve health, productivity, and quality of life for animals and people and maintain and promote the safety and availability of animals, animal products, and veterinary biologics.

In early 2010, USDA Secretary Thomas J. Vilsack announced a new approach for responding to and controlling animal diseases, referred to as the Animal Disease Traceability (ADT) framework. Key principles of the framework include:

- Application to animals moved in interstate commerce.
- Administration by the States and Tribal Nations to increase flexibility.
- Encouraging the use of lower cost technology.
- Transparent implementation through the full Federal rulemaking process.

USDA published a proposed rule, “Traceability for Livestock Moving Interstate,” on August 11, 2011. The final rule was published on January 9, 2013. The regulations improve the ability of animal health officials to trace livestock when disease is found. The program must have a high level of compliance to achieve a solid infrastructure for tracing livestock.

The “Traceability for Livestock Moving Interstate” regulation establishes requirements for the official identification of livestock and documentation for certain interstate movements at title 9 of the Code of Federal Regulations (9 CFR), part 86. Covered livestock include cattle and bison; horses and other equine species; poultry, sheep, and goats; swine; and captive cervids. Animals of these species, unless otherwise exempt, are required to be officially identified and accompanied by an Interstate Certificate of Veterinary Inspection (ICVI) or other movement documentation. These identification and documentation requirements provide basic information essential for traceability and are the main elements for monitoring compliance. Certain disease program requirements pertaining to traceability will be considered in monitoring compliance. In addition to APHIS regulations, the criteria and policies defined in the ADT General Standards document and guidance documents will also be considered part of the monitoring activities.

[ADT Summary of Federal Interstate Movement Requirements by Species](#)

[What’s New in Goat ID?](#)

[Sheep & Goat ID Flow Chart](#)

Animal Disease Traceability

[Animal Disease Traceability](#)

[Animal Disease Traceability Official Animal Identification Device Standards \(OAIDs\)](#)

[2024 ADT Rule Comments](#)

[Myth Busters: The Facts About Animal Disease Traceability](#)

[Frequently Asked Questions: Animal Disease Traceability Rule](#)

[Guidelines for Manufacturing, Selling, and Distributing USDA-Approved Official Identification Devices](#)

[How to Become an Animal Identification Device Manager](#)

[IDALS Approved Tagging Sites](#)



Cattle Breeds and Abbreviation Code Guide

Code	Cattle Breed	Code	Cattle Breed	Code	Cattle Breed
AN	Aberdeen Angus	FP	East Flemish Red Pied	NM	Normande
AB	Abondance	ER	Eringer	NR	Norwegian Red
AF	Africander	FA	Flamand	OT	Other
AY	Ayrshire	FL	Fleckvieh	PA	Parthenais
BA	Barzona	FR	Fribourg	PI	Piedmontese
BE	Beefalo	FB	Friesian (Belgium)	PR	Pie Rouge
BF	Beef Friesian	DF	Friesian (Dutch)	PZ	Pinzgauer
BM	Beef Master	GA	Galloway (beef)	RN	Romagnola
FF	Belgian Blue	GD	Galloway (dairy)	RA	Ranger
BG	Belted Galloway	GS	Gascone	AR	Red Angus
BW	Black Whiteface	GV	Gelbvieh	RB	Red Brangus
BD	Blonde d'Anuitaine	GR	Groningen	RD	Red Dane (Red Danish, Danish Red)
BO	Braford	GU	Guernsey		
BR	Brahman	HC	Hays Converter	WW	Red Holstein
BH	Brahmental	HH	Hereford (horned)	RP	Red Poll
BN	Brangus	HP	Hereford (polled)	RO	Rotbunte
BU	Braunvieh	SH	Highland (Scotch Highland)	AS	Salers
SB	Brown Swiss (beef)	HO	Holstein	SG	Santa Gertrudis
BS	Brown Swiss (dairy)	HY	Hybrid (Alberta Hybrid)	MS	Shorthorn (milking)
CN	Canadienne	JE	Jersey	SS	Shorthorn (beef-Scotch)
CP	Campine Red Pied	KB	Kobe (Wagyu)	SP	Shorthorn (polled)
CB	Charbray	LM	Limousin	IS	Shorthorn (llawara)
CH	Charolais	LR	Lincoln Red	SM	Simmental
CA	Chianina	LL	Luing	DS	South Devon
XX	Crossbred	MA	Maine-Anjou	DX	Sussex
DB	Danish Black & White	MR	Marchigiana	TA	Tarentaise
DJ	Danish Jerry	ME	Maremma	TG	Tasmanian Grey
RW	Danish Red & White	MI	Meuse-Rhine-Yssel	TL	Texas Longhorn
DE	Devon	MO	Montbeliard	WB	Welsh Black
DR	Dexter	MG	Murray Gr	WF	West Flemish Red

¹If an animal is crossbred, record the predominant breed with an "X" beside it, (e.g., ANX). Use only "XX" when no single breed is predominant.

Swine Breeds and Abbreviation Code Guide

Code	Swine Breed	Code	Swine Breed	Code	Swine Breed
BK	Berkshire	LC	Lacombe	RW	Red Wattle
CW	Chester White	LA	Landrace	SO	Spotted
XX	Crossbred	LB	Large Black	TM	Tamworth
DU	Duroc (Jersey)	LW	Large White	WE	Welsh
FE	Feral Swine	OT	Other	WS	Wessex Saddleback
HA	Hampshire	PE	Pietrain	YO	Yorkshire
HE	Hereford	PC	Poland China		

Goat Breeds and Abbreviation Code Guide

Code	Goat Breed	Code	Goat Breed	Code	Goat Breed
AG	Angora	MX	Mixed breed	PG	Pygora
AL	Alpine	MY	Myotonic	PY	Pygmy
BO	Boer	ND	Nigerian Dwarf	SA	Saanen
CS	Cashmere	NS	Not specified	SP	Spanish
KI	Kiko	NU	Nubian	TO	Toggenburg
LN	LaMancha	OB	Oberhasli	XX	Crossbred
MU	Multiplebreeds present	OT	Other		

Sheep Breeds and Abbreviation Code Guide

Code	Sheep Breed	Code	Sheep Breed	Code	Sheep Breed
BB	Barbados Blackbelly	DO	Dorset	OX	Oxford
BC	Border Cheviot	DP	Polled Dorset	PA	Panama
BD	Babydoll	DR	Dorper	PE	Perendale
BL	Border Leicester	EF	Eastern Friesian	PO	Polypay
BM	Booroola Merino	FI	Finnsheep	RA	Rambouillet
BW	BlackWelshMountain	FN	Finnish Landrace	RM	Romnelet
BX	Blackfaced Crossbred	HA	Hampshire	RN	Romanov
CA	Canadian Arcott	HS	Hampshireand Suffolk	RO	Romney
CD	California Red	IC	Icelandic	SB	Scottish Blackface
CF	Clun Forest	IF	Ile-de-France	SC	St. Croix (Virgin Island White)
CH	Charolais	JE	Jacob	SH	Shetland
CM	California Variegated Mutant	KA	Karakul	SM	Miniature Southdown
		KT	Katahdin	SO	Soay
CO	Columbia	LE	Leicester	SR	Shropshire
CP	Coopworth	LI	Lincoln	ST	Southdown
CR	Corriedale	ME	Merino	SU	Suffolk
CS	Cormo	MT	Montadale	TA	Targhee
CT	Cotswold	MU	Multiple breeds present	TE	Texel
CV	Cheviot	MX	Mixed breed	TU	Tunis
CX	Columbia Cross	NA	Navajo	TX	Texel Cross
XX	Crossbred	NC	North Country Cheviot	WD	White Dorper
DE	Debouillet	NS	Not specified	WX	Whitefaced Crossbred
DH	Horned Dorset	NT	Natural colored		
DM	Delaine Merino	OT	Other		

Equine Breeds and their Abbreviation Codes

Code	Equine Breed	Code	Equine Breed	Code	Equine Breed
AS	American Saddlebred	HU	Hunter	SI	Shire
AP	Appalosa	MN	Morgan	SN	Standardbred
AB	Arabian	APL	Palomino	SF	Suffolk Punch
BL	Belgian	PE	Percheron	TW	Tennessee Walking
CL	Clydesdale	PN	Pinto	TH	Thoroughbred
HA	Hackney (Horse)	QH	Quarter Horse	WE	Welsh
HK	Hackney (Pony)	SE	Shetland		

NEUS Tag State and Tribal Codes

Alabama (AL) 64

Alaska (AK) 96

American Samoa (AS) 99

Arizona (AZ) 86

Arkansas (AR) 71

California (CA) 93

Colorado (CO) 84

Connecticut (CT) 16

Delaware (DE) 50

Florida (FL) 58

Georgia (GA) 57

Guam (GU) 97

Hawaii (HI) 95

Idaho (ID) 82

Illinois (IL) 33

Indiana (IN) 32

Iowa (IA) 42

Kansas (KS) 48

Kentucky (KY) 61

Louisiana (LA) 72

Maine (ME) 11

Marianas (MP) 98

Maryland (MD) 51

Massachusetts (MA) 14

Michigan (MI) 34

Minnesota (MN) 41

Mississippi (MS) 65

Missouri (MO) 43

Montana (MT) 81

Navajo Nation (NN) 77

Nebraska (NE) 47

Nevada (NV) 88

New Hampshire (NH) 12

New Jersey (NJ) 22

New Mexico (NM) 85

New York (NY) 21

North Carolina (NC) 55

North Dakota (ND) 45

Ohio (OH) 31

Oklahoma (OK) 73

Oregon (OR) 92

Pennsylvania (PA) 23

Puerto Rico (PR) 94

Rhode Island (RI) 15

South Carolina (SC) 56

South Dakota (SD) 46

Tennessee (TN) 63

Texas (TX) 74

Utah (UT) 87

Vermont (VT) 13

Virgin Islands (U.S. VI) 59

Virginia (VA) 52

Washington (WA) 91

West Virginia (WV) 54

Wisconsin (WI) 35

Wyoming (WY) 83



It is extremely important that all livestock producers in Iowa have a Premises ID Number (PIN), and they should register every site where livestock are raised. If there is a foreign animal disease outbreak, the Iowa Department of Agriculture and Land Stewardship will use the PIN database to alert producers about potential exposures, quarantines, and other important disease-response information.

Time is critical during a foreign animal disease response. Registering livestock sites and making sure contact information is up to date will help state and federal animal health officials notify the owner/producer of affected sites faster. This gives state and federal animal health officials the best possible chance of controlling or slowing the outbreak.

Premises Identification Number Application (Print Legibly) Purpose of this form: ☐ New ☐ Renewal

Premises Information

Premises ID numbers are assigned to the location where the animal(s) reside.

Name of Site: _____

911 Address of site: _____

City: _____ State: IA Zip code: _____ County: _____

Latitude (Decimal Degrees): _____ Longitude (Decimal Degrees): _____

Site Owner Information (Owner of Land)

Please provide the best phone number where someone can be reached in the case of an emergency.

Owner Name: _____

Contact Information: Name: _____

Mailing Address Street: _____

City, State, Zip Code: _____

County: _____

Number: _____

Mobile Phone Number: _____

Email: _____

Do you own multiple sites: Yes ☐ No ☐

Animal Owner Information (Feed For?)

Please provide the best phone number where someone can be reached in the case of an emergency.

Owner or Company Name: _____

Contact Information: Name: _____

Mailing Address Street: _____

City, State, Zip Code: _____

County: _____

Phone Number: _____

Mobile Phone Number: _____

Email: _____

Do you own animals located at multiple sites: Yes ☐ No ☐

Premises Type (Check all that apply)

☐ Producer Unit/Farm

☐ Exhibition, Zoo

☐ Market/Collection point

☐ Port of Entry

☐ Tagging Site

☐ Veterinary Clinic

☐ Non-Producer Participant

☐ Slaughter Plant

☐ Quarantine Facility

☐ Rendering

☐ Laboratory/Research

☐ Semen Collection/Embryo Trans

☐ Feed Mill

☐ Truck Wash

☐ Other _____

Species on Premises

☐ Cattle/Bison

☐ Swine

☐ Poultry

☐ Goats

☐ Cervids

☐ Camelids

☐ Ratite

☐ Sheep

☐ Horses

☐ Other _____

Please mail completed application to Wallace Bldg., 502 E 9th Street, Des Moines, IA 50319 or fax to (515)281-4282

Phone: (888) 778-7675

Email: idals_id@iowaagriculture.gov

Tips on Filling out CVIs



- In Iowa you need to be an accredited veterinarian before you can issue health certificates. Use the accredited number issued to you by USDA APHIS when filling out papers.
- Find out the types of health papers the State has and how to use them.
- Iowa has:
 - **Form M** – Used for animals moving intrastate (within the State of Iowa), do not use for out of state movement.
 - **Form O** – Used for animals moving intrastate or out of state, when in doubt use this form.
 - **Form DC** – Used for dogs and cats.
- When you fill out a health paper for movement to a new premises find out where the animals are going, and then call the State of destination for the rules for that particular species.
 - Ask if you need a permit number.
 - Ask if any statements, other than the Certification by Inspecting Veterinarian, need to be on the health paper.
 - Ask what tests, if any, are to be done prior to shipment.
- You have to inspect the animals, don't bypass this step!!
- Make sure you write down the correct animal ID information on the health paper. Include all forms of ID (tattoos, brands, metal tags, ear tags, etc.)
- Make sure you write down the results, dates, and laboratories used for any tests.
- Fill out the rest of the paper as necessary. Sometimes your staff will fill in the paper, remember you are responsible for the paper, so you need to be the last to review it.
- **Don't forget to date it (inspection date and date you signed) and sign it!**

Special Notes for Shows, Exhibitions, and Fairs

- Call and get the official health rules for each show, exhibition, or fair as some rules will vary.
- If there is a chance that the animal will be sold to a new owner, then put each animal on an individual health paper. Make a photocopy of the paper for your records and send the whole paper (all copies) with the owner.

[IDALS Request for Veterinary Supplies Form](#)

[State Veterinarian Contact List](#)

[National Assembly Approved eCVI Vendors \(December 2024\)](#)

REQUEST FOR VETERINARY SUPPLIES – Updated 10/1/2024

TO: IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP
ANIMAL INDUSTRY DIVISION
WALLACE BUILDING, 502 E 9TH STREET, DES MOINES, IOWA 50319
515-281-5305



IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

REMITTANCE REQUIRED PRIOR TO SHIPMENT – PRICES SUBJECT TO CHANGE WITHOUT NOTICE – ALL SALES FINAL

CHECKS PAYABLE TO: IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP (IDALS)

THIS SECTION IS FOR VETERINARY ORDERS ONLY				
OFFICIAL HEALTH CERTIFICATES (Code 98)	UNIT DESCRIPTION	# OF UNITS	COST PER UNIT	TOTAL COST
CERTIFICATE OF VETERINARY INSPECTION (out-of-state)	100/pkg		\$100.00	\$
CERTIFICATE OF INSPECTION (intrastate – Form M – 1/2 page)	50/pkg		\$25.00	\$
DOG AND CAT CERTIFICATES (Form DC)	50/pkg		\$25.00	\$
NATIVE SWINE FARM TO FARM	25/pkg		\$25.00	\$
AFFIDAVIT OF SLAUGHTER	50/pkg		\$50.00	\$
IDENTIFICATION TAGS (Code 50)	UNIT DESCRIPTION	# OF UNITS	COST PER UNIT	TOTAL COST
SMALL SILVER (not for cattle or bison)	Box of 100		\$30.00	\$
VINYL (Flex tags) - 1½ X 1¼, 2 PART, FRONT & BACK	50 tags/bag		\$45.00	\$
TAGGING PLIERS (Code 50)	UNIT DESCRIPTION	# OF UNITS	COST PER UNIT	TOTAL COST
SMALL	1 Tagger		\$40.00	\$
VINYL (Flex tags)	1 Tagger		\$55.00	\$

TOTAL DUE \$

THIS SECTION IS FOR VETERINARY/PRODUCER FREE EID TAG ORDERS

A Premises ID is required to order EID tags. A Premises ID Application can be found on our website at this page: <https://iowaagriculture.gov/animal-disease-traceability>
Orders including only EID Tags can be emailed to: idals_id@iowaagriculture.gov. All other orders must be mailed to the address on this form and include payment.

Tag Brand (subject to change)	UNIT DESCRIPTION	# OF UNITS	TOTAL # TAGS
DATAMARS/Temple EID Tag - White	Bag of 100		

Code of Federal Regulations §86.3 Recordkeeping requirements. Official identification device distribution records. Any State, Tribe, accredited veterinarian, or other person or entity who distributes official identification devices must maintain for 5 years a record of the names and addresses of anyone to whom the devices were distributed.

