

# **Stock Quotes: Animal Health Newsletter**

http://liv.mt.gov/Animal-Health/Newsletters

Quarterly Newsletter from the Animal Health Bureau of the Montana Department of Livestock (MDOL)

Volume 12, Issue 4

#### December 2019

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#### **CALENDAR OF EVENTS**

American Farm Bureau Federation Convention & Trade Show–January 16-20, Austin, Texas 75th Montana Winter Fair–January 18-20, Lewistown Montana Veterinary Medical Association winter meeting–January 23-25, 2020 in Bozeman

### WHAT'S NEW

Dr Schwarz joins MVDL, p. 4 Brucellosis review, p. 3, 5

# **State Veterinarian Notes**

FALL BRUCELLOSIS TESTING: Much of our fall has been spent working through a new protocol for brucellosis testing after a key reagent became unavailable nationally. In the process of analyzing 40,000 tests, we detected over 50 suspects in 30 herds which resulted in much anxiety on the producer side, and head scratching at MDOL and USDA. Although the majority of the subsequent movement restrictions were brief, we know that we cannot have a successful program unless we can continue testing with minimal interruptions of commerce.

We worked with USDA, and other state veterinarians to refine the testing protocol which should be posted on our website by the time you read this.

**USDA BRUCELLOSIS PROGRAM REVIEW:** The high level of testing and compliance with brucellosis regulations earned us high marks from USDA in the most recent Brucellosis Program Review. The review acknowledged the extremely low risk of exporting a brucellosis positive animal out of our Designated Surveillance Area (DSA) and complemented the state on a strong working relationship with producers, veterinarians, and Fish Wildlife & Parks (FWP). One area where we continue to have room for improvement is more rapid matching of movements with the required testing.

ANIMAL DISEASE TRACEABILITY: You've heard the word 'traceability' so often, the idea has possibly become an abstract concept. A couple of recent tuberculosis investigations allow us to clearly contrast inadequate and good traces as well as the human and financial impact of animal identification. When you read about the details of the investigations on page 5, keep in mind not only the resources expended by state or federal staff in testing numerous herds that could not be excluded from the investigation, but also the time, wear on cattle, and anxiety that being part of a tuberculosis investigation causes to individual producers.

**VETERINARY DIAGNOSTIC LABORATORY:** There are more good things to talk about in the veterinary diagnostic laboratory. With the recent hiring of a veterinary microbiologist, Erika Schwarz, DVM, we are now fully staffed with senior scientist positions. Dr. Schwarz comes on the heels of hiring Greg Juda, PhD as the laboratory director in May, and Jonathon Sago, DVM as a second pathologist in October. Dr. Schwarz will provide much appreciated expertise to various MVDL sections including microbiology, virology, serology, and molecular diagnostics.

MVDL building discussions are progressing, albeit slowly. Several key questions need to be answered including whether the MVDL will be co-located with other laboratories, scope of facility, and most critically, cash flow needed to support an owned or leased facility. Funding and construction of veterinary diagnostic laboratories often take many years of planning; so we have much work yet to do.

**FERAL SWINE:** We've taken opportunities to share information on feral swine with the public. Two main points on this topic are worth repeating. 1) We (fortunately) don't have feral swine in Montana, and 2) no public hunting of swine will be allowed under any circumstances. Although hunting may seem like a good idea to control feral swine, hunting has been shown not to work by every jurisdiction that has tried and in fact, makes the problem worse. Report any sightings of feral swine to our office at 406/444-2976.

**ANNUAL REPORT:** The report is a comprehensive review of disease programs, numerical summaries of animal imports, and other data. We compile the annual report to maintain a historical record, and provide you insight into our priorities. We welcome you to review the document which can be accessed on the Animal Health section of our web site. ¤ By Marty Zaluski, DVM

# **Benefits of Traceability**

In a recent email (MDOL update), we communicated the USDA's decision to "pause" the timeline for transition to RFID tags. This timeline was discussed in the June 2019 edition of this newsletter. USDA states they remain committed to the transition but are working to accommodate current Executive Branch policy and feedback from the livestock industry. As we await further information about what happens next, silver metal NUES tags and metal brucellosis vaccination tags will be available free of charge for the foreseeable future. Tags can be obtained by contacting the USDA-VS-MT office at (406) 449-2220.