Veterinarian Name: _____

IA LICENSE #: _____
(required for CVIs)

Busines/Clinic Name: _____

Producer Name: _____

PREMISES ID: _____
(required for EID Tags)

Mailing Address: _____

City, State, and Zip Code: _____

Telephone (required): _____

E-mail (required): _____

IDALS OFFICE USE ONLY

Number for Inventory

Number for Inventory

Number for Inventory

IDALS OFFICE USE ONLY

DATE SHIPPED: _____

CLERK: _____

CHECK AMOUNT: _____

CHECK #: _____

INVENTORIED: _____

Form DC - Certificate of Veterinary Inspection for Cats/Dogs

Form DC-Certificate of Veterinary Inspection for Cats/Dogs

STATE OF IOWA
DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
Bureau of Animal Industry
Certificate of Veterinary Inspection for Cats/Dog

Interstate Shipment ☒ DC 658501
 Exhibition ☐ SHIP VIA:
 Sale ☐ Air ☐ Auto ☒
 Rail ☐ Ship ☐

Owner or Consignor John Doe Consignee Jane Roe
 Address 123 Canine Dr Address 111 Feline Dr
 City Anytown, IA 58765 City Anywhere, NE 76832

DESCRIPTION	BREED/ COLOR	SEX	AGE/ DOB	TATTOO MICROCHIP NUMBER	RABIES TAG NUMBER	Date Rabies Vaccine Administered	RABIES VACCINATION TYPE		MANUFACTURER	SERIAL NUMBER
							Live/ Killed	1 year 3 year		
<u>Rover</u>	<u>Lab/Blk</u>	<u>MC</u>	<u>5yrs</u>	<u>9551 3246</u> <u>8039369</u>	<u>56982</u>	<u>1/24/23</u>	<u>Killed</u>	<u>3yr</u>	<u>Zoetis</u>	<u>12345</u>

REMARKS:

I hereby certify that the animals listed above have been examined by me and found to be free from contagious and infectious diseases to the best of my knowledge. To my knowledge, the animals listed have not been exposed to rabies and have not originated from a rabies quarantine area.

Signature of Licensed Veterinarian Sally Doolittle, DVM Iowa Vet License # 1234
 Typed or Printed Name Sally Doolittle Date Issued 1/24/2024
 Name of Veterinary Hospital/Clinic All Creatures Clinic Telephone Number 515-987-1234
 Address 6789 Bovine Dr City Cowchip State IA Zip Code 52396

Original (White) copy to accompany shipment. Mail two copies (Yellow & Pink) to the State Veterinarian. Retain last copy (Green) unless required for air shipment)

Revised 11/2023

****State copy (canary) must be mailed to the IDALS office within 30 days of issuance to the client****

****This form does not need to be sent into the IDALS office****



OWNER-SHIPPER STATEMENT (OSS)

All movements are subject to approval by the shipping and receiving states.

This document should be used when no other Transportation certificate (For example Certificate of Veterinary Inspection) is required as specified in Iowa Code section 163 and 172B.3 and Iowa Administrative Rules Chapter 66.

Address animals moved from:			
911 Address	City	State	Zip
Owner name:		Driver's license number	
Owner mailing address:			
911 Address:	City:	State	Zip
Shipper name:		Driver's name and Driver's license number:	
Vehicle registration plate number:	State of issuance:	Vehicle Seal Number if any	
Shipper address:			
911 Address:	City:	State	Zip
Species and number of each and description (breed, sex, age, brands if any):			
Cattle <input type="checkbox"/>	Goats <input type="checkbox"/>	Sheep <input type="checkbox"/>	Swine <input type="checkbox"/> Horses <input type="checkbox"/>
Other <input type="checkbox"/>	Date livestock loaded: _____		
Signature:			
_____ OR _____		_____	
Owner	Shipper	Date	
Destination (Livestock Market, Slaughter plant, Tagging Site or Buying Station Name, Purchaser or Consignee):			
911 Address:	City:	State	Zip

- ☐ Animals are being shipped directly to an approved tagging site for ID.
☐ Directly to Slaughter
☐ Official ID for each animal in the shipment as required in 9 CFR is recorded below.

Certificate of Veterinary Inspection Number (if required) _____ State issued _____

Please indicate species by C –cattle, G – goats, SH – sheep, SW –swine, H – horse, O – other
 *A separate listing of official animal identification numbers may be attached to this form.

This is not an Interstate Certificate of Veterinary Inspection

VSPS – Certificates of Veterinary Inspection (CVIs)

The United State Department of Agriculture’s (USDA) Veterinary Services Process Streamlining (VSPS) Interstate Module, through which an accredited veterinarian can create online certificates of veterinary inspection (CVI), has been greatly enhanced based on feedback from accredited veterinarians.

The new version is faster and more user-friendly and is NOW AVAILABLE!

Some of the enhanced features include:

- An animal upload capability that allows an Excel spreadsheet or CSV file of animal information to be uploaded with multiple animal identifiers,
- The capability for a user to create a number of CVI templates and certificate statements and save them to an account for future use,
- Storage and access to commonly shipped individual animal or group descriptions for one click data-entry on future documents,
- Rapid addition of lab tests and vaccination information to each individual animal or a group of animals,
- Accredited veterinarians and labs can enter and process Coggins forms for multiple horses at one time,
- A quick-copy auto-fill feature that allows copying of age, breed, sex, test results, and more from one animal to all the following animals with just one click. If sequential identification numbers are being used, it can “add 1” to each subsequent line, and
- Storage of an electronic copy of an issued CVI for future reference.

Why create certificates electronically in VSPS?

VSPS is FREE to all users (accredited veterinarians, health technicians, NVSL-approved labs and State animal health officials). There are many benefits when you create and electronic certificate of veterinary inspection:

- It saves time!
- They’re much easier to read than paper forms.
- They assist State health officials in tracking livestock movements in and out of their States.
- They’re easily searchable to find animal identification and to locate animal certificates.
- You can electronically store all your documents in one place.
- It’s easier to share information with State and other animal health officials.
- It’s easier to share documents between practice members.

[Using the Veterinary Services Processes Streamlining \(VSPS\) System](#)

[VSPS User Manual](#)

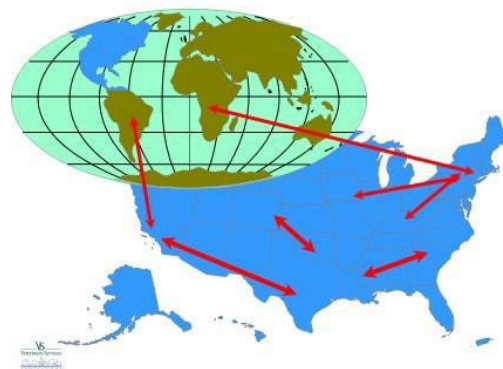
Import and Export Requirements for Animals

Export

Federal Government (USDA, APHIS, Veterinary Services) has the sole responsibility for establishing minimum U.S. requirements for the export of livestock and poultry. As such, USDA, APHIS, Veterinary Service must endorse all international health certificates for these animals.

Requirements of Foreign Countries

Information on country import requirements for animals can be found at [APHIS Pet Travel](#). It is very important that you fully understand a country's requirements, as knowledge of isolation and testing protocols are critical to successful export of animals, semen, and embryos.



USDA Veterinary Services does not regulate the export of pet dogs and cats, but they ...

1. Are willing to help but do charge a user fee for endorsement of small animal export health certificates.
2. Will endorse international health certificates for pet dogs and cats if required by a foreign country.
3. Owners or accredited veterinarians need to contact the embassy or consulate of the importing country as they are often a good source of current information on regulations concerning small animal imports.

Common Problems with International Health Certificates: They are similar to those encountered with Interstate Health Certificates:

1. Failure to be timely.
2. Timing of tests, treatments, and isolation periods must be considered to meet all regulations and to allow adequate time for paperwork to be endorsed at the USDA, APHIS, Veterinary Export Trade Services Office.
3. Improper Identification.
4. You MUST record all OFFICIAL identification, but it is helpful to note any additional identification.
5. Improper Tests Performed (e.g., EIA, and Bluetongue tests for animals to Canada).
6. Failure to understand and properly record certification statements (Certifications and statements must be recorded EXACTLY as written by the importing country).

Why does USDA, APHIS, Veterinary Services regulate exports?

1. To protect our export markets.
2. Political, economic, and health reasons.
3. To prevent the spread of disease internationally.



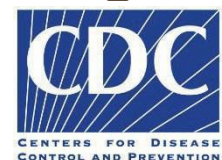
General Considerations:

1. The United States import requirements vary by the country of origin and species
2. Import permits and health certificates are required to enter the United States
3. All animals are inspected on arrival
4. Quarantine facilities are required and are paid at the owner's expense



Importation of some species is regulated by other Federal agencies:

- **Fish and Wildlife Services** - regulate the importation of species protected by the Convention on International Trade of Endangered Species (CITES).
- **Public Health Service / Center for Disease Control and Prevention** - Regulate the importation on nonhuman primates, dogs, and cats.



User Fees - are in effect for most imports. People interested in importing animals or animal products should contact USDA, APHIS, Veterinary Services for specific requirements and fees.

Import Issues Awareness - Accredited Veterinarians need to know animals entering the country can be potential carriers of foreign animal diseases. Examples of instances that have occurred: a dog with screwworm larva; ostriches and snakes with exotic ticks; psittacine birds with Exotic Newcastle Disease.

[APHIS Endorsement Offices by State](#)

[APHIS Pet Travel Website](#)

[APHIS IRegs-Livestock International Export](#)



USDA Veterinary Health Export Certification System (VEHCS)



Save TIME & MONEY by submitting international health certificates ONLINE!

Electronic certificate submission is available NOW through the Veterinary Export Health Certification System (VEHCS)*

VEHCS allows USDA-accredited veterinarians to electronically sign and submit export health certificates and supporting documentation to their local Veterinary Services (VS) Endorsement Offices for review and USDA endorsement. Once finalized, the hardcopy certificate will be returned by mail or made available electronically, depending on the destination country.

Advantages:

- **Easy registration:** Accredited veterinarians can create a VEHCS user account and gain e- authentication capabilities with their existing national accreditation number (NAN). Just follow the directions on the “New to this site?” link under the Log In button.
- **Multiple user roles available:** USDA- accredited veterinarians, their support and administrative staff, exporters, and animal shippers, can create accounts within VEHCS and input health certificate information for the accredited veterinarian’s signature and submission.
- **Transmit certificates:** Depending on the requirements, accredited veterinarians can create health certificates directly in the system or upload a scanned paper certificate to submit for APHIS review and endorsement.*
- **Reduced turn-around time:** With an electronic submission, there’s no more waiting for paper documents to be delivered to the VS Endorsement Office. Customers can expect to receive their USDA-endorsed certificates in less time than with traditional mail-in endorsement and eliminate time spent sitting in the VS Endorsement Office waiting room.
- **Reduced cost:** Save money by eliminating the cost of shipping fees (Ex: FedEx or UPS), or the need to drive to the nearest VS Endorsement Office.
- **Improved communication:** VS Endorsement Offices can return documents to accredited veterinarians electronically for any corrections or edits. Changes can be made to the health certificates without requiring owners to return to the clinic or needing to create a completely new certificate.
- **IT support for VEHCS users:** VEHCS has dedicated customer service and technical support available for questions or troubleshooting.

Accredited Veterinarians:

[Access or register your account with the VEHCS system](#)

PART 1 - TO ACCOMPANY SHIPMENT

Instructions - VS Form 17-140 United States Origin Health Certificate

Livestock traveling internationally must be accompanied by an official health certificate issued by an APHIS representative or an accredited veterinarian at the point of origin. VS Form 17-140 United States Origin Health Certificate is the primary health certificate used for the export of livestock or semen to foreign countries. A pre-movement authorization, known as a **Permit for Entry or Import Permit**, may be required by the destination country before animals can enter the country.

[Regulations on international movement of livestock](#)

This document is intended to give general guidance on how to complete VS Form 17-140. Recognize that these are not official directions and forms change over time. If you have any questions regarding how to complete this form, contact your District Office for official guidance.

1. **CONSIGNOR'S NAME:** Last name, first name, and middle initial of consignor, which may or may not be the owner.
2. **CERTIFICATE NO.:** The certificate number is imprinted on the certificate. All copies of the certificate shall carry the same unaltered certificate no. Insert this certificate number on all VS Form 17-140A (continuation sheets) if used.
3. **PAGE NO.:** Show total number of pages in the shipment on each sheet (for example, a shipment that uses one VS Form 17-140 and two VS Form 17-140A would be numbered: "Page 1 of 3; Page 2 of 3; and Page 3 of 3")
4. **DATE ISSUED:** The date the veterinary inspection was performed and the animals were determined to be healthy. The form may not be signed and given to the consignor unless all testing results are negative and all other requirements have been completed.
5. **U.S. PORT OF EMBARKATION (City and State):** The location where the animals are loaded on the aircraft or ocean vessel for departure. If the animals are traveling to Canada or Mexico by land vehicle, list the U.S. Port of Entry across from the Canadian or Mexican Port of Entry.
6. **STATE CODE:** State of the port of embarkation using the two-letter United States Postal Service (USPS) state code.
7. **CONSIGNOR'S STREET ADDRESS (Mailing Address):** Mailing address of the consignor.
8. **CONSIGNOR'S CITY:** City/Town of the consignor's mailing address.
9. **SEMEN:** Check if semen is being exported. Be certain to list the species in box 15.
10. **NO. DOSES OF SEMEN:** Number of semen doses being exported. If box 9 was not checked "YES", leave this blank.
11. **TRANSPORTATION CLASS:** Enter the number in the box for the type of transportation to be used from the point of embarkation loading for export. For example, if a horse is being transported in a truck to an airport so the animal can be exported on an airplane, the Transportation Class is "AIR".
12. **CONSIGNOR'S STATE:** State of consignor's mailing address.
13. **STATE CODE:** The two-letter United States Postal Service (USPS) state code from the state of the consignor's mailing address.
14. **ZIP CODE:** Zip code of the consignor's mailing address.

This information was developed by staff veterinarians at the CFSPH and approved by APHIS for use as training materials for the USDA APHIS National Veterinary Accreditation Program.



- 15. SPECIES:** A separate certificate must be used for each species.
- 16. CONSIGNEE'S NAME AND STREET ADDRESS:** Name and mailing address of consignee.
DESTINATION COUNTRY: Destination country name.
ENTER CODE: The two-letter destination country code if known, otherwise leave blank.
- 17. FARM ORIGIN:** Name, street address, city, two-letter USPS state code, and zip code of the premises where the animals were processed for the export, also called the origin premises. This origin premises may or may not be the owner or consignor.
- 18. INDIVIDUAL IDENTIFICATION:** (If more lines are needed – use VS Form 17-140A)
 - a. ID NO. OR DESCRIPTION:** ID requirements vary by species. Record all forms of ID including permanent brands, tattoos, and registration numbers. Color markings are part of equine and llama identification and need to be listed. For electronic (microchip) identification, the location of where the chip was placed should always be included. Also list the reader device since not all readers read all microchips.
 - b. AGE:** Indicate age and the unit of measure of each animal in years (y), months (m), weeks (w), or days (d). For young animals, the age in months, weeks, and days are commonly used as the unit of measure. For older animals, the age in years would commonly be recorded. For example, a 10 year old horse would be listed as 10y, or a 4 week old horse could be listed as 1m or 4w.
 - c. SEX:** Indicate the sex of the animal (M – Male, F – Female, NM – Neutered Male, NF – Neutered Female).
 - d. BREED:** Use breed codes located on back of form.
 - e. MODIFIED ACCREDITED AREA (TB):** Check the box if the animals originate from a TB Modified Accredited Area. (Check the status through the State Animal Health Official's Office of the state of origin).
 - f. DATE:** The date the TB test was completed (observation/palpation date). Make sure to also mark in the area above it, the appropriate box indicating whether the test was read at 48 HRS or 72 HRS.
 - g. CERTIFIED BRUCELLOSIS FREE AREA:** Check the box if the animals originate from a Certified Brucellosis Free Area. (Check the status through the State Animal Health Official's Office of the state of origin).
 - h. DATE:** Date the blood sample was drawn from the animal.
 - i. VAC:** Use official vaccinates "OV" or vaccination date when required by country of destination.

For the next titers (1/25, 1/50, 1/100), show the animal was negative by including an "N" in the box that corresponds to the highest negative titer required.

- j. 1/25:
- k. 1/50:
- l. 1/100:

NEGATIVE RESULTS OF OTHER TESTS:

DISEASE: Name of the disease being screened; use the disease name that is mentioned in the destination requirements. **TYPE TEST:** Name and type of test used to screen for the disease; use the test type that is mentioned in the destination requirements. If the destination did not specify the test type, use the test type the laboratory performed (AGID, PCR, ELISA, etc.).

- m. **DATE:** Date the sample was collected from the animal for the above test type.
- n. **DATE:** Date the sample was collected from the animal for the above test type.
- o. **DATE:** Date the sample was collected from the animal for the above test type.

- 19. DATE ENDORSED:** Date the federal veterinarian endorsed the certificate. This will be completed by the federal veterinarian.

- 20. NAME OF ISSUING VETERINARIAN:** Print last name, first name, and middle initial of the accredited veterinarian who is issuing (signing) this form.
- 21. STATUS:** As an accredited veterinarian, check the Accredited box.
- 22. TOTAL NO OF ANIMALS:** Total number of animals certified for export or donated semen. Include numbers from all attached VS Forms 17-140A.
- 23. SIGNATURE OF ENDORSING FEDERAL VETERINARIAN:** Signature of a federal veterinarian. In some instances, a USDA Official Veterinary Seal may be mandatory for the certificate to be complete.
- 24. NAME OF ENDORSING FEDERAL VET:** Printed name of the federal veterinarian signing box 23. This will be filled out by the federal veterinarian.
- 25. SIGNATURE OF ISSUING VETERINARIAN:** Signature of the veterinarian who is issuing this form. It must be the veterinarian whose name was printed in box 20.

If more space is needed when filling out VS Form 17-140, a continuation sheet (VS Form 17-140A) can be used.

VS Form 17-140A United States Origin Health Certificate - Continuation Sheet

Complete all boxes on the continuation sheet as completed in the main form.

NOTE: The Certificate number from VS Form 17-140 (Box 2) needs to be inserted in Box 2 of all continuation sheets (VS Form 17-140A). Each continuation sheet should be numbered ("Page No." in upper right corner box 3) as well as the total number of pages. If using three pages for the export, the two continuation sheets should be numbered "Page 2 of 3" and "Page 3 of 3".



General Office Forms

**United States
Department of
Agriculture**

Animal and Plant
Health Inspection
Service

Veterinary Services

Iowa District Office
Neal Smith Federal
Bldg,
210 Walnut St
R o o m 891
Des Moines IA
50309

Phone: 515-284-4140
Fax: 833-575-0006

FORM #	DESCRIPTION	QUANTITY
VS 6-22	TUBERCULOSIS TEST RECORD – 50/PKG.....	_____
VS 6-22B	TUBERCULOSIS TEST RECORD CONTINUATION – 50/PKG.....	_____
VS 1-27	INTERSTATE MOVEMENT OF REACTOR ANIMALS – 25/FORMS & ENVELOPES...	_____
VS 4-26	BRUCELLOSIS CALF HOOD VACCINATION RECORD (LONG) – 100/PKG.....	_____
VS 4-33	BRUCELLOSIS TEST RECORD – 50/PKG.....	_____
VS 4-33A	BRUCELLOSIS TEST RECORD CONTINUATION – 50/PKG.....	_____
VS 4-54	BRUCELLOSIS MARKET CATTLE TESTING PROGRAM – 100/PKG.....	_____
VS 10-11	EQUINE INFECTIOUS ANEMIA LABORATORY TEST REPORT - 50/PKG.....	_____

Seals/Shields

CUP SEALS..... _____

WIRES..... _____

BALL SEALS..... _____

"V" SHIELDS (VET. CLINIC MUST RETURN OLD SHIELD)..... _____

Reason for requesting V-Shield (new VMO; replacing old one; etc. If requesting to replace the old one, please send the damaged one back to us.

Reagents-TB is now ordered direct from NVSL

Jaci Weese
515-337-7181

Teresa Sigafosse-Grimm
515-337-7317
teresa.m.sigafosse@usda.gov

Or go to NVSL website to look at the **Reagent Catalog & Order form**
https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/lab-info-services/sa_reagents/ct_reagents

**Completed order
forms can be
faxed to
833-575-0006 or
emailed to
vs.iowa.admin@
usda.gov**

ACCREDITED VETERINARIAN: _____

ACCREDITATION NUMBER: _____

CLINIC NAME: _____

UPS ADDRESS: _____

CITY/STATE/ZIP: _____

PHONE (EMAIL ADDRESS optional): _____

Order Taken By: _____ Order Filled By: _____ Order Filled Date: _____

APHIS VS Form 10-11 (Coggins Form)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not 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 0579-0127. The time required to complete this information collection is estimated to average .083 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.						OMB Approved 0579-0127	
UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE						FORM SERIAL NUMBER AA 635950	
EQUINE INFECTIOUS ANEMIA TEST FORM							
COMPLETION OF ALL UNSHADED NUMBERED FIELDS IS REQUIRED FOR SUBMISSION, IF NONE WRITE "NONE" AND TYPE OR PRINT LEGIBLY.							
1. LABORATORY ACCESSION NUMBER (for laboratory use only)			2. DATE BLOOD DRAWN		3. TEST REQUESTED BY VETERINARIAN <input type="checkbox"/> ELISA <input type="checkbox"/> AGID		
4. REASON FOR TESTING <input type="checkbox"/> Interstate Movement <input type="checkbox"/> Within State Use/Annual <input type="checkbox"/> Change Ownership/Sale <input type="checkbox"/> International Import/Export <input type="checkbox"/> Illness/Clinical Suspect <input type="checkbox"/> Investigation/Exposure							
5. LOCATION OF EQUINE AT BLOOD DRAW (ranch, farm, stable, or market)				7. NAME AND ADDRESS OF OWNER			
5a. NAME				7a. NAME			
5b. PHYSICAL/STREET ADDRESS				7b. MAILING ADDRESS			
5c. CITY, STATE, ZIP CODE				7c. CITY, STATE, ZIP CODE			
5d. TELEPHONE NUMBER		6. COUNTY OF EQUINE AT BLOOD DRAW		7d. TELEPHONE NUMBER			
I CERTIFY I AM A CATEGORY II FEDERALLY ACCREDITED VETERINARIAN, AUTHORIZED IN THE STATE WHERE THE SAMPLE WAS OBTAINED, BY ME, FROM THE ANIMAL DESCRIBED BELOW.							
8. ACCREDITED VETERINARIAN		8b. NATIONAL ACCREDITATION NUMBER		8c. VETERINARIAN SIGNATURE		8d. SIGNATURE DATE	
8a. VETERINARIAN NAME		8e. PHYSICAL/STREET ADDRESS OF VETERINARIAN		8f. CITY, STATE, ZIP CODE		8g. TELEPHONE NUMBER	
9. Tube Number	10. Tag/Tattoo/Brand Number	11. Name of Animal	12. Color	13. Breed (or species if not a horse)	14. Age or DOB	15. Sex	M - Male Intact F - Female Intact G - Gelding FS - Female Spayed
16. MICROCHIP, BREED, OR REGISTRATION NUMBER							
SHOW ALL PERMANENT WHITE MARKINGS, BRANDS, TATTOOS, SCARS, AND WHORLS (marked with an "X")							
1 - Coronet, 2 - Pastern, 3 - Fetlock, 4 - Carpus, 5 - Hock							
REQUIRED: NARRATIVE DESCRIPTION OF PERMANENT WHITE MARKINGS, BRANDS, TATTOOS, SCARS, AND WHORLS. (If none write none) Suggested nomenclature includes Heel, Heels, Coronet(1); Half Pastern, Pastern(2); Fetlock(3); Half Canon, Canon, Carpus/Hock(4/5) above Carpus/Hock							
17. HEAD				18. NECK AND BODY (include coat color patterns, if any)			
19. LEFT FORELIMB				20. RIGHT FORELIMB			
21. LEFT HINDLIMB				22. RIGHT HINDLIMB			
FOR LABORATORY USE ONLY							
23. EIA LABORATORY NAME		24. DATE SAMPLE RECEIVED		25. DATE RESULTS REPORTED		26. OFFICIAL TEST RESULT <input type="checkbox"/> Negative <input type="checkbox"/> Positive	
23a. CITY		28. LABORATORY REMARKS		27. TEST TYPE USED <input type="checkbox"/> AGID <input type="checkbox"/> ELISA			
23b. STATE		29. SIGNATURE OF NVSL - APPROVED EIA TECHNICIAN		30. INTERIM RESULT REFERRED FOR CONFIRMATION <input type="checkbox"/>			
FALSIFICATION OF THIS FORM OR KNOWINGLY USING A FALSIFIED FORM IS A CRIMINAL OFFENSE AND MAY RESULT IN A FINE OF NOT MORE THAN \$10,000 OR IMPRISONMENT FOR NOT MORE THAN 5 YEARS OR BOTH (18 U.S.C. SECTION 1001).							

VS FORM 10-11
FEB 2018

Previous editions may be used.

PART 1 - VETERINARIAN/SUBMITTER

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
OFFICIAL VS 10-11 EQUINE INFECTIOUS ANEMIA TEST FORM

FORM SERIAL NUMBER

AC 0159559

COMPLETION OF FIELDS #2 - #24 IS REQUIRED. IF NONE: LINE THROUGH BOX FULLY OR WRITE "NONE".

1. ACCESSION NUMBER (For laboratory use only)

2. DATE BLOOD DRAWN

3. TEST REQUESTED BY VETERINARIAN

☐

ELISA

☐

AGID

4. REASON FOR TESTING

☐

Interstate
Movement

☐

Within State
Use/Annual

☐

Change
Ownership/Sale

☐

International
Import/Export

☐

Illness/Clinical
Suspect

☐

Investigation/Exposure

5. NAME AND MAILING ADDRESS OF OWNER

5a. NAME

7. CURRENT HOME PREMISES OF EQUINE (ranch, farm, stable, or market)

7a. NAME

5b. MAILING ADDRESS

7b. PHYSICAL/STREET ADDRESS

5c. CITY

5d. STATE

5e. ZIP CODE

7c. CITY

7d. STATE

7e. ZIP CODE

5f. OWNER TELEPHONE NUMBER

6. COUNTY OF CURRENT HOME PREMISES OF EQUINE

7f. PREMISES TELEPHONE NUMBER

I CERTIFY I AM A CATEGORY II, FEDERALLY ACCREDITED, VETERINARIAN, AUTHORIZED IN THE STATE WHERE THE SAMPLE WAS OBTAINED, BY ME, FROM THE ANIMAL DESCRIBED BELOW.

8a. VETERINARIAN NAME

8b. NATIONAL ACCREDITATION NUMBER

8c. STATE IN WHICH BLOOD SAMPLE WAS OBTAINED

8d. VETERINARIAN SIGNATURE

8e. SIGNATURE DATE

8f. MAILING ADDRESS OF VETERINARIAN

8g. CITY

8h. STATE

8i. ZIP CODE

8j. TELEPHONE NUMBER

9. TUBE #

10. NAME OF ANIMAL

11. COLOR

12. BREED OF HORSE (or Species of Equid)

13. SEX

☐ MALE INTACT

☐ FEMALE INTACT

☐ GELDING

☐ FEMALE SPAYED

14. AGE OR DOB

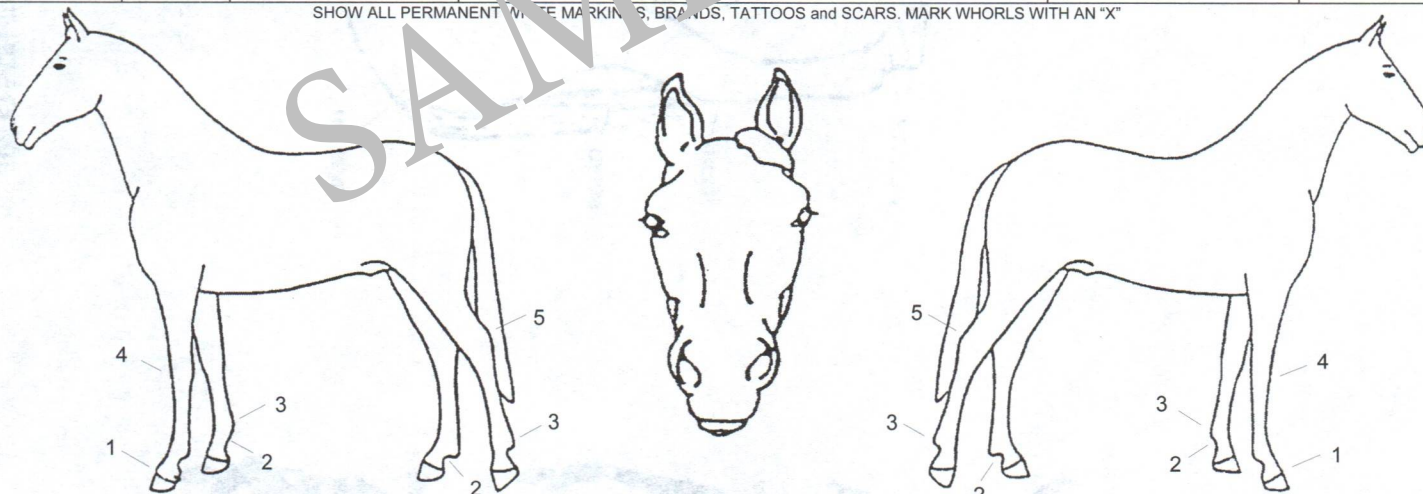
15. TAG #

16. TATTOO #

17. MICROCHIP #

18. BREED REGISTRATION #

SHOW ALL PERMANENT WHITE MARKINGS, BRANDS, TATTOOS and SCARS. MARK WHORLS WITH AN "X"



1 - Coronet, 2 - Pastern, 3 - Fetlock, 4 - Carpus, 5 - Hock

REQUIRED: NARRATIVE DESCRIPTION OF PERMANENT WHITE MARKINGS, BRANDS, TATTOOS, SCARS, AND WHORLS. (If none: line through box fully or write "none")

19. HEAD

20. NECK AND BODY (include coat color patterns if any)

21. LEFT FORELIMB

22. RIGHT FORELIMB

23. LEFT HINDLIMB

24. RIGHT HINDLIMB

The narrative description section must have a value noted in each field #19-24. NO FIELD CAN BE LEFT BLANK. If there is no applicable marking, write "none", "NA", or draw a hash mark through that field.

FOR LABORATORY USE ONLY

25. EIA LABORATORY NAME

26. DATE SAMPLE RECEIVED

27. DATE RESULTS REPORTED

28. OFFICIAL TEST RESULT

☐ NEGATIVE

☐ POSITIVE

29. TEST TYPE USED

☐ AGID

☐ ELISA

30. LABORATORY REMARKS

25a. CITY

25b. STATE

31. SIGNATURE OF NVSL - APPROVED EIA TECHNICIAN

32. INTERIM RESULT REFERRED FOR CONFIRMATION

☐

FALSIFICATION OF THIS FORM OR KNOWINGLY USING A FALSIFIED FORM IS A CRIMINAL OFFENSE AND MAY RESULT IN A FINE OF NOT MORE THAN \$10,000 OR IMPRISONMENT FOR NOT MORE THAN 5 YEARS OR BOTH (U.S.C. SECTION 1001).

VS Form 10-11 Instructions Sheet

(Completion of Fields 2 - 24 is required; if none, line through box fully or write "none")

Field 1: Accession Number *Leave blank.*

Field 2: Date Blood Drawn

Indicate the date the veterinarian obtained the sample from the animal. This is the official test date.

Field 3: Test Requested by Veterinarian

The veterinarian determines which test should be run by the laboratory - based on the reason for the testing.

Field 4: Reason for Testing

If more than one option applies, mark the most compelling reason for performing the test.

Interstate Movement = movement between States.

Within State Use/Annual = movement within a State (intrastate), shows/events, or any annual or routine testing.

Change Ownership/Sale = includes tests run for private sales, markets or auctions whether required by state law or otherwise.

International Import/Export = international movement into or out of the USA.

Illness/Clinical Suspect = diagnostic testing of sick animals.

Investigation/Exposure = official investigations by authorities.

Field(s) 5: Name & Mailing Address of Owner

May be a market or auction. This section was designed for use in a window envelope. For best results you should use ALL CAPS, dark ink, print clearly and follow USPS guidance.

Field 6: County of Current Home Premises of Equine

The county of the current home premises equine residence in Field 7.

Field(s) 7: Current Home Premises of Equine

Physical address of the current home premises or residence of the animal. This includes farms, stables or racetracks - where the animal normally lives. It may include a market location if the home premises is unknown. It should NOT include a temporary location such as a veterinary clinic. DO NOT use a Post Office Box.

Field 8a: Veterinarian Name

Name of veterinarian who drew sample. **DO NOT** enter a practice name.

Field 8b: Veterinarian National Accreditation Number

National Veterinary Accreditation Number of Cat II accredited veterinarian who drew the blood sample.

Field 8c: State in Which the Blood Sample Was Obtained

Use the 2 letter code for the State in which the blood sample was obtained.

Field 8d: Veterinarian Signature

Signature of the accredited veterinarian who drew the blood sample.

Field 8e: Signature Date The date the veterinarian signed the form.

Fields 8f, g, h, i, j: Mailing address & Phone Number of Veterinarian

Mailing address and phone number of veterinarian.

Field 9: Tube Number (#) If applicable, per accredited veterinarian.

Field 10: Name of Animal

If the animal does not have a name **enter NONE** however, a unique identifying number associated with the animal will be required in Field 16, 17 or 18.

Field 11: Color Enter coat or hair color(s).

Field 12: Breed of Horse (or species of equid)

Enter the horse's breed(s). If equid is not a horse enter the species. Ex: donkey, mule, hinny or zebra.

Field 13: Sex Check the box to indicate sex.

Field 14: Age or DOB

Record the animal's age (XX) in years (Y); use months (M) if less than one year (Example: **01Y** or **12M**) or indicate the date of birth: **MM/DD/YYYY**.

Field 15: Tag Number (#) any tag number used for ID. **If none enter NONE.**

Field 16: Tattoo Number (#) Enter tattoo number. **If none enter NONE.**

Field 17: Microchip Number (#)

Enter the microchip number or **NONE DETECTED**.