Independent of USDA's decision, MDOL remains committed to the transition to electron-

Figure 1. TB testing follow up statistics Source: DOL Staff	June 2018 Steer	March 2019 Cow
Official ID	No	Yes
Brand data used	No	Yes
Movement docu- ments available	No	Yes
Calfhood vaccination data available	N/A	Yes
Number state and federal employees	25	9
Total hours	2,028	459
Total mileage	47,482	7,597

ic certificates of veterinary inspection. The transition will improve traceability data and allow for shorter and more targeted disease traces.

To demonstrate the value of accurate, timely, and searchable traceability data, we are providing a comparison of two recent tuberculosis traces conducted in Montana.

The first was a steer found at slaughter in South Dakota. The positive steer had no official identification in its ear and because it was found at slaughter, steers need not be officially ID'd according to current regulations. The hide had already been removed from the carcass, therefore no brand data was available. Using kill sheets and sales records, it was determined that the steer had been fed at a South Dakota (SD) terminal feedlot as part of a single lot purchased at a SD livestock market. The lot of animals was purchased from a SD buyer and came from a group of 450 assembled animals from markets in 3 states. There were 99 total sellers from 5 states contributing to the assembled group of 450 animals. Because there was no additional traceability data available, all potential source herds were required to conduct TB testing.

In Montana, this meant 15 herds, where 4867 animals were tested. Twenty-five state and federal employees spent 2028 hours and traveled 47,482 miles to conduct the testing with no detections of bovine tuberculosis. Likewise, South Dakota, North Dakota, Minnesota, and Wyoming have conducted testing of similar investigations as part of the same investigation into their respective herds.

In contrast, a cow found with bovine tuberculosis at slaughter in Nebraska had official identification present that was collected at slaughter. The official ID was a brucellosis vaccination tag that was traced back to a Treasure County, Montana cow herd. The official ID was also recorded on an electronic certificate of veterinary inspection (CVI) that showed the animals movement from Montana to the SD feedlot where the animal was fed prior to slaughter. Brands records in Montana confirm that the Treasure County herd sold animals into the lot represented on the CVI. This information allowed traceback to a single herd of approximately 150 animals that was tested two times as a direct traceback.

This testing and associated follow-up (8 caudal fold responders were taken to the diagnostic lab for euthanasia and tissue collection) involved 9 state and federal employees, 7,597 miles, and 459 hours.

Official identification applied to animals and captured by systems that are readily available and searchable greatly narrows the scope of trace-back investigations, therefore, preventing producers being subject to unnecessary disease testing. Tuberculosis traces in particular are difficult for producers as this testing requires two trips through the chute for all animals.

¤ By Tahnee Szymanski, DVM

# **Brucellosis Program Review**

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In June, USDA sent a review team to Montana to evaluate our state brucellosis program. The USDA review team includes veterinary epidemiologists, animal health technicians, and a state veterinarian from another state. The review team's objectives were to assess.

Adequacy of the State's brucellosis rules ٠ and infrastructure

Enforcement of brucellosis rules. .

Cattle surveillance. diagnostics/ laboratory capability, and producer education and cooperation

• Wildlife surveillance and risk mitigation activities

DSA boundaries, testing, and movement restrictions for overall effectiveness

Montana has received a draft of the review team's recommendations which fit into three categories: a) current actions to be continued, b) recommended improvements, and, c) recommendations that do not directly impact the Department of Livestock.

Recommendations for continuation of activities include reimbursement to producers and veterinarians for testing; encouragement of whole herd testing of DSA herds in the fall; collaboration with Fish Wildlife and Parks (FWP) on live elk captures and wildlife surveillance; collaboration with other Greater Yellowstone Areas states for consistency between programs; and maintenance of the current level of surveillance.