Field 18: Breed Registration Number (#) enter number, **NONE** or **UNKNOWN**

Silhouette/Line drawing

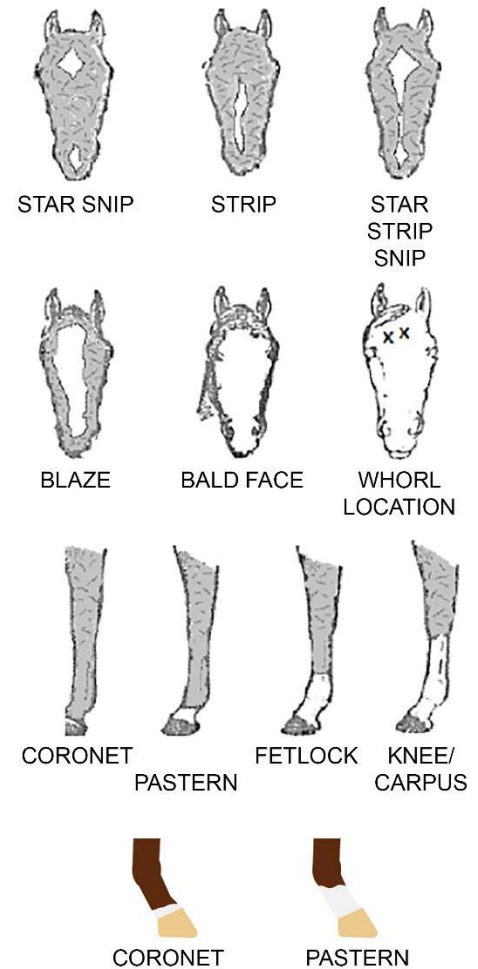
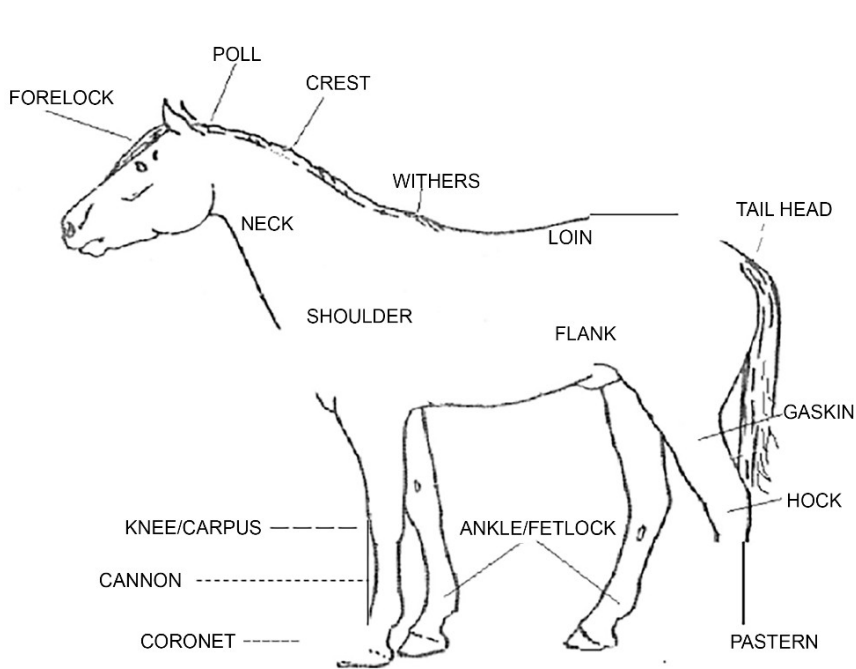
Instructions: This section, while not required, complements the required narrative descriptions in Fields 19 – 24. Show, draw or otherwise represent all permanent white markings, brands, tattoos, and scars. Mark whorls with an X. The animal should be uniquely identified. Non-descript animals require greater detail; use whorls and scars to properly identify the animal. Brands should be drawn.

Fields 19 - 24: Head, Neck & Body, Left Forelimb, Right Forelimb, Left Hindlimb, Right Hindlimb.

The narrative **description is required**; indicate all permanent white markings, brands, tattoos, scars, & whorls. Blank fields are not acceptable - **if none line through box fully or enter "NONE"**. The animal should be uniquely identified. Non-descript animals require greater detail; use whorls and scars to properly identify. For the head suggested nomenclature includes any combination of star, strip, snip, lip, chin, blaze, bald; modified by "connected" if applicable. For limb markings describe the most proximal extent of the white area. Suggested nomenclature includes none, heel, coronet, pastern, fetlock, cannon, carpus/hock, above carpus/hock.

Fields 25 - 32: *For Laboratory Use Only: Leave blank*

Equine Description Guide



In general, the more non-descriptive the animal, the more details required to uniquely and properly identify the animal

Describe, draw or indicate all whorls, scars, brands or marks.

On the limbs, describe, draw or indicate the most proximal anatomic extent of the white markings



Tuberculosis Overview

A Review for Accredited Veterinarians

As Category II accredited veterinarians, you play a critical role in detecting and preventing bovine tuberculosis. Please follow these testing guidelines.



1. Handling Tuberculin (PPD)

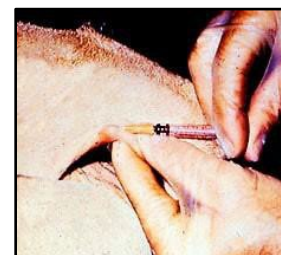
- Do not use tuberculin after the expiration date
- Store in the dark at 35-45°F; do not allow to freeze, and avoid exposure to sunlight (proteins will denature)
- Do not store dose amounts out of original amber-colored container for longer than 12 hours; if syringes are pre-filled, they should be used within a few hours
- Discard vials within 3 months of opening

2. Animal Identification (ID)

- Record the official identification of every animal tested (official ear tag), as well as any additional form of ID (e.g. bangle tags)
- Apply official ID to animal if none is present
- Breed, sex, approximate age in years of each animal tested must be recorded on the test record

3. Caudal Fold Test (CFT) Injection

- Palpate area before injecting; if lesion/thickening, pick another spot
- Use a 1 ml syringe with a 26 gauge, 3/8" long needle
- Inject 0.1 ml intra-dermally into the caudal fold; if you don't see a bleb the injection is not intradermal, re-inject the other caudal fold and note this in the test record
- It is recommended to use a new needle for each animal to minimize transmission, or appearance of transmission, of blood-borne infectious agents
- If you inject, you read (remember which side you injected the tuberculin)
- Do not vaccinate or treat cows on injection day, it may interfere with their response
- There is no meat or milk withdrawal time for tuberculin



4. Reading the Test

- Cattle & cervids: read the test at 72 hours post-injection \pm 6 hours
- All animals injected must be read, and the results recorded on official forms with all ID
- Visualize and palpate the injection site
- **ANY change in size/swelling is a positive response (check "suspect" box on form)**
- **Report any responders immediately to the Federal or State Animal Health Officials**, and provide a copy of the test records
- Explain the CFT response to your client and expect approximately a 1-3% false positive rate due of exposure to *M. avium* sub. *paratuberculosis*, *M. avium*, and other soil-borne *Mycobacterium*; response rates are monitored
- State/Federal regulatory staff must apply a Comparative Cervical test (CCT) on responders within 10 days of CFT injection (or wait 60 days), or collect blood for a gamma test (optimally within 3-7 days of CFT injection); all cohort cattle will remain under quarantine pending results



Mail white and green copies of all test records to the USDA APHIS VS Iowa Area Office:

USDA APHIS VS, Iowa Area Office 210 Walnut St., Rm 891, Des Moines, IA 50309

Tuberculosis Testing Information

Species	Dose & Type	Site	Read Test
Cattle	0.1ml PPD Bovis	Caudal Fold (CF)	72 hours
Horse		Not reliable	
Camelids	0.1ml PPD Bovis	Axillary Region	72 hours
Sheep, Goats	0.1ml PPD Bovis	Caudal Fold (CF)	72 hours
Swine	0.1ml PPD Bovis	Caudal Fold (CF), Vulvar Lips	48 hours
	0.1ml PPD Avian		48 hours
Poultry	0.1ml PPD Avian	Wattle	48 hours
Cats		Not reliable	
Other Ungulates	0.1ml PPD Bovis	Side of neck, eyelid, CF	72 hours
Cervidae**	0.1ml PPD Bovis	Side of Neck	72 hours

** Must receive training from USDA-APHIS-VS in order to conduct testing in these species**

Tuberculin and its Application

The tuberculins provided for the bovine TB eradication program are scientifically produced by the USDA according to very stringent criteria. To maintain the potency and high quality of these diagnostic agents, also ensuring they will provide accurate testing, they must be properly stored and handled.

1. Tuberculin loses potency when exposed to light and/or air. Do not draw tuberculin into plastic syringes or store in dose amounts for longer than 12 hours, as proteins may interact with the container material. Once opened, tuberculin remaining in vials may lose potency due to oxidation with the air in the container, so discard partially used vials of tuberculin within 3 months. Different sized bottles of tuberculin are available to match testing needs and minimize waste. Do not use expired tuberculin or tuberculin that has frozen. Tuberculin can be ordered from NVSL in Ames at 515-337-6200.
2. Several drugs and hormones (particularly live vaccine and corticosteroid drugs) depress the tuberculin response. The same is true of viral infections. Avoid testing animals that are diseased, and plan to give any vaccines or treatments the day the tuberculin test is read rather than on the day of injection. There is no meat or milk withdrawal time after using tuberculin.
3. The Caudal Fold Test (CFT) is based on a Type IV Delayed Hypersensitivity response to tuberculin. ***Tuberculin must be injected intradermally, not subcutaneously. Correct administration is verified by observance of a “bleb”.***
4. The timing of reading the delayed hypersensitivity response is important. In cattle or cervids, tests should be read at 72 ± 6 hours from the time of injection. If the test cannot be read within that time frame, you must wait 60 days to retest cattle, and 90 days to retest cervids.
5. The animals' genetic make-up affects the magnitude of the tuberculin response. Certain breeds or strains of cattle may respond differently, and tuberculin sensitivity is usually higher in females than in males.
6. The method of reading is also important. ***Each injection site must be palpated by the injecting veterinarian; visual inspection alone is inadequate, and responders will be missed.*** Differentiate other swellings, thickness, and dermal lesions from a tuberculin response; comparison with the opposite caudal fold can be helpful for small responses.
7. The magnitude of the response is ***not*** proportional to the level of infection; cattle infected with bovine tuberculosis may react very minimally or have a very large response to the CFT.
8. ***Exposure to avian, soil-borne, and other mycobacteria can cause a “false positive” CFT response rate of 1% to 3% of all animals tested.*** You should expect to see some responders.
9. Report any CFT response immediately to the Federal or State office for secondary testing. A Comparative Cervical Test (CCT) must be applied to responders within 10 days of the CFT injection, or we must wait 60 days to retest cattle and 90 days to retest cervids. Alternatively, blood for a gamma test is optimally drawn within 3-7 days of the CFT injection.
10. Educate your clients to provide you with advance notice (3 weeks) of their plans to ship cattle to allow complete diagnostic testing, which may include CCT tests. This will reduce the pressure on you to ignore a response to avoid delaying a cattle shipment.
11. You must be certified to perform the Single Cervical Tuberculin (CT) test in cervidae (deer, elk, moose) and Axillary test in Camelidae. This involves training in proper test procedures by a regulatory veterinarian. Upon certification, your name will be placed on a list of those approved to conduct these tests.

Tuberculin is now ordered direct from the NVSL.

[Request for Reagents or Supplies](#)

Email Completed forms to: NVSL_concerns@usda.gov

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES

COOPERATIVE STATE - FEDERAL TUBERCULOSIS
ERADICATION PROGRAM
TUBERCULOSIS TEST RECORD

ALL INCOMPLETE RECORDS WILL BE RETURNED FOR COMPLETION

STATE 1			HERD OWNER - LAST NAME, FIRST MI 3			Serial No.							
COUNTY 2	TWP	SEC	HERD OWNER COMPLETE ADDRESS			PREVIOUS TEST DATE	VET CODE	TOTAL	REA	SUS			
HERD NUMBER						CERTIFICATION FOR PAYMENT <input type="checkbox"/> STATE/FEDERAL EXPENSE <input type="checkbox"/> OWNER EXPENSE I certify that this test was made and read by me on each of the cattle identified below on the dates and with the results as entered in appropriate spaces, and that when payment is claimed at program expense in accordance with agreement number below, no payment has been or will be received from any other source.							
LESION	TEST	D-B									U		
COUNTY		TOWNSHIP OR DISTRICT		SECTION	FARM NUMBER	PRACTITIONER SIGNATURE 9 PRACTITIONER NAME (print) 9 INJECTION 11 OBSERVATION 12 TUBERCULIN SERIAL NUMBER							
REASON FOR TEST 4			COMPLETE HERD TEST OF ALL ELIGIBLE ANIMALS								8 SUMMARY		
AREA 1			RETEST 6								NEGATIVE		
HERD (RE)ACCREDIT 2			TRACING REG. KILL 7								SUSPECT		
MILK ORDINANCE 3			TRACING REACTORS 8								REACTOR		
SALE SHOW 4			TRACING EXPOSED 9			TOTAL			DATE 11 HOUR 11				
AFFECTED HERD 5			OTHER 10						DATE 12 HOUR 12				

1	OFFICIAL IDENTIFICATION NUMBER	AGE	BREED	SEX	RESULTS		1	OFFICIAL IDENTIFICATION NUMBER	AGE	BREED	SEX	RESULTS	
					SIZE	NRS						SIZE	NRS
	1. 13	14	15	16		17		16.					
	2.							17.					
	3.							18.					
	4.							19.					
	5.							20.					
	6.							21.					
	7.							22.					
	8.							23.					
	9.							24.					
	10.							25.					
	11.							26.					
	12.							27.					
	13.							28.					
	14.							29.					
	15.							30.					

RT - Retag NA - Natural Addition PA - Purchased Addition	N - Negative S - Suspect R - Reactor	I hereby acknowledge receiving a copy of this record which I have examined and find correct. OWNER SIGNATURE 18	DATE	THIS AUTHORIZATION TO TEST EXPIRES:
--	--	---	-------------	-------------------------------------

Completing Tuberculosis Test Records

All test charts must be completed **legibly in their entirety** and will reflect the true status as determined by the testing veterinarian. If an item is not applicable, mark an “NA” or a dash indicating that it has been reviewed.

1. **STATE:** Iowa, must be abbreviated “IA”.
2. **COUNTY:** Name of county where animals are located.
3. **HERD OWNER’S NAME:** Legal name of owner should be entered in this block, last name first. If a ranch/dairy name, follow it with a contact person and physical location of the animals, complete address including zip code. If a livestock market, put name and address of the market in box and put the owner’s name above.
4. **REASON FOR TEST:** Place an “X” in the appropriate box. For Sale or Show, please circle which one it is. If Movement or any other reason not specified, check “OTHER” and write the reason in the box.
5. **COMPLETE HERD TEST:** If the whole herd was tested, check YES and give the number of test eligible animals in the herd.
6. **KIND OF HERD:** Indicate the kind of herd.
7. **METHOD OF TEST:** Place an “X” in the appropriate box. Alternate sites should be indicated.
8. **SUMMARY:** Indicate the number of negatives, suspects and the total number tested.
9. **PRACTITIONER’ NAME and SIGNATURE:** Always sign the test record and print your name below your signature.
10. **AGREE CODE:** *Fill in your IA Federal Accreditation Number or your State License Number. The IA Veterinary License Number is preferred.*
11. **INJECTION/DATE/HOUR:** Initials of veterinarian who injects the animals, date and hour of the test.
12. **OBSERVATION/DATE/HOUR:** Initials of the veterinarian who observes the test results, date and time. For cattle and cervids, the observation should be completed 72 hours (+/- 6) following injection. It **MUST** be the same veterinarian who injects and observes.
13. **IDENTIFICATION:** This must be an OFFICIAL identification, usually a 9-digit alphanumeric USDA ear tag which is unique to each animal. An official vaccination tag is acceptable in place of a silver USDA tag. An animal carrying an official tag (even if from other states) **should not be retagged** nor shall the ear tag be removed. In instances where more than one official tag is present, all tags must be recorded. If using registration tattoos, give the entire tattoo (must match registration papers, which may be requested), along with the brand on the animal, and their location. Bangle tags are not considered official identification but should be noted along with the official ID. Please indicate if the animal has been re- tagged by putting RT in the space before the identification number. Should you have any questions regarding identification, please contact the VS-IA Area Office.
14. **AGE:** Note the age of the animal in years (Y) or months (M).
15. **BREED:** Enter the 2-letter breed abbreviation. A list of standardized breed codes is provided. For example, the code for Angus is AG, not AN. If animal is a crossbreed/mixed, the code is XX. Black angus is not a standard breed (and as such, the code BA is for Barzona). “Beef” is also not a breed.
16. **SEX:** Self-explanatory. If castrated, neutered, etc. please note the codes to be used (e.g. castrated male is ST for steer).
17. **RESULTS:** N = negative or S = suspect.
18. **OWNER SIGNATURE:** The owner or his agent should sign and date the record as of the date of observation.

[Fillable VS 6-22 Tuberculosis Test Record](#)

Cervid TB Testing and Certification

Cervid TB Testing Information from USDA-APHIS

To perform tuberculosis testing in cervids, accredited veterinarians (AV) must complete additional training to become a Designated Accredited Veterinarian (DAV). Cervid TB testing can be accomplished in one of two ways: an accredited veterinarian can perform a Single Cervical Test (SCT) or draw blood for the Dual Path Platform (DPP) test. Training for the SCT must be “hands on” with a regulatory veterinarian, either a State District Veterinarian or a USDA Veterinary Medical Officer. This training can be done when a producer requests testing, so they do not have to present animals for training purposes only. When the accredited veterinarian has completed the SCT training, they will be certified for the SCT and eligible to perform that test.



Additional training is also required to perform the DPP test. No “hands on training” is required, but there are educational documents concerning the DPP test that need to be read (see below).

Once the required documents have been read, the AV needs to contact their local State District Veterinarian (SDV) or Federal Veterinary Medical Officer (VMO), discuss the program, sign the DAV application, and email it to their SDV/VMO. Once the application is on file, the DAV will be able to submit blood samples to NVSL for TB testing in cervids.

Designated Accredited Veterinarians are only allowed to perform the testing that they have completed the training for and have been certified in. It is not required, however, that veterinarians are trained in both procedures if they will only be performing one of the testing methods routinely.

At this time, NVSL is requesting that if you are submitting more than 30 blood samples for DPP testing, you prepare an Excel spreadsheet with the animal information and official ID. Complete the top part of the [VS Form 10-4](#) as usual; in the sample ID section type in “see attached list”. This can either be submitted in the form of an Excel file, Word file, or submitting fully electronically through the [NCAH Portal](#). A 10-4 must still accompany all submissions. If sending an electronic file, please send ahead of the sample shipment to VS.DB.NVSL.DBRL.Sero.Mgmt@usda.gov.

Please contact USDA APHIS VS office at (515) 284-4140 with questions.

DPP Training Documents

[Cervid DPP Frequently Asked Questions](#)

[Cervid TB Diagnostics](#)

[VS Guidance Document 6701.4 DPP Testing](#)

[Dual Path Platform \(DPP\) Submission Policy](#)

[Application for Designated Accredited Veterinarian \(DAV\)](#)

Tuberculosis Accreditation Uniform Methods & Rules

Because the regulations are currently evolving and changing at a rapid pace, including excerpts would be outdated shortly after they were included. Therefore, it has been decided to NOT include excerpts from the UMR at this time. However, the links below provide access to the Tuberculosis UMRs for various species and should be referred to if you need specifics on Tuberculosis rules and methodology.

The location of the actual regulations would be the 9CFR. The CFR also contains the details for many other regulations that Accredited Veterinarians must adhere to. Therefore, a link to that is also included below.

[2005 Bovine TB UMR \(Cervids not included\)](#)

[1999 Bovine TB UMR \(Cervid section valid\)](#)

[9 CFR Part 77: Tuberculosis](#)



Brucellosis Program

Overview

- There are cattle and swine brucellosis programs.
- Most states have Brucellosis Free status, but statuses change. Check USDA website for current statuses.
- Methods of brucellosis surveillance:
 - Slaughter
 - Diagnostic
 - BRT (Brucellosis Ring Test)
 - First Point of Contact



Role of Private Practitioner in the Brucellosis Program

1. Aging cattle for vaccination or test eligibility.
2. Vaccination (**Vaccination between ages 4 and 12 months-Iowa law**)
3. Official Identification at the time of vaccination.
 - a. Tattooing (Vaccination Tattoo) Right ear, e.g. RV4
 - b. Tagging with official Identification Right ear; RFID tag
 - Brucellosis tags are orange
 - They are to be used **ONLY** for brucellosis vaccinations, **NOT** for other ID
 - V means the animal is a brucellosis vaccinee
4. Adult vaccinations are only to be administered with **PRIOR** approval by State Veterinarian.
5. Completing and distributing official forms - remember it is the accredited veterinarian's responsibility to make sure that the correct forms are distributed.

R 2

Common Mistakes by Veterinarians

1. Overage Vaccination
 - Animals that vaccinated about the required age have a propensity to test positive
 - Difficulty distinguishing them from true positives
2. Improper Identification of Animals
 - Improperly tagged and / or failure to record official identification on test or vaccination forms.
 - Official tests require animals to be officially identified, also remember to record **ALL** forms of identification present in the animal.
3. Allowing technicians to vaccinate and/or bleed animals without direct supervision of the accredited veterinarian.
4. Late or Improper distribution of forms. Brucellosis vaccination forms (VS Form 4-24 and VS Form 4-26) are required to be sent to the State office within 30 days after vaccination.
5. Mishandling vaccines
 - Veterinarians need to handle the vaccine properly to maintain efficacy, and the zoonotic risk associated with self-injection (RB 51 vaccine)
6. Controlling possession of Tattoo Shield and Vaccination Tags

Brucellosis Uniform Methods & Rules

RB51 Vaccine

Brucellosis Testing Information

1. Preferably, blood samples should be collected in a serum separator vacutainer tube or a plastic 5cc microbleeder tube.
2. Write your Agreement Code and a sequential number corresponding to each sample tube on the VS Form 4-33 (Brucellosis Test Record). Label tubes on the collar (wipe first!) with a Sharpie marker to avoid accidental erasure.
3. The blood samples should be allowed to clot at room temperature; AVOID heat and cold extremes and direct sunlight. After clotting, place samples on the top shelf of a refrigerator. **DO NOT FREEZE!**
4. All blood samples should be submitted to a commercial diagnostic laboratory (see examples on the laboratory list 5-2).
5. OVERNIGHT samples to ensure arrival at the laboratory the next working day. If you collect blood samples on a Friday or Saturday, refrigerate them over the weekend and overnight on Monday. If samples are allowed to sit 2-3 days in the heat or extreme cold they may arrive hemolyzed and will be useless.
6. A VS Form 4-33 (Brucellosis Test Record) must be used for all field testing.
7. No unofficial card or CITE tests are to be done in the field.

VS FORM 4-33
JUNE 2014

Completing Brucellosis Test Records

All test charts must be completed **legibly in their entirety** and will reflect the true status as determined by the testing veterinarian. If an item is not applicable, mark an “NA” or a dash indicating that it has been reviewed.

1. **STATE:** Iowa, may be abbreviated IA.
2. **COUNTY:** Name of county where animals are located.
3. **HERD OWNER’S NAME:** Legal name of owner should be entered in this block, last name first. If a ranch/dairy name, follow it with a contact person and physical location of the animals, complete address including zip code. If a livestock market, put name and address of the market in box and put the owner’s name above.
4. **REASON FOR TEST:** Place an “X” in the appropriate box. For Sale or Show, please circle which one it is. If movement or any other reason not specified, check “Other” and write the reason in the box.
5. **COMPLETE HERD TEST:** If the whole herd was tested, check YES and give the number of test eligible animals in the herd.
6. **KIND OF HERD:** Indicate the kind of herd.
7. **SUMMARY:** Indicate the number of negatives, suspects and the total number tested.
8. **CERTIFICATION FOR PAYMENT:** Always check private, unless contracted by the State.
9. **PRACTITIONER’S SIGNATURE and ADDRESS:** Sign your name legibly. Because there is no room for your printed name on this form, ***your signature must be legible***. Indicate your mailing address.
10. **AGREE CODE:** Federal Accreditation Code.
11. **DATE BLED:** Enter the date the animals were bled.
12. **TUBE NUMBER:** Use consecutive numbers. Do not duplicate numbers of samples mailed to the laboratory on the same day. Write the number and your vet accreditation code on the top of each blood tube.
13. **COLUMN “2”:** Indicate in this column if the animal has been re-tagged (RT), is a natural addition (NA), purchased addition (PA), or aborter (AB). The codes are located at the bottom of the column.

- 14. IDENTIFICATION NUMBER:** This must be an OFFICIAL identification, usually a 9-digit alphanumeric USDA ear tag which is unique to each animal. An official vaccination tag is acceptable in place of a silver USDA tag. An animal carrying an official tag (even if from other states) **shall not** be retagged nor shall the ear tag be removed. In instances where more than one official tag is present, all tags shall be recorded.
Currently RFID identification tags listed on a separate attachment must have a copy attached to each carbon copy of the Brucellosis forms.
- 15. VACCINATION TATTOO:** Enter as shown in the animal's ear. Record all legible characters.
- 16. AGE:** Note the age of the animal in years (Y) or months (M).
- 17. BREED:** Enter the breed abbreviation. A list of standardized breed codes is provided. For example, the code for Angus is AG, not AN. If animal is a crossbreed/mixed, the code is XX. Black angus is not a standard breed (and as such, the code BA is for Barzona).
- 18. SEX:** Female (F) or male (M). Steers are **not** tested.
- 19. TEST INTERPRETATION:** N = negative, S = suspect, or R = reactor
- 20. REMARKS AND ADDITIONAL INFORMATION:** Additional info and/or other pertinent data. This includes plastic ear tags and neck chains. Always correlate these with a USDA silver ear tag. With commercial tags, show the type and color.
- 21. REACTOR TAG NUMBER:** Reserved for reactor tag placed in the left ear of a brucellosis infected animal.

[Fillable Brucellosis Test Record](#)

VS Form 4-24 Brucellosis Vaccination Record

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not 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 0579-0047. The time required to complete this information collection is estimated to average .082 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.										OMB APPROVED 0579-0047 Exp. 9/30/2022			
STATE <div style="color: red; font-size: 1.5em;">1</div>		ALL VACCINATIONS MUST BE PROMPTLY REPORTED COOPERATIVE STATE-FEDERAL BRUCELLOSIS ERADICATION PROGRAM						UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE VETERINARY SERVICES					
COUNTY <div style="color: red; font-size: 1.5em;">2</div>		CODE		BRUCELLOSIS VACCINATION RECORD									
HERD NUMBER		HERD OWNER (LAST NAME, FIRST NAME, MI) <div style="color: red; font-size: 1.5em;">3</div>						VACCINE MFG AND STRAIN <div style="color: red; font-size: 1.5em;">4</div>		DOSAGE <input type="checkbox"/> FULL <input type="checkbox"/> REDUCED		<div style="color: red; font-size: 1.5em;">7</div>	
PREMISES ID NUMBER		ROUTE-STREET-ROAD						SERIAL NUMBER/EXPIRATION DATE <div style="color: red; font-size: 1.5em;">5 & 6</div>		VACCINATION TATTOO <div style="color: red; font-size: 1.5em;">8</div>			
KIND OF HERD <input type="checkbox"/> DAIRY <input type="checkbox"/> BEEF <input type="checkbox"/> BISON		POST OFFICE		STATE		ZIP CODE		CERTIFICATION FOR PAYMENT <input type="checkbox"/> FEDERAL EMPLOYEE <input type="checkbox"/> FEE BASIS (Federal) <input type="checkbox"/> STATE COUNTY <input type="checkbox"/> PRIVATE (Owner's Expense)					
REMARKS		<div style="color: red; font-size: 1.5em;">10</div> CV AV <input type="checkbox"/> <input type="checkbox"/>		GPS COORDINATES						I CERTIFY THAT: (1) I have vaccinated with an approved vaccine; officially tattooed and eartagged, or otherwise officially, individually identified all animals listed hereon as prescribed by the Brucellosis UM and R, and recorded all information as prescribed by State regulations; and (2) when payment is claimed at the program's expense in accordance with the agreement number below, no payment has been or will be received from any other source. <div style="color: red; font-size: 1.5em;">11</div>			
NO.	IDENTIFICATION NUMBER	AGE Yr.(s)/Mo.(s)	BREED	SEX	P/B GRADE	* TATTOO							
1	<div style="color: red; font-size: 1.5em;">16</div>	<div style="color: red; font-size: 1.5em;">17</div>	<div style="color: red; font-size: 1.5em;">18</div>	<div style="color: red; font-size: 1.5em;">19</div>	<div style="color: red; font-size: 1.5em;">20</div>	<div style="color: red; font-size: 1.5em;">21</div>	Signature <div style="color: red; font-size: 1.5em;">12</div>		Date of Vaccination <div style="color: red; font-size: 1.5em;">13</div>		Agree Code <div style="color: red; font-size: 1.5em;">14</div>		
2							CERTIFICATION OF OWNER OR WITNESS I CERTIFY THAT the animals listed hereon were vaccinated and identified for the above named owner.						
3							Signature <div style="color: red; font-size: 1.5em;">15</div>				Date		
4							CERTIFICATION FOR RE-ESTABLISHING VACCINATION STATUS * <input type="checkbox"/> Indicate tattoo of animals previously vaccinated in appropriate column.						
5							I CERTIFY THAT I have personally examined the animal(s) noted hereon, and have read the official tattoo(s), and have retagged them as shown.						
6							Signature				Date		
7							NO.	IDENTIFICATION NUMBER	AGE Yr.(s)/Mo.(s)	BREED	SEX	P/B GRADE	* TATTOO
8							21						
9							22						
10							23						
11							24						
12							25						
13							26						
14							27						
15							28						
16							29						
17							30						
18							31						
19							32						
20							33						

 VS FORM 4-26
 JUN 2014

Completing Brucellosis Vaccination Records

All test charts must be completed **legibly in their entirety** and will reflect the true status as determined by the testing veterinarian. If an item is not applicable, mark an “NA” or a dash indicating that it has been reviewed.

1. **STATE:** Iowa can be abbreviated as IA.
2. **COUNTY:** Name of county in which tested animals are located.
3. **HERD OWNER:** Legal name of owner should be entered in this block, last name first. If a ranch/dairy name, follow it with a contact person and physical location of the animals, complete address including zip code.
4. **VACCINE USED:** This will be RB-51, unless permission to use Strain 19 has been obtained.
5. **EXPIRATION DATE:** This is the expiration date of the vial of vaccine being used.
6. **SERIAL NUMBER:** This is the serial number from the vial of vaccine being used.
7. **DOSAGE:** Mark the appropriate dosage being used, full or reduced.
8. **VACCINATION TATTOO:** Place the tattoo being applied to the animals in this block, it should read: type of vaccine {R}, shield {V} and last number of the calendar year in which the vaccine is administered [0-9], e.g. RV1 for 2011.
9. **KIND OF HERD:** Indicate the kind of herd; Dairy, Beef, or Mixed.
10. **CV or AV:** CV is for calfhood vaccinate, AV is for adult vaccinate. Adult vaccination is only to be administered with prior approval of the State Veterinarian and the AVIC.
11. **CERTIFICATION FOR PAYMENT:** Always check private, unless contracted by the State.
12. **SIGNATURE:** Sign your name legibly. Because there is no room for your printed name on this form, ***your signature must be legible.***
13. **DATE OF VACCINATION:** Enter the date the animals were vaccinated.
14. **AGREE CODE:** Federal Accreditation Number.
15. **CERTIFICATION OF OWNER OR WITNESS:** The owner or designated agent must sign and date the vaccination record.
16. **IDENTIFICATION NUMBER:** Place the official ear tag number (the vaccination tag number) in this block. If using registration tattoos, give the entire tattoo (must match registration papers, which may be requested), along with the brand on the animal, and their location.
17. **AGE:** Note the age of the animal in years (Y) or months (M).
18. **BREED:** Enter the breed abbreviation. A list of standardized breed codes is provided. For example, the code for Angus is AG, not AN. If animal is a crossbreed/mixed, the code is XX. Black Angus is not a standard breed (and as such, the code BA is for Barzona).
19. **SEX:** Enter F. The only official calfhood vaccinates are female.
20. **P/B-GRADE:** Mark this block if the animals are purebred (registered) or grade calves.
21. ***TATTOO:** If you are retagging animals previously vaccinated and tattooed, show the existing tattoo. Sign and date the “Certification for Re-Establishing Vaccination Status” block.

[Fillable VS Form 4-26 Brucellosis Vaccination Records](#)

Brucellosis Accreditation Uniform Methods & Rules

Because the regulations are currently evolving and changing at a rapid pace, including excerpts would be outdated shortly after they were included. Therefore, it has been decided to NOT include excerpts from the UMR at this time. However, the links below provide access to the Brucellosis UMRs for various species and should be referred to if you need specifics on Brucellosis rules and methodology. The location of the actual regulations would be the 9CFR. The



CFR also contains the details for many other regulations that Accredited Veterinarians must adhere to. Therefore, a link to that is also included below.

[2003 Bovine Brucellosis UMR](#)

[2003 Cervid Brucellosis UMR](#)

[1998 Swine Brucellosis UMR](#)



Iowa Scrapie Program

History

Scrapie is a Transmissible Spongiform Encephalopathy of sheep and goats that is transmitted at the time of lambing or kidding via exposure to placenta and birth products. It is a non-zoonotic, fatal prion disease of sheep and goats. The National Scrapie Eradication Program was started in November 2001 with the goal of eradicating Scrapie in the United States. The US and Iowa are making progress toward this goal. There are several factors essential to success of the NSEP and they are detailed below.

Identification

A primary component of the Scrapie program is having all sexually intact sheep and goats identified, and therefore traceable to their flock of birth, and subsequent flocks where lambing/kidding could have occurred. This is accomplished by requiring that all sexually intact sheep and goats are identified before, or upon departure from their flock of birth. In Iowa, sheep are required to have Scrapie tags and goats are required to have Scrapie tags or in some cases, USDA approved Scrapie tattoos before leaving their flocks. The program also relies on producer and market/dealer records, and hence record keeping requirements are also specified. Sheep and goat producers, markets, and dealers can call 1-866-USDA-TAG for information about getting Scrapie tags. Sheep and goat producers will need to call the same number to get a Scrapie Flock ID number. For more information visit the [IDALS Animal Industry Bureau](#).



Regulatory Scrapie Slaughter Surveillance (RSSS)

RSSS is a slaughter surveillance program targeting adult sheep and goats where adult sheep or goats are sampled at slaughter and samples are tested for Scrapie. This has been our primary method for identifying Scrapie infected flocks/herds.

On Farm Testing

As we get further along in the eradication program, we will depend more and more on producers and veterinarians to report sheep and/or goats that have clinical signs resembling Scrapie to find the last remaining cases. When suspect sheep or goats are reported, USDA or IDALS (Iowa Department of Agriculture and Land Stewardship) veterinarians collect samples from the suspect animals.

Flock Clean-up Plans

USDA and/or IDALS veterinarians are responsible for working with owners of infected flocks to complete Scrapie flock clean-up plans. This usually involves genetic testing to identify Scrapie susceptible sheep or goats, indemnification of the sheep and/or goats (if funds are available), euthanasia and sampling of susceptible animals, cleaning and disinfection of birthing areas, and follow-up inspections.

Scrapie Genetic Resistance Testing

Practitioners may be called upon by their clients to do genetic testing for Scrapie to determine an animal's genotype. When you collect samples for genotyping, be sure to review the guidelines so that the test meets the requirements for an official test under USDA policy. More information on Scrapie-resistance genetics in [sheep](#) and [goats](#) can be found on the USDA National Scrapie Eradication Program Website.

For more information on the Iowa Scrapie Program visit the [Scrapie pages](#) at the IDALS website!

[2019 National Scrapie Eradication Program Standards](#)

Genetics of Scrapie Resistance for Rams

(Genetics review for sheep producers)

The primary gene that determines whether an animal is **susceptible** to classical Scrapie (can easily get Scrapie), or whether it is **resistant** (almost never becomes infected with Scrapie) is a gene located at **codon 171** that consists of a pair of factors usually designated as “R” and “Q”. “R” is the gene most resistant to Scrapie in the United States, and “Q” is most susceptible. So an animal that is “RR” is very resistant, and there have been no known cases of classical Scrapie in “RR” sheep in the United States. An animal that is “QQ” is the most susceptible to Scrapie, and almost all known cases of classical Scrapie have been in “QQ” sheep. Sheep that are “QR” are usually resistant to Scrapie; there have only been a few known cases of Scrapie in “QR” sheep in the U.S. (with these few Scrapie-infected “QR” animals, another genetic factor seems to come into play, located at codon 136.)