The recommended improvements include making compliance assessment close to real -time. Currently, we review compliance by matching a brucellosis test with a corresponding brand inspection after the inspections are sent to the Helena office. To accomplish a truly real-time assurance of compliance, a brand inspector would need to identify that all individual animals on the shipment are individually listed as negative on the test chart. To get this accomplished, several changes would be needed.

- All animals tested for brucellosis at the diagnostic laboratory would need to have their individual animal ID entered into a laboratory database.
- All animals that move would need to have electronic ID, and this ID would need to be scanned during shipment.

- Software would need to be developed that could match the negative brucellosis laboratory test with the animal's electronic ID.
- Montana law need to be changed to allow a brand inspection to be withheld even when 'ownership' of the livestock was verified per MCA 81-3-203.

In the meantime, the Brands Division has prioritized the data entry of paper field inspections from the DSA. If these inspections are entered into the brand database soon after the inspection occurred, the DSA program compliance technician is able to assess compliance more quickly.

While there is a variable delay in reconciling field inspections, market compliance assessments are currently near real-time. Animal information is entered into a database the day of the sale. By matching the sale information with the laboratory testing record, we can confirm that the market veterinarian did test all eligible DSA animals that were sold. If animals were tested prior to arrival at the market, we can confirm that occurred as well.

Additional information on the review including recommendations and our formal response will be available on our website once the review document is considered final. Watch for notification of its availability in an MDOL update. We hope that USDA will have the final version to us soon.

#### **Brucellosis Testing Protocol Update**

As discussed in the most recent edition of StockQuotes, the Rapid Antigen Plate (RAP) test is no longer available nationally as a primary screening test for brucellosis. Also, in the last MDOL update (emailed November 18th), we described the increased number of suspect results with the use of the Fluorescent Polarization Antibody (FPA) test for screening. Both Montana and Wyoming have utilized the FPA this fall on thousands of samples and have seen a sharp increase in low level suspect results (which we believe are actually negative animals) over previous years. Continued on page 5

## **Post-Illegal Imports**

Animals occasionally enter Montana without Dr. Erika Schwarz-Collins to join the Montana Vetmeeting the state's animal health import requirements. When this occurs, several steps are necessary to ensure animals are brought into compliance in order to be considered 'in Montana legally'. These include:

- Ouarantine animals should be isolated and requirements. Depending on the circumstance, guarantines may be issued verbally by trict Brands Investigator, or an official quarantine may be issued by our office.
- Brand inspection animals that enter Monverify ownership of animals and bring animals zoonoses, and translational medicine. into compliance with Montana brand laws.
- Disease testing All required testing must be completed prior to issuance of post illegal import permit and release of guarantine.
- Official identification If required.
- Post Illegal Import Permit and O release

As an accredited veterinarian in Montana, you a passion for diagnostic microbiolomay be asked by our office, by a DOL Livestock District Brands Investigator, or by a client to assist with this process. In the past, we have asked that veterinarians issue a post-illegal import certificate of veterinary inspection (CVI) to capture the necessary information on the movement into Montana. With the transition to electronic CVIs, this practice is quickly becoming obsolete as electronic CVI formats do not allow an out of state location as the origin on a CVI intended for use on Montana origin animals. To replace this practice, we will require the animal owner or the accredited veterinarian to obtain a post-illegal import permit from our office. The finalized permit will be provided to the owner of the animals for their records.