When it comes to rams used for breeding, we need to think beyond genetics that will protect the ram itself from getting Scrapie. We need to think of what “genotype” will pass on the most protection to the flock. A common misconception is that if a ram has one “R” then he’s good for breeding with respect to Scrapie. In actuality, while the ram may be protected from getting Scrapie, many of his offspring will not be! Using only “RR” rams for breeding will produce offspring that are resistant to Scrapie.

	Ram			Ram			Ram		
	Q		R	Q		R	R		R
Ewe									
Q	QQ		QR	Q	QQ		QR	Q	QR
R	QR		RR	Q	QQ		QR	Q	QR

If you’ve ever studied basic genetics in school, then you probably remember these quadrants:

In the first example, the ewe and the ram are both “QR”. The square shows all the possible outcomes of the offspring: 50% will be “QR”, 25% will be “RR”, and 25% will be “QQ”. This means that even with parents that are usually resistant to Scrapie, one quarter of the offspring born to this pairing would be susceptible to Scrapie.

In the second case, using the same “QR” ram on a ewe that is “QQ”, it’s even worse, with half of the offspring being “QQ”.

But in the third case, using an “RR” ram, it is impossible to get any “QQ” offspring, even out of a “QQ” ewe. This is how you can “Scrapie-proof” your flock if you are saving back your own replacement ewes; by using only RR rams. Over time as the old “QQ’s” are culled and home-raised replacements are “QR” or “RR”, your chances of having a positive Scrapie diagnosis in your flock shrinks down to zero. If you buy replacements, look for a flock that uses only “RR” rams or only purchase QR or RR replacement females.

Remember that Scrapie is most commonly spread by infected female animals at or soon after lambing or aborting, via the afterbirth and fluids. Scrapie infected ewes bred to an “RR” ram and carrying “QR” lamb(s) will not have the Scrapie Prion in the afterbirth or birth fluids. So, it is possible to limit the spread of Scrapie even in infected ewes by exclusively breeding with “RR” rams.

Official Scrapie Resistance Genotype Testing

Are you getting “Official” Scrapie Resistance Genotype tests? Many labs are now offering Scrapie resistance genotype testing (if you are not familiar with Scrapie resistance genotype testing, please see the Iowa Department of Agriculture and Land Stewardship website’s scrapie pages at the [IDALS Iowa Scrapie Program](#) webpage.



Many producers are taking advantage of the availability of this testing to be able to choose sheep that are resistant to scrapie.

Requirements for an Official Test: An official test is one that is recognized by USDA (sheep only):

- 1.) The sample must have been collected by an accredited veterinarian.
- 2.) The sample must be submitted to the lab with an official form called a “5-29” (the veterinarian can get these from the Iowa USDA APHIS VS Federal Office, phone (515) 284-4140). These special forms are numbered, and the test results will be linked to that number in the USDA database.
- 3.) The animal being tested must have an official Scrapie tag in place when the sample is taken, preferable from the flock where she/he was born, and the veterinarian must record this complete ID number on the 5-29. It is recommended that any other identification on the animal is also recorded. If the flock of origin ID is no longer in the animal’s ear and you replace it with your own official ID, be sure to keep a record to show what ID was in the animal and what ID you replaced it with.
- 4.) The blood must be sent to a USDA Approved Lab. These are labs regularly monitored by USDA for accuracy.

A list of approved labs can be found on [the USDA scrapie website](#). The listings change periodically, so always check the website before submitting a sample.

Why are official tests important? Most labs provide reliable results, and in most instances, when you want to know your sheep’s genotype for your own selection purposes, sending a sample in on your own can make sense (and many of the Approved Labs accept private samples from producers). Official tests are particularly important with respect to the state/federal Scrapie eradication program. When a ewe which originated in a flock that is later found infected with Scrapie is traced to your flock (you purchased the ewe), and this animal is no longer available for testing either due to death or sale, an official test on record for this animal can save you from the need to do further testing within your flock to rule out the likelihood of Scrapie exposure. In these instances there is a concern that this ewe could have spread Scrapie in your flock. If the ewe were still there, then this possibility can be ruled out by testing the ewe. But since the animal is missing, other sheep in your flock must be tested, and some may even be indemnified and sampled at slaughter in order to look for Scrapie infection. In some cases, when these animals are too young to test, they may have their movement restricted until a later date. This process can be lengthy and frustrating. When a ewe was purchased and is no longer available to test, a previous “official” genotype Scrapie resistance test can resolve this issue if the ewe tested “QR” or “RR” (if she tested “QQ”, or in very rare cases QRAV then further diagnostic testing within the flock would still be required).

Bottom Line: Official Scrapie resistance genotype testing is recommended for all purchased sheep that you intend to use for breeding. When sheep are purchased and the genotype results are provided, it may be difficult to verify whether the test was an official test. Retesting of these animals is recommended.

If you have questions or need clarification, please feel free to contact Dr. Bailey Goos with the USDA at 515-350-6922 or Dr. Greg Schmitt with the Iowa Dept. of Agriculture at 515-669-5633. Your state or federal district veterinarian can also provide information on this subject.

VS Form 5-29 Scrapie Test Record

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 0579-0101. The time required to complete this information collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

STATE 1	ALL INCOMPLETE RECORDS WILL BE RETURNED FOR COMPLETION COOPERATIVE STATE - FEDERAL SCRAPIE CONTROL PROGRAM					FORM APPROVED OMB NO. 0579-0101 A REFERRAL NO.				
SCRAPIE TEST RECORD										
COUNTY OF OWNER 2	FLOCK OWNER'S NAME - LAST 3	FIRST 3	MI	PREVIOUS TEST DATE	PERSON ID (VETERINARIAN/SNGD)	TOTAL # OF SAMPLES 12				
FLOCK ID 4	FLOCK OWNER'S COMPLETE ADDRESS 3			CERTIFICATION FOR PAYMENT <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> State/Federal Expense <input type="checkbox"/> Owner's Expense 13 I certify: That this test was made by me on the animals identified below on the dates as entered in appropriate spaces. That when payment is claimed at program expense in accordance with agreement number below, no payment has been or will be received from any other source.						
COUNTY OF FLOCK 5	FLOCK OWNER'S TELEPHONE NUMBER 3	SEC.	FARM NO.							
7 REASON FOR TEST		6 COMPLETE FLOCK TEST OF ALL ELIGIBLE ANIMALS: <input type="checkbox"/> YES <input type="checkbox"/> NO NO. OF ANIMALS IN FLOCK _____			VETERINARIAN'S SIGNATURE 11					
SURVEILLANCE 1	RETEST 6	NO. OF ANIMALS IN FLOCK _____ <input type="checkbox"/> SHEEP 8 KIND OF FLOCK <input type="checkbox"/> GOAT <input type="checkbox"/> OTHER _____ <input type="checkbox"/> MIXED			TELEPHONE NO 11					
FLOCK (RE) CERTIFICATION 2	INFECTED OR SOURCE RSSS POS. 7	LAB TURN AROUND TIME <input type="checkbox"/> 5 DAY TURNAROUND 9 <input type="checkbox"/> 10 DAY TURNAROUND			VETERINARIAN'S NAME (Please print) 11					
HIGH RISK TRACE TO FLOCK 3	INFECTED OR SOURCE (NOT RSSS) 8	TEST TYPE <input type="checkbox"/> 171 CODON ONLY 10 <input type="checkbox"/> 171/136 CODON <input type="checkbox"/> 136 CODON ONLY <input type="checkbox"/> 171/136/154 CODON <input type="checkbox"/> THIRD EYELID (TE) <input type="checkbox"/> OTHER _____			VETERINARIAN'S ADDRESS 11					
OWNER'S REQUEST 4	MISSING EXPOSED EWE (ME) 9	FAX NO. OR E-MAIL ADDRESS 11			AGREEMENT NO. 15					
IMPORTED 5	OTHER 10	FLOCK STATUS <input type="checkbox"/> SFCP <input type="checkbox"/> EXPOSED <input type="checkbox"/> INFECTED <input type="checkbox"/> NONE 16 <input type="checkbox"/> SOURCE <input type="checkbox"/> INVEST <input type="checkbox"/> OTHER _____			3rd Eyelid Info					
Specimen #		Official ID Number		Other ID Numbers	Designation (pos, sus, exp, me, n/a)	Age	Sex (m, f, cm)	Breed (if unkn, face color)	3rd Eyelid Info	
		17		18	19	20	21	22	L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R
									L	R

Completing Scrapie Test Records

All test charts must be completed **legibly in their entirety** and will reflect the true status as determined by the testing veterinarian. If an item is not applicable, mark an “NA” or a dash indicating that it has been reviewed.

Requirements for submitting samples for official genotype testing:

- Sheep are officially identified.
- The blood is drawn by a Federal or State animal health official or an accredited veterinarian.
- The lab is approved by APHIS (see below).
- The sample also meets any additional requirements set by the approved scrapie susceptibility genotyping lab.
- The sample is submitted with a VS Form 5-29 or State equivalent. VS Form 5-29 can be obtained by calling the APHIS VS Iowa Area Office at (515) 284-4140.

1. **STATE:** Iowa, may be abbreviated IA.
2. **COUNTY:** Name of the county where the owner lives.
3. **HERD OWNER’S NAME & ADDRESS:** Legal name of the owner should be entered in this block, last name first.
Complete mailing address of the herd owner including zip code and phone number.
4. **FLOCK ID:** Scrapie flock ID. For example: IA3421.
5. **COUNTY OF FLOCK:** County of physical location of animals.
6. **COMPLETE FLOCK TEST OF ALL ELIGIBLE ANIMALS:** If whole flock test, check YES and give the number of the test eligible animals in the herd.
7. **REASON FOR TEST:** Place an “X” in the appropriate box.
8. **KIND OF FLOCK:** Place an “X” in the appropriate box.
9. **LAB TURN AROUND TIME:** Mark 10-day turnaround.
10. **CODON:** Use 171 only.
11. **SUBMITTING VETERINARIAN INFORMATION:** Always sign the test record and print your name below and complete your address and telephone information.
12. **TOTAL # OF SAMPLES:** Complete the total number of samples collected and submitted.
13. **CERTIFICATION FOR PAYMENT:** Check at “owner’s expense”.
14. **COLLECTION DATE:** Complete the date that the samples were collected.
15. **AGREEMENT NUMBER:** Fill in your Federal Accreditation Number.
16. **FLOCK STATUS:** Place an “X” in the appropriate box.
17. **IDENTIFICATION:** This must be OFFICIAL identification (Scrapie ear tag). The animal must have this in the ear.
It will be in the form of: State Abbreviation, flock number, animal number, i.e. IA1467 0056 or complete tag number of other type of Scrapie tag. This must be on the form, or the test will not be “official”.
18. **OTHER ID NUMBERS:** Record all identification numbers present in the animal.

- 19. DESIGNATION:** Check the box N/A (unless told differently by a regulatory authority).
- 20. AGE:** Note the age of the animal in years (Y) and months (M).
- 21. SEX:** Fill in as appropriate.
- 22. BREED:** Fill in the breed of animals if known. This is important when doing an “official” test. **If the breed is unknown, make sure to put in the face color of the animal sampled (i.e. BF, WF, mottled) **
- 23. DESIGNATED SCRAPIE EPIDEMIOLOGIST (DSE):** Complete contact information for the Designated Scrapie Epidemiologist in your area. For Iowa, use Bailey.Goos@usda.gov or Greg.Schmitt@iowaagriculture.gov so the results will be entered into the government data base and be “official”. You do not need to put the address of the DSE.
- 24. OWNER’S SIGNATURE:** The owner or his agent should sign and date the record.

Be sure to send this to an “approved” USDA genotype testing lab so the results will be official.

You can call your DSE: Dr. Greg Schmitt at (515) 669-5633 or Dr. Bailey Goos (515) 350-6922 to find an approved lab.

You can also find a USDA approved lab at:

https://www.aphis.usda.gov/animal_health/lab_info_services/downloads/ApprovedLabs_genotyping.pdf

Pseudorabies Program

History

Pseudorabies (PRV) is a disease of swine that causes death in cattle, horses, dogs, cats, sheep, and goats. The disease is caused by pseudorabies virus, an extremely contagious herpesvirus that causes reproductive problems, including abortion, stillbirths, and even occasional death in baby, breeding, and finishing hogs. In 1989 USDA initiated a PRV Eradication program, and the US was declared free of pseudorabies in commercial swine in 2004. All states in the US are currently classified as Stage V.



Surveillance

Pseudorabies is a reportable disease. Always keep PRV in mind as a differential diagnosis. If it is listed as a surveillance rule-out on an ISU lab submission there will be no charge for this test (check with the IDALS office or the Dx Lab to assure availability). It is still present in the US in wild-type swine in many states. On-going surveillance continues in the form of slaughter sow and boar testing. Any time that a positive or suspect result is attained via this testing then a PRV test chart is issued, and the producer is asked to have testing completed on his or her herd. This testing is to be completed by the producer's regular herd veterinarian. The veterinarian is compensated for his or her services, and the lab fees are paid for, by USDA. The veterinarian must be accredited in order to perform this task and must have a fee basis agreement in place with APHIS.

Conducting PRV Testing

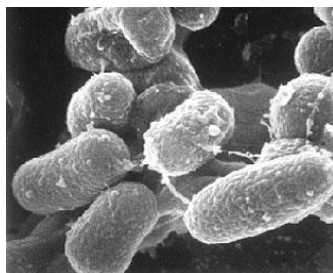
There are two types of PRV test charts: a "Form 1" is for testing that is requested by the State of Iowa. This testing can only be completed by an accredited veterinarian. Breeding swine must be individually officially identified on the test chart. The test chart must be completed accurately, and with all requested information, including the location of the swine, age, and sex (if they are feeder swine, then "mixed" is acceptable). The "Form 2" is for producer-requested testing, such as for export or exhibition. This testing is completed at producer expense, and the lab fees are not covered by USDA. If you have additional questions about conducting PRV testing please contact your state or federal field veterinarian.

Exhibition Testing Requirements

Currently there are no PRV testing requirements for swine returning home from any exhibitions such as county fairs, district shows, jackpot shows, or the state fair. All swine exhibitions must be registered with the State Veterinarian's office.

Johne's Disease

Johne's disease (also called paratuberculosis) is an infectious bacterial disease primarily affecting the intestinal tract. Infected animals may show no signs of the disease until years after the initial infection. It has been estimated that 22 % of the nation's dairy herds have greater than 10 % of the herd infected with Johne's disease. It has also been estimated that 41 % of the nation's dairy herds have at least one ELISA-positive cow. It has been estimated that nearly 8 % of the nation's beef herds are infected with Johne's disease. Although an 8 % infection rate might seem low compared to the percent of the dairy herds infected, the protocol for testing was used to find beef herds with at least 10 % of the herd infected. The estimated prevalence of 8% infection rate for Johne's disease should be considered a conservative estimate.



Johne's disease is caused by the bacterium **Mycobacterium avian subspecies paratuberculosis** or MAP for short. The bacteria grow and multiply inside the immune cells of an animal. Johne's disease typically enters a herd as an infected, but healthy-looking animal in Stage I. As the disease progresses in that animal, the frequency and number of bacteria being excreted increase. The infection spreads to herd mates without the owner's knowledge. Calves are the most susceptible group to Johne's Disease. Resistance to the disease increases with the age of the cow.

However, adult cattle can be infected with Johne's disease if they are exposed to large doses of **Mycobacterium paratuberculosis** and/or immunologically compromised.

The incubation period for the disease varies from 1 to 10 years, with most clinical signs of the disease showing up after delivering their 2nd or 3rd calf. Animals exposed between 18 and 24 months of age and exposed to a very small amount of the organism, likely will not develop the disease until they are older. This may be 8 – 10 years of age. The most important factors determining when animals with Johne's disease start developing clinical disease are the animal's age when first detected and the dose of the organism ingested.

Johne's Disease

Common Sources of Infection:

1. The most common source of infection is feces or manure. When the microbe is excreted in the feces, it can contaminate the udder, soil or water. Outside the animal, the organism does not multiply well, if at all, but it can survive over a year in the environment because of its resistance to heat, cold, and drying.
2. Another source of infection is colostrum and milk from infected dams. The likelihood of Johne's bacteria being excreted in milk of infected females increases as the disease progresses. In beef herds, where calves remain with their mothers and nurse daily, the chance for transmission of the infection through colostrum and milk is high. The bacteria may be excreted directly through the mother's milk or, it might be present on the outside the teats in contaminated feces.
3. Prenatal exposure may be a source of infection for calves. Becoming infected before birth is possible for a fetus, if the dam is in the late stages of disease. Studies have shown that calves born to cows in later stages of Johne's disease were 8 to 40 percent infected while still in the womb.
4. Standing water. Pond water contaminated with infected feces is another potential source of infection.
5. Pastures contaminated with infected feces.



Things to Remember:

Fecal contamination is the main source of infection. Fecal contamination of feed, udders, drinking water and environment help spread the disease. Poor farm hygiene will increase the infection transmission rate. This is why biosecurity is so important in preventing the spread of this disease. Animals that live under good husbandry conditions tolerate the Johne's disease infection better. It would appear that some kind of stress may be involved in causing the cow to become infected.

The Four Stages of Johne's Disease in Cattle

Johne's disease is a slow, progressive disease. The signs of Johne's disease may not be seen until years after the initial infection. If the infection remains unchecked, the rate and number of infected animals in the herd increases over time.