A few notes on completing this new process:

- upon the class of animal (i.e. TB testing for sporting bovines or EIA testing for horses).
- Apply official identification to animals as required.
- In order to obtain the post illegal import per-З. mit, our office will need the physical address from which the animal originated, the destination in Montana, owner contact information, and animal information.
- 4. Release quarantine or notify DOL of eligibility for quarantine release
- If you have questions, please call (406) 444-5. 2976.
- ¤ By Tahnee Szymanski DVM

## MVDL Update

erinary Diagnostic Laboratory

Dr. Erika "Rikki" Schwarz is a veterinarian from Gainesville, FL. She is currently a PhD Candidate at the University of Florida College of Veterinary Medicine, working in the Emerging Diseases Requarantined pending compliance with import search and Test Laboratory. As a classically trained virologist, Dr. Schwarz is proficient in a wide variety of diagnostic techniques. Her disseryou or a Department of Livestock (DOL) Dis- tation research has focused on the development of a translational ovine model of Zika virus infection at the maternal-fetal interface. Her professional interests include diagnostic microbiology, tana illegally should be brand inspected to clinical virology, high consequence pathogens,

> Dr. Schwarz graduated with honors from the University of Florida College of Veterinary Medicine in

2016, simultaneously receiving her Doctor of Veterinary Medicine and Master of Public Health degrees. During veterinary school, she found gy and public health and completed internships with the Florida Department of Health, United States Department of Agriculture, and Florida Fish and Wildlife Conservation Commission. Dr. Schwarz has extensive research experience and has worked on projects such as investigating the zoonotic risk to nonhuman primate owners in Florida, examining the ocular immune system of manatees, and understanding factors related to tuberculosis transmission between elephants and humans. She also holds a grad-

uate certificate in Aquatic Animal Medicine. Prior 1. Perform or verify all required testing based to veterinary school, Dr. Schwarz received her Bachelor of Science degree in Animal Sciences, focusing on Animal Biology and Dairy Sciences.

> In her free time, Dr. Schwarz enjoys spending time with her husband, Mike, and three cats (Apollo, Oskar, and Penny). An avid outdoors-woman, she enjoys riding her quarter horse mare (Candy), practicing archery, gardening, and anything to do with the ocean (especially swimming, diving/ snorkeling, and kayaking). Dr. Schwarz is excited to be trading in her flip flops for snow boots and is looking forward to joining the Montana Veterinary Diagnostic Lab this coming spring! ¤ By Gregory Juda, Ph.D.



# Vaccination Certificates

Beginning this fall, the Department of Livestock chose to tattoo animals with the birth year. (DOL) is handling data entry from brucellosis vaccination certificates. Historically USDA completed this data entry but due to recent changes in staffing at USDA and loss of the primary position that handled the data entry, DOL has now taken over the process. The information entered from vaccination certificates provides valuable traceability information by tying the brucellosis vaccination tag to a location, most commonly, the birth premises. This information is frequently used when tracing animals.

In a past edition of StockQuotes, we covered "do's and don'ts" associated with the completion of paper brucellosis vaccination forms. As we are still seeing these common errors, we wanted to review best practices for form completion to ensure data collected is useful and to hopefully prevent you from receiving calls from our office as we address these issues.

#### 1. ACCURATELY COMPLETE CERTIFICATES.

Information needed on the form includes a complete physical address for where animals are located, date of vaccination, RB51 serial number and expiration date, and designation of calfhood or adult vaccination. PO Box information is not an acceptable form of address.

ALL VACCINATIONS MUST BE PROMPTLY REPORTED			
COOPERATIVE STATE-FEDERAL BRUCELLOSIS ERADICATION PROGRAM			
BRUCELLOSIS VACCINATION RECORD			
		LUUII	
HERD OWNER (LAST NAME	EIRST NAME UN		
HERO OTHER [DAGT HAVE	, FIRST NAME, MI		
ROUTE-STREET-ROAD			
DOOT AFFIAR			
POST OFFICE	STATE	ZIP CODE	
	GPS COORDINATES		
CV AV			

Figure 3. Improperly completed Vaccination Certificate

2. APPLY AND DOCUMENT THE CORRECT BRU-CELLOSIS VACCINATION TATTOO TO ANIMALS. The last digit of the brucellosis vaccination tattoo correlates to the year in which the vaccination is applied, NOT the year in which the animal was born. We recognize that occasional errors occur early in the calendar year when the last digit in the tattoo gun has not yet been changed. Our concern applies to veterinarians who deliberately

3. INCLUDE STATE LICENSE NUMBER OR NATION-AL ACCREDITATION NUMBER IN THE AGREE. CODE BOX. Signatures are not always legible, and we need to be able to identify who completed the work.