Stage I: Silent, Subclinical, Non-detectable Infection

Stage I is the initial infection: the animal is infected, not showing signs of disease and may be shedding small numbers of microbes into the environment that are not detectable by diagnostic tests. This stage typically starts in calves and heifers less than two years of age.

Eventually, these animals progress to Stage II.

Stage II: Subclinical Shedders

In Stage II, the infection is progressing, and the animal still does not show any clinical signs. Subclinical shedders are typically older heifers or adult animals that may appear healthy, but are shedding the organism in very high numbers, probably enough to infect others nearby or in contact. Infection is detectable by organism-based techniques but not often by blood tests.

Shedding in Stage I and II is often cyclical depending on stress conditions such as calving, weaning, environmental, etc.

Stage III: Clinical Johne's disease

In Stage III, the animal is showing the early signs of Johne's disease. Animals with advanced infection may have been brought on by a period of stress. These cattle have acute, intermittent, watery, fetid manure. A loss of weight and drop in milk production are also common signs. Many of these infected animals will continue to eat and are positive on their serologic tests. Clinical signs may only last from a few days to a few weeks before animals progress on to Stage IV.



Stage IV: Advanced Clinical Johne's Disease.

In Stage IV, the animal has obvious clinical disease and is readily recognized by the trained observer and is detected by diagnostic tests. This is the end stage of the disease. Most animals are very thin with fluid diarrhea. Some animals progress from Stage II to Stage IV in a few weeks.

Diagnosis of Johne's Disease

The clinical signs of Johne's disease, diarrhea and weight loss can resemble many other diseases. Some herds will experience poor performance in spite of good nutrition. An excellent way of diagnosing Johne's disease is to detect the bacterium that causes the infection. Since this bacterium is not normally found in the manure of uninfected animals, if detected, it is assumed to be causing an infection and pathology in an animal. [Official Johne's disease tests](#) in Iowa consist of two tests that are organism-based tests. They are the standard fecal culture and DNA probe (PCR).

Standard bacterial culture has been used for almost 100 years. It requires little equipment and is technically simple to perform. It does, however, require experienced technologists who are able to identify the growth of bacterial colonies on the culture medium. The test is moderately expensive, costing roughly \$20 to \$30 / test and takes at least 16 weeks to complete because of the slow growth rate of **Mycobacterium tuberculosis**. Due to the high labor costs of fecal culture, it has been discontinued at the ISU VDL.

A FECAL CULTURE THAT IS POSITIVE INDICATES TRUE INFECTION

DNA probes allow detection of **Mycobacterium paratuberculosis** without having to grow the bacterium. Therefore, they are much faster. A DNA probe test can be done in less than 3 days. The main disadvantage is cost.

There is no commercial test for Johne's disease that detects Stage I or early-Stage II infections. So, being completely assured that a single negative-test result certifies an animal is infection-free is not possible.

The fastest and easiest way to measure the infection rate (apparent prevalence) in a herd is by doing a pooled fecal PCR on all animals 2 years and older in a herd. Results are most reliable for herds already confirmed to be infected by isolation of the microbe from at least one animal.

More information on Johnes testing at ISU VDL can be found at:

<https://vetmed.iastate.edu/vdpam/about/production-animal-medicine/beef/bovine-disease-topics/johnes-disease>

Iowa Rules for Johnes' Disease

Johne's disease is a reportable disease in at least 13 states, including Iowa. The Iowa Department of Agriculture & Land Stewardship (IDALS) does not place any restrictions on the farm where the Johnes infected cattle are located. However, a person shall not knowingly sell cattle with Johnes Disease except directly to a packer or a packer at a livestock market. Johnes infected cattle move to slaughter only using an Owners- Shipper Statement to document the movement.



The Iowa Department of Agriculture and Land Stewardship (IDALS) offers a [Risk Assessment program](#) at no cost for veterinarians and their producers, that will assist them in developing a management plan for decreasing the risk of contracting or spreading Johnes' disease. In the Johnes' disease risk assessment evaluation, District Veterinarians will assist veterinarians in the field and their producers by walking through different phases of production to determine the potential risk of the herd becoming infected with Johnes' disease. The risk assessments can also help the infected herd decrease or eliminate the spread from infected animals to negative animals within the herd.

Ethics

For Cattle Buyers:

It is common that herds get infected only by buying infected cattle. Pre-purchase testing for Johnes' disease is today's standard of veterinary practice. Testing the herd of origin is much more reliable than testing only the purchased cattle.

Options In Order of Decreasing Risk of Buying Johnes' infected animals:

Options	Risk
No Testing	Very risky, >10% chance, for each purchased animal of being infected
Test individual animal before purchase – don't buy anything from herds with cows suspect or positive	Slightly less risky than not testing; more confidence in negative tests on older animals than heifers
Quarantine and test after purchase: PCR Testing 2x at 6-month interval	Lower risk and is sound policy for several infectious diseases of cattle
Partial test on herd of origin PCR testing 30 head of 2 nd lactation or older cows	Low risk of Johnes' disease in any animal from such herds, but is not 0%
Whole herd testing on herd of origin	Very low risk of Johnes' disease if herd test 100% negative

For Cattle Sellers:

Veterinarians should caution cattle owners to beware of the liability laws that might apply to the sale of infected animals. Liability laws protect the buyer against negligence and fraud. Remember, the basis of most consumer protection laws is practicing "the golden rule". Not testing cattle does not avoid liability issues that might arise later. Test all or part of the herd and disclose the results.

For Veterinarians:

Remember, Johnes' disease is a reportable disease. You will need to inform the State Veterinarian's Office of an infected herd. Ignoring a problem and not dispensing correct advice has been used as grounds to sue veterinarians. Veterinarians should protect themselves by confirming the diagnosis and providing proper advice in writing. Strongly advise owners in writing that test positive cows be sent **ONLY FOR SLAUGHTER**, otherwise you and the client may be contributing to the spread of this infection to other herds.

FIVE Things to Remember about Johne's Disease and the Control Program

1. Johne's disease is a **REPORTABLE** but not a "quarantinable" disease!
 - This means while any positive Johne's test indicates an 'infected herd', a positive individual fecal (PCR or culture) indicates the organism is present and this infected animal can only leave the premise for slaughter only.
 - "Subclinical" animals can shed the Johne's organisms in their manure and possibly thru colostrum, milk and in utero.
2. The Johne's Disease Control Program is voluntary and confidential within Iowa statutes.
 - **Risk Assessments** ('walk-through' bio-risk evaluations) are free from your area state District veterinarian.
3. Even though youngest animals are most susceptible, older animals can be infected but clinical signs tend to be delayed.
 - Manure is usual means of transmission - one thimbleful from a heavy to 'Super-shedder' can infect a calf!
 - 'Super-shedders' shed at the rate comparable to 20,000 low shedders and some can be subclinical initially!
4. Bulls should never be forgotten! Make sure all bulls are tested with an organism based test before adding to the cows. One positive bull can expose a large percentage of a herd.

Johne's Control Program Website for more information:

<https://iowaagriculture.gov/animal-industry-bureau/johnes-disease-control-program>

Gary Eiben, DVM

Johne's Program Coordinator

Cell phone: (515) 669-6095

E-mail: Gary.Eiben@iowaagriculture.gov

[Johne's Voluntary Herd Classification Program](#)

[Johne's-Iowa Administrative Code](#)

[Johne's Vaccination](#)

Johne's C-Punch Verification Form



IOWA DEPARTMENT OF
AGRICULTURE &
LAND STEWARDSHIP

Iowa Johne's Disease Control Program

Dr. Gary E Eiben, Johne's Program Coordinator

C-PUNCH VERIFICATION FORM

Animal ID (Accession#): _____

Status of Animal (dead/euthanized): _____

Date (C-Punched): _____

Owner Shipper Statement issued ☐ yes

Owner's Signature: _____

Owner Name & Address: _____
Name

Address, City, State, Zip Code

Phone: _____ County _____

☐ Discussed Slaughter-Only Restrictions

District Veterinarian: _____
Signature

Johne's Owner-Shipper Statement

The following livestock (Record ID number and description) are being transported to a livestock market for slaughter channels only:

Cattle				
Breed	Sex	Official Identification	Back Tag	Lab Report Accession Number

Are animals c-punched? ☐ Yes ☐ No

I affirm that the following livestock are being presented for consignment to `slaughter only` and will be sold only to slaughter:

Owner Name (Print) _____

Owner Signature _____

Owner Address _____

Market Name and address: _____

Livestock Market Representative: These animals are sold to slaughter only

Signature: _____ "Please save form in records"

Please return form to:

Iowa Department of Agriculture and Land Stewardship

FAX: 515-281-4282

Bureau of Animal Industry

Wallace State Office Building

502 E 9th St, 2nd Floor

Des Moines, IA 50319

Questions? Please contact:

Dr. Gary E. Eiben – Johne's Program Coordinator

Gary.Eiben@iowaagriculture.gov

515-669-6095

Bovine Trichomoniasis

Trichomoniasis is a venereal disease of cattle characterized by early fetal death, infertility, rare abortions, and pyometra in cows and heifers, that results in extended calving intervals.

- It is caused by a protozoan, *Tritrichomonas foetus*, they can be found in the genital tracts of cattle.
- When cows are bred naturally by an infected bull, 30-90 % become infected.
- Bulls of all ages can remain infected indefinitely, but this is less likely in younger males.
- Most females eventually clear the infection, but infertility and infectivity may remain for 2-6 months following infection and chronic infections can occur.
- Pregnancy typically progresses for 60-120 days, then the fetus dies and is reabsorbed, resulting in an irregular return to estrus.

Problems with Cows

- Producers may notice excessive numbers of cows still cycling at the end of the breeding season.
- Most commonly seen as increases in the number of short-term pregnancies and open cows (up to 40% or more) when pregnancy checked.
- Fetal deaths and abortions can occur, and the organism can be found as late as 8 months of gestation, and live calves can be born to infected dams.
- Subsequent calving season will be spread out.
- One way of telling if the herd is still infected, is evaluating calf birth dates during the following calving season and dividing them into 21-day periods. An affected herd will show low conception rates in the first 2-3 periods and have a large percentage of open cows.

Problems with Bulls

- Commonly, symptoms are not seen in bulls.
- May occasionally see a purulent preputial discharge.
- Bulls may clear the infection but often become carriers.
- Bulls older than 4 years-old are more likely to become carriers because they harbor the organism in the penile crypts.

Diagnosis

- History and clinical signs are useful but are similar to other cattle diseases, i.e. campylobacteriosis.
- Confirmation of the disease depends on isolating or testing for the protozoan that causes Trichomoniasis.
- Diagnostic tests are directed at bulls because they are the most likely carriers.

Treatment

- Trichomoniasis is a reportable disease and there is no legal **treatment**.
- Various drugs have been used to treat bulls, but none are both safe and effective.
- Bulls are susceptible to reinfection after treatment.

Control

- Control consists of eliminating the infection by testing and culling bulls.
- Replacing them with virgin bulls
- Using clean cows (clean cows are assumed to be those with calves at foot) and virgin heifers.
- Vaccine is available for cows for use at 8 and 4 weeks prior to breeding.
- Currently, the vaccine is not labeled for use in bulls.
- Eliminating Risk Factors is the Best Control:
 - Bull exposure from neighboring pastures/herds
 - Cows commingling with neighboring pastures/herds
 - New bull additions without testing (non-tested bulls)
 - Leasing or borrowing bulls
 - Retaining open cows into the next breeding season

Trichomoniasis Quarantine and Testing Protocol

Quarantine of Positive Test - Upon laboratory notification of a positive test for *Tritrichomonas foetus* IDALS will contact the animal owner and property owner. (IC 163, IAC 64, IAC 65)

1. A quarantine will be placed on all cattle at the location of the Trichomoniasis positive bull and all cattle that have had contact with the Trichomoniasis positive bull.
2. No one is allowed to add or remove animals to the quarantine premises without permission from the Iowa Department of Agriculture and Land Stewardship (IDALS).
 - a. Each animal to be moved must be identified using a USDA Official Individual ID Tag.
 - i. Producer may obtain permission from IDALS to move cattle to vet clinic, sale barn, or official tagging site to have the Official ID applied.
 - b. A Category 2 Accredited Veterinarian must complete a Certificate of Veterinary Inspection (CVI) and submit a copy to IDALS to obtain a permit number prior to movement and sale.
 - i. The CVI for adult cattle moved from a *Tritrichomonas foetus* quarantined premises must list the complete USDA Official ID for each animal and contain the statement, "For Slaughter Only".
 - ii. The CVI for feeder cattle (steers, heifers, and virgin bulls) moved from the quarantined premises must list the individual official identification for each feeder calf included in the shipment.
 1. The CVI must state that the bulls are virgins less than 24 months of age.
 - iii. The CVI may be submitted to IDALS at the address listed above.

Quarantine Release - Quarantine will be released when ALL the following conditions are met.

1. IDALS receives verification that the Trichomoniasis positive bulls have been sold to slaughter or euthanized.
2. Cows are diagnosed as pregnant for greater than 120 days by a veterinarian.
 - a. A veterinarian must confirm the pregnancy diagnosis and provide IDALS a written report that includes official ID and test result for each cow on the premises.
3. Bulls require two consecutive negative PCR tests.
 - a. First test to occur no sooner than two weeks (14 days) following exposure to females.
 - b. The second test shall occur no sooner than 14 days following a negative first test.
4. Open cows are sold to slaughter.
 - a. Each open cow must be identified using a USDA Official Individual ID Tag.
 - b. A Category 2 Accredited Veterinarian must complete a Certificate of Veterinary Inspection (CVI) listing the complete individual ID of each cow in the shipment.
 - c. The CVI must contain the statement, "For Slaughter Only".
 - d. A permit number for the movement of open cows to slaughter is obtained by submitting a copy of the CVI to IDALS prior to movement.
 - e. If open cows are not sold to slaughter.
 - i. All bulls must have 2 negative Trichomoniasis tests following the next breeding season (See #3).
 - ii. IDALS may require further testing of the cow herd based on epidemiologic and breeding history.

Suspect positive bulls

1. Based on epidemiological and herd reproduction history, suspect bulls may be retested.
 - a. A minimum of 14 days of sexual rest (removal from all females) shall occur prior to a retest.
 - b. A second suspect test, the bull will be considered positive for Trichomoniasis.
2. District veterinarians will stress the importance of a good quality sample to the testing veterinarian.

Iowa's Chronic Wasting Disease (CWD) Herd Certification Program (HCP)



The **Iowa CWD HCP** is a voluntary program. Each herd must have an annual inspection within 90 days of its anniversary date; inventory reconciliation must be conducted by a state district veterinarian. Certified CWD cervid herd status must include all Cervidae under common ownership. They cannot be commingled with other cervids that are not certified, and a minimum geographic separation of 30 feet between herds of different status must be maintained.

Definitions: “Cervidae” means all animals belonging to the Cervidae family. “CWD susceptible Cervidae” means whitetail deer, blacktail deer, mule deer, red deer, elk, moose and related species and hybrids of these species.

Compliance for the CWD HCP: Monitored CWD cervid herd means a herd of Cervidae that is in compliance with the Cervid Chronic Wasting Disease Surveillance Identification (CCWDSI) Program. Monitored herds are defined as one-year, two-year, three-year, four-year, and five-year monitored herds in accordance with the time in years such herds have followed the Cervid Chronic Wasting Disease Surveillance Identification (CCWDSI) program. The goal of the CWD HCP is completing five years of compliance and reaching the Certified Status and then maintaining this status.



Annual Inventory Inspections: A herd is certified for 12 months. Each Cervidae herd enrolled in the CWD HCP must have an annual inspection and inventory reconciliation conducted by a state district veterinarian. These inspections must be done annually within 11-13 months after the last annual inventory inspection. Records shall be kept documenting the history/accountability of all animals in the herd, including identification, during the inspection period. These records shall include, but are not limited to:

1. All forms of identification date of movement, and sex of all animals moving into or out of the herd. All movement of animals other than to a state or federally inspected slaughter establishment shall be accompanied by an intrastate/interstate movement certificate of veterinary inspection signed by a licensed, accredited veterinarian. A copy of the certificate of veterinary inspection needs to be given to the state district veterinarian at the time of inspection.
2. All forms of identification, date of birth, and sex of all animals born on the premise.
3. All forms of identification, date of death, and sex of all animals that die, including the cause of death, if known. A copy of the CWD laboratory report of all animals 12 months and older must be given to the state district veterinarian at the time of the annual inspection.
4. A copy of test charts for tuberculosis or brucellosis must be provided to the state district veterinarian at the time of the annual inspection.
5. Identification of all animals that escaped.

Triennial Physical Herd Inventory Inspections: Physical Inventories can be performed as part of an official herd test for tuberculosis or brucellosis. Physical Herd Inventories are separate and different from Annual Inventories conducted by our State District Veterinarians and the Physical Herd Inventories are to be conducted triennially.

Physical Herd Inventories will be required for advancement in the program. Physical Herd Inventory completions are to be done no more than 3 years after the last physical herd inventory.

A complete Physical Herd Inventory must provide verification to reconcile all deer and verification of two approved individual identifications (one must be a USDA official identification) with the records maintained by the owner. All Cervid animals must receive the identification before 12 months of age.