4. SIGN THE COMPLETED FORM. Brucellosis vaccination certificates are official forms that require your signature as the accredited veterinarian completing the work.

5. SUBMIT COMPLETED CERTIFICATES WITHIN SEVEN DAYS OF ISSUANCE.

We appreciate the tremendous work that you perform as accredited veterinarians in Montana and hope that these errors can be remedied. If you have any questions pertaining to Standards for accredited veterinarian duties (9 CFR 161.4), duties of deputy state veterinarians (ARM 32.3.140), or any program standards, please contact Dr. Tahnee Szymanski, tszymanski@mt.gov or (406) 444-5214. ¤ Bv Tahnee Szvmanski. DVM

To help alleviate the issues associated with the

## **Brucellosis Program** Review continued from page 3

FPA screening results, USDA in partnership with the Greater Yellowstone Area States and State animal health officials from across the country have worked on a testing and interpretation protocol that is now in its second iteration. For more details, please see our website.

We have been working diligently with the USDA on the testing protocol to ensure that we are able to successfully identify true positive animals while minimizing the number of false positive serologic tests. We recognize that this is necessary to minimize the impact of guarantines and additional testing on DSA producers and to maintain producer confidence in the program. Unfortunately, we expect to see lower test numbers for 2019 than years past. This is concerning as our high level of surveillance helps with marketing confidence, and has received praise from USDA following their review of Montana's brucellosis program. ¤ By Eric Liska, DVM

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Return Service Requested Helena, MT, 59620-2001 P.O. Box 202001 Animal Health Bureau

Fax: 406-444-1929 0702-444-2014 :9nil hoqml Phone: 406-444-2043

vog.jm.vil.www We're on the Web:

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**Brooke Ruffier** 

Alternative Livestock

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Eric Liska. DVM Brucellosis Program Veterinarian

# Marty Zaluski, DVM

Information:

**Animal Health Contact** 

State Veterinarian, Administrator (406) 444-2043 mzaluski@mt.gov

Category I Accredited Veterinarians must complete three modules within their three-year renewal period to renew their accreditation. Similarly, Category II Accredited Veterinarians must complete 6 modules within their three-year re-

For veterinarians without Internet access, a paper-based option is available at a minimal cost to cover production, shipping, and handling. Requests for non-Web based materials may be made to the VS Montana office. Additionally, modules may be offered in conjunction with future MVMA meetings. APHIS and the MVMA are in the process of exploring options.

newal period. The trainings are available online

For more information, please visit the following web site: www.aphis.usda.gov/nvap/ or contact the USDA-APHIS-VS-Montana Area Office (406-437-9450).

Veterinarians whose accreditation status has

been terminated and are seeking to have their

accreditation reinstated should contact the

USDA-APHIS-VS-Montana Area Office regarding

reinstatement. ¤ By Janet Hughes DVM

Currently there are 31 modules available. The National Veterinary Accreditation Program

(NVAP) requires accreditation renewal every 3 years with completion of supplemental training. You must know your 6 digit National Accreditation Number (NAN) to access your Certificate of Completion. If you do not know your NAN or your accreditation renewal date, you can check with your NVAP coordinator at the number pro-

# National Veterinary Accreditation Program News

Two new APHIS-approved supplemental training vided below.

modules are now available online at:

# www.aphis.usda.gov/nvap/

- Module 30: The Role of Veterinarians in Honey Bee Health
- Module 31: High-Impact Equine Diseases in the U.S.

Modules 2, 4 and 10 now have audio added:

- at no charge. Module 2: Role of Agencies and Animal • **Movement Forms**
- Module 4: Preventing Disease Introduction . and Spread
- Module 10: Personal Protective Equipment • for Veterinarians

Each module represents one unit of training, and takes approximately one hour to complete. Anna Forseth, DVM