The owner must present the entire herd for the Physical Herd Inventory inspection where the department, a state authorized veterinarian (accredited veterinarian) or authorized federal personnel can safely read all identifications on the animals and be able to record all identification devices. **A complete physical herd inventory must be performed at the time a herd enrolls in the Chronic Wasting Disease Herd Certification Program.**

Official Cervid Identification: All Cervid 12 months of age or older (All Animals under 12 months of age leaving the premises), shall have a minimum of two forms of animal identification. One of these identifications must be a nationally unique official animal identification. The official identification device must be a device approved by APHIS, and must be an 840-visual tag, 840 radio frequency identification devices (RFID), silver/steel and plastic USDA tag or another approved device. Information on official animal identification devices can be found on the APHIS Traceability website at the following address: <https://www.aphis.usda.gov/livestock-poultry-disease/traceability>

The second form of identification must be one that is approved by IDALS:

1. A plastic or other material tag that indicates the official herd number issued by USDA and includes individual animal identification which is no more than five digits and is unique for each animal.
2. A legible tattoo which includes the official herd number issued by the USDA and includes individual animal identification which is no more than five digits and unique for each animal.
3. A plastic or other unique material tag which provides unique animal identification and is issued and approved by the North American Elk Breeders Association or by the North American Deer Farmers Association.

Animals that lose their identification should be retagged as soon as possible. All animals 12 months of age or older must have individual identification and it must be reconciled in herd records before the herd status can be advanced.

Official Laboratory Confirmation: Any Cervidae **12 months of age and older** that died, or were sent to slaughter, must have the date of death and a negative laboratory report showing the official tag numbers and accession number. A copy of approved laboratory reports shall be maintained by the owner for purposes of completion of the annual inventory examination for recertification. If there are deaths for which tissues were not submitted for laboratory diagnosis due to postmortem changes or unavailability, the department shall determine compliance. If a death is too young to test (TYTT), note date and reason for death.

Movement into a CWD Monitored Herd: (Note of Caution) If a lesser status animal is added to a CWD herd, the whole herd will be lowered to the lesser status.

Intrastate Movement Requirements: All intrastate movement of Cervidae other than to a state or federally inspected slaughtered establishment shall be accompanied by an intrastate movement certificate of veterinary inspection signed by a licensed, accredited veterinarian. Movement of CWD susceptible Cervidae, other than direct movement to slaughter, shall only be allowed from herds that have been enrolled in the Iowa CWD monitoring program and that have successfully completed at least one year in the program. “Been enrolled” means that the herd owner has received from the department written notification of the herd’s enrollment and participation in the program.

Intrastate movement certificate shall include all the following:

1. Consignor’s name and address.
2. Consignee’s name and address.
3. Individual, official identification of each animal.
4. For CWD susceptible Cervidae, the certificate shall include the CWD herd premises number, the herd status level, the anniversary date, and the expiration date.
5. For Cervidae other than CWD susceptible Cervidae, the following statement must be on the certificate: “The animal(s) has not spent any time within the past 36 months in a zoo, animal menagerie, or like facility, or has not been on the same premise as a cervid herd which has been classified as a CWD infected herd, exposed herd or trace herd”.

Import Requirements: (Health certificate copies must be kept on file for all animals purchased.) Movement, of CWD susceptible Cervidae, other than direct movement to slaughter, shall only be allowed from herds which have satisfactorily completed at least five years in an official recognized CWD monitoring program. Cervidae entering Iowa must be accompanied by all the following: An official Certificate of Veterinary Inspection issued by a licensed, accredited veterinarian. A permit number requested by the licensed, accredited veterinarian signing the certificate and issued by the State Veterinarian prior to movement must be recorded on the certificate.

One of the following statements must appear on the health certificate:

- 1 **For CWD susceptible Cervidae:** “All Cervidae on this certificate originate from a CWD monitored or certified herd in which these animals have been kept for at least one year or were natural additions. There has been no diagnosis, signs, or epidemiologic evidence of CWD in this herd for the past five years.”
- 2 **For Cervidae other than CWD susceptible Cervidae:** “All Cervidae on this certificate have not spent any time within the past 36 months in a zoo, animal menagerie, or like facility, and has not been on the same premises as a cervid herd which has been classified as a CWD infected herd, exposed herd or trace herd.”

The CWD herd number, anniversary date, and expiration date and herd status must be listed on the Certificate of Veterinary Inspection. Each animal must be officially identified, and all forms of identification must be listed on the certificate. Cervidae originating from an area considered to be endemic to chronic wasting disease shall not be allowed entry into Iowa. Cervidae that originate from a herd that has had animal introductions from an area endemic to chronic wasting disease during the preceding five years shall not be allowed entry into Iowa.

Tuberculosis (TB) Testing of Cervidae: All Cervidae 12 months of age and older must be tested negative for tuberculosis (TB) and testing must be done by a licensed, accredited veterinarian that has been certified to test Cervidae. All tuberculosis (TB) testing for movement of Cervidae must be completed prior to the movement of the animal. (Injection of tuberculin and reading of the injection site 72 hours later must be done prior to movement of the animal).

Brucellosis (BRT) Testing of Cervidae: All Cervidae 6 months of age and older must originate from a Certified Brucellosis Free herd or be tested negative for Brucellosis within 90 days of importation.

Interstate movement requirements: (Animals leaving Iowa) Cervidae leaving Iowa must meet the state of destination's entry requirements prior to movement.

Slaughter Inspection: Slaughter inspection services will continue to be provided at state licensed slaughter facilities. Meat that is intended for retail sale in Iowa must be slaughtered and inspected at a state or federal licensed facility. If you are slaughtering Cervidae at a state licensed facility and the meat is for your own personal consumption, the carcass inspection and brain stem submission will not automatically occur. You could retrieve the head yourself from the slaughter facility and take it to your local veterinarian for brain stem and lymph node submissions. This same procedure could be utilized for home butchered animals.

**If you have additional questions,
contact the State District Veterinarian in your area or:**

Dee Clausen
Farm Deer Program Coordinator
IDALS, Bureau of Animal Industry
Wallace Building, 2nd Floor
Des Moines, Iowa 50319
(515) 281-8236

[CWD Program Standards](#)

[ADT/Traceability Fact sheet for interstate transport of Cervids](#)

[Regulatory Sample Collection](#)

Rabbit Hemorrhagic Disease

Rabbit Hemorrhagic Disease Virus Type 2 (RHDV2) is a viral disease fatal to lagomorph species (rabbits, hares, and pikas). It does not affect humans or other animals. It was first detected in wild rabbit populations in the US in March 2020, the since that time, the NWDP has worked closely with Veterinary Services and diagnostic labs to track all wild lagomorph samples submitted for testing, report test results back to state wildlife agencies, and provide crucial data used in OIE reporting, disease mapping, and genetic sequencing.



Affected Species

RHDV2 is a highly contagious disease caused by a strain of the RHD virus. RHDV2 can be spread by contact with infected rabbits, their meat or fur, or materials that infected rabbits have come in contact with. Many times, the only signs of the disease are sudden death and blood- stained noses caused by internal bleeding. In the US, the virus has spread to wild rabbit populations in at least 14 states since March 2020.

Wild lagomorph species affected in the United States include:

- Eastern cottontail
- Desert cottontail
- Mountain cottontail
- Black-tailed jackrabbit
- Antelope jackrabbit
- Brush rabbit
- Pygmy rabbit
- Riparian brush rabbit



[USDA Fact Sheet](#)

[USDA APHIS 2020 Rabbit Hemorrhagic Disease -- Affected Counties](#)

[CFSPH Fact Sheet—RHDV](#)

Canine Brucellosis

Canine brucellosis is caused by the gram-negative bacteria *Brucella canis* (*B. canis*) and can infect both dogs and humans. Infection in both humans and dogs is under-recognized. Veterinarians should educate their staff and clients, especially those with breeding dogs, about the disease and potential for human illness. Canine brucellosis is reportable to the State Veterinarian in Iowa.

Clinical Signs:

In dogs, infections can be subclinical to clinical and often result in reproductive failure including infertility, abortions, and stillbirths. Decreased litter size and poor puppy survivability can occur. Other clinical signs include lethargy, weight loss, uveitis, generalized lymphadenopathy, and discospondylitis. Infected dogs may not show clinical signs for weeks, months or years after infection.

Transmission:

Transmission in dogs occurs through mucosal contact with infected material, fluids, or fomites. Transmission occurs during breeding, through ingestion or inhalation or contact with aborted materials, birth products, vaginal discharge, or urine. Puppies can be infected in utero, during birth, while nursing or through contact with contaminated surfaces. *B. canis* is found in vaginal discharge, semen, birthing tissues and fluids, aborted tissues and fluids, urine, blood, milk, saliva, nasal and ocular secretions, and feces.

B. canis is stable in the environment, especially with lower temperatures, high humidity, and lack of sunlight. Contaminated fomites such as clothing, water, dirt, etc. play a role in transmission. However, *B. canis* is killed by common disinfectants. Cleaning with a degreasing agent to remove organic debris and biofilm is an important step prior to disinfection. One should also be careful to follow the label instructions for concentration and contact time of the disinfectant.

Diagnosis:

Diagnosis is based on history, physical exam findings and laboratory testing including serology and antigen detection. There is no one perfect test for *B. canis* and sometimes it takes testing in both parallel and series to know if the dog is truly infected.

Serology is most commonly used to screen dogs for *Brucella canis*. The rapid slide agglutination test (RSAT), a tube agglutination test (TAT) or indirect fluorescent antibody (IFA) test are all good screening tests but do have an issue with false positives (for example if the dog has another gram-negative infection, or *Staphylococcus* or *Streptococcus* infection, etc.). False negatives are uncommon unless testing is done too early. The addition of 2ME to any of these tests reduces the rate of false positives. However, if performed too early (less than 2-4 weeks after infection or recrudescence), false negative results can occur. The Agar Gel Immunodiffusion II (AGID II) is not a good screening test because of its high false negative rate. It takes 5-12 weeks to have an antibody level high enough post infection or recrudescence to detect an infection. The AGID II can be used as a confirmatory test. PCR and culture are not good screening tests due to the lack of bacteremia or intermittent bacteremia. *B. canis* tends to sequester in immune privileged sites such as the reproductive organs and kidneys. False positives are rare with PCR or culture; if positive, there is a high likelihood the dog has *Brucella canis*. However, if the dog is negative, it simply means the test did not detect the bacteria.

The Iowa State University Veterinary Diagnostic Laboratory (ISU-VDL) uses the Bionote Antigen Rapid Canine Brucella Antibody Test (Rapid Ab test). Any non-negative serum will be forwarded to the United States Department of Agriculture (USDA) National Veterinary Services Laboratory (NVSL) for tube agglutination test (TAT). All non-negative test results will be forwarded to the State Veterinarian. If the Rapid Ab Test is positive and the TAT is negative, the dog will be classified as suspect. The Iowa Department of Agriculture and Land Stewardship (IDALS) will contact the submitting veterinarian and the owner(s) of the dog. The dog will then be quarantined for at least 30 days. After 30 days have lapsed, the dog can again be tested for *B. canis* at the ISU- VDL. ISU-VDL follows the same testing protocol. Be sure to reference the prior test's Accession Number. If the results are still suspect (positive on the Rapid Ab Test and negative on TAT), then the sample will be sent to Cornell University Animal Health Diagnostic Testing for additional testing including 2ME-RSAT and AGID II. Based on those results, the quarantine will either be lifted or continue. This process of testing in series and parallel allows IDALS to determine if this is an early infection vs. a false positive as there is no one good test for *B. canis*.

Any breeding kennel in Iowa containing a positive dog will be quarantined by the state of Iowa. For the quarantine to be lifted, all positive dogs must be euthanized. All remaining dogs must be tested at 30 days and 60 days from the last known exposure. If all tests for all dogs are negative, then the quarantine can be lifted. IDALS encourages all breeding kennels to establish an isolation and testing protocol for all newly acquired dogs.

Prevention: IDALS encourages all breeding kennels to establish an isolation and testing protocol for all newly acquired dogs. Isolation is recommended for at least 60 days with testing is recommend prior to arrival, 30 days post arrival and 60 days post arrival.

Treatment:

There is no cure or vaccination for canine brucellosis. Dogs are infected lifelong regardless of treatment and relapses are common. Intermittent shedding occurs despite treatment with antibiotics. Spaying or neutering does not reduce the risk of transmission to other dogs or humans. Any positive dogs will be under a lifelong quarantine.

Zoonosis: Canine brucellosis in people is under diagnosed and under reported. The epidemiology is not well understood due to nonspecific clinical presentation, lack of clinical suspicion, and challenges with testing. Clinical signs and symptoms in humans are vague and include fatigue, weakness, lethargy, weight loss, chills, sweats, headache, lymphadenopathy, splenomegaly, hepatomegaly and fever (periodic and nocturnal).

Transmission to people is through direct contact with infected dogs, their reproductive products or fluids, blood products, urine or contact with contaminated fomites. The people most at risk for infection are those handling breeding dogs, laboratory workers, veterinarians, veterinary staff, animal shelter staff, immunosuppressed people, children, and pregnant women.

Diagnostic testing in humans is not without challenge. *Brucella canis* is quite fastidious and grows slowly. Cultures are typically discarded before growth can occur. Bacteremia is intermittent and low level. Antibiotic treatment can also affect the ability to culture. PCR (Polymerase Chain Reaction) to identify *B. canis* in patient specimens is not readily available in the US. Serology for other Brucella species, which grow in smooth colonies, is available, but cannot detect *B. canis* antibodies due to *B. canis*' rough phase.

Infections have been reported in laboratory workers, children, and immunosuppressed persons. In 2012, a 3-year-old girl became ill. *B. canis* was cultured from the child and subsequently the new puppy in the household. The two isolates had close genomic similarity, suggesting the puppy was the source of the infection. Additionally, 31 laboratory workers were exposed.

The risk of transmission is highest when handling animals during breeding or parturition. To decrease potential exposure, veterinarians should encourage clients who breed dogs to routinely test for *Brucella canis*, isolate and test any new dogs introduced for breeding, and to use personal protective equipment during breeding, whelping, and handling newborn puppies. Veterinarians and their staff should also take precautions when assisting with whelping, breeding, handling of newborn puppies and handling of semen, urine, vaginal discharge, or birthing tissues/fluids. Animal shelter staff should take precautions similar to veterinarians and breeders.

B. canis infection has implications for both human and dog health. The prevalence of disease is not well understood, and diagnostic testing presents challenges. Veterinarians should educate their staff and clients, especially those with breeding dogs, about the disease and potential for human illness.

Resources:

Center for Food Security and Public Health. Brucellosis: *Brucella canis* (Contagious Abortion, Undulant Fever). May 2018. https://www.cfsph.iastate.edu/Factsheets/pdfs/brucellosis_canis.pdf

Dentinger, C.M., Jacob, K., Lee, L.V., Mendez, H.A., Chotikanatis, K., McDonough, P.L., et al. (2015), Human *Brucella canis* Infection and Subsequent Laboratory Exposures Associated with a Puppy, New York City, 2012. Zoonoses Public Health, 62: 407-414. <https://pubmed.ncbi.nlm.nih.gov/25363807/>

Hensel, M. E., Negron, M., & Arenas-Gamboa, A. M. (2018). Brucellosis in Dogs and Public Health Risk. Emerging Infectious Diseases, 24(8), 1401-1406. <https://pubmed.ncbi.nlm.nih.gov/30014831/>

National Association of State Public Health Veterinarians. Public Health Implications of *Brucella canis* Infections in Humans. March 2012. <http://www.nasphv.org/Documents/BrucellaCanisInHumans.pdf>

United States Department of Agriculture. Best Practices for *Brucella canis* Prevention and Control in Dog Breeding Facilities. 2015.

Keeping Brucellosis Out of Your Dog Kennel

Establishing an Isolation and Testing Program for Newly Acquired Dogs:

- The isolation facilities must be separated from the rest of the animal holding facilities by at least 30 feet, with no possibility of exposure to urine or feces via runoff/drainage.
- Organic materials removed from the isolation facility (feces, urine, discarded feed, birth/abortion products, etc.) must be disposed of in a manner that prevents contact with any other animals.
- No animals running loose outside of cages/runs/enclosures, where nose-to-nose contact could occur.
- Dogs should move through isolation and testing in batches, with no dogs leaving until all have had two negative tests, 30 days after arrival and again 30 days after the first test. (In the event that a Brucellosis test-positive animal is found, quarantine of the entire facility may be avoided if the animal has resided only in the isolation facility since arrival, and no other dogs have been removed from isolation since the arrival of the test-positive dog).
- The isolation facility should have designated boots and coveralls that are put on upon entering and removed upon leaving the building. Alternatively, boots can be thoroughly washed and disinfected upon entering and leaving. Hands are washed upon entering and leaving. It is recommended that chores in the isolation facility be completed at the conclusion of each day.
- Equipment must not be carried back and forth between facilities. If this must occur, equipment must be adequately cleaned and disinfected.
- The isolation unit should be thoroughly cleaned daily. Upon the discovery of a Brucellosis test- positive dog, the facility, and particularly the dog's pen, should be carefully cleaned and disinfected following the euthanasia and removal of the affected dog.
- It is recommended that breeding and whelping be avoided in the isolation facility.

If a dog belonging to you tests positive for canine brucellosis, an investigation will be conducted, and the entire kennel would be quarantined pending completion of the investigation. If it can be determined that the animal has been maintained in isolation from the rest of the facilities, and adequate biosecurity practices, as described above, were observed, then the quarantine would be limited to the isolation facility, and the rest of the business would remain unaffected.

Disinfecting for dog kennels to prevent the spread of Brucellosis

Brucella is a relatively hardy bacteria, does not form spores, and most common disinfectants are effective at killing it. It can survive freezing and thawing and can survive for several weeks in milk, water, urine, or damp soil. It will die relatively quickly in dry conditions and is killed by sunlight. Contaminated objects are easily sterilized or disinfected by common methods and most disinfectants. It is essential when disinfecting to remove all organic material such as feces, feed, and bedding, and apply the disinfectant to a thoroughly cleaned surface.

Helpful Links



[Iowa Rabies Resource Manual](#)



InterstateLivestock.com

Hosted by



NIA National Institute for
Animal Agriculture



[IDALS Animal Industry News](#)

