



# Stock Quotes: Animal Health Newsletter

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

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## CALENDAR OF EVENTS

- The NILE is scheduled for October 12-19, 2019 at the Metra in Billings
- Montana Farm Bureau Federation Annual Convention is scheduled for November 11-14, 2019 in Billings
- Montana Wool Growers Association Annual Convention is scheduled for December 5-7, 2019 in Billings
- Montana Stock Growers Association Annual Convention is scheduled for December 10-12, 2019 in Billings
- Montana Veterinary Medical Association winter meeting will be held January 23-25, 2020 in Bozeman

## State Veterinarian Notes

As we gear up for fall work, we have several timely announcements.

THE VETERINARY DIAGNOSTIC LABORATORY (MVDL) will soon be able to test for Chronic Wasting Disease (CWD). Since first finding CWD in a wild mule-deer in October 2017, Montana Fish, Wildlife and Parks (FWP) has ramped up testing to better understand the prevalence and distribution of the disease. Although there is no evidence that CWD can be transmitted between deer and people, hunters have also expressed an interest in testing harvested game out of an abundance of caution.

The MVDL has filled a long-term vacancy in hiring another pathologist. Dr. Jonathon Sago just completed his residency and passed his boards. Starting at the end of September, Dr. Sago will provide Dr. Steve Smith much needed relief since he's been the lone full-time pathologist at the laboratory for several months. We are continuing to recruit for a veterinary microbiologist.

Please note that the laboratory has proposed an administrative rule adjusting fees for laboratory services. The fee changes will cover increasing costs of reagents and other laboratory inputs. The proposed adjustment will also allow the laboratory to charge for incineration based on the actual weight of the product burned, and address significantly higher testing costs associated with brucellosis testing (see page 3). Fees were last adjusted in 2017, and are expected to continue to be competitive with those charged by regional laboratories.

**RABIES REPORTING:** Rabies reports jumped significantly as the summer progressed. In July and August, MVDL reported eight positive submissions and ten samples that were unsuitable for testing. As you know, unsuitable samples are treated as positives for the purposes of animal and public health management.

ELECTRONIC HEALTH CERTIFICATES (eCVI): If you're still searching for the ideal eCVI solution that works for your practice, please see the [eCVI](#) section (page 4). This section is the fourth installment of a multi-part series that explores various electronic options in some detail.

FERAL SWINE have the infamous designation of being the most destructive terrestrial species. It's well documented that feral swine can be devastating to ground nesting birds, crops, and can prey on fawns and other small ruminants. In addition to inherent difficulty of eradicating a species that is by all accounts highly intelligent and adaptable to human pressure, the hunting constituency that rapidly builds after feral swine are established makes eradicating them from a state a rare occurrence. In partnership with the Montana Invasive Species Council (MISC), MDOL has significantly ramped up our efforts on education and prevention. Page 5 offers details on this important subject.

JOHNE'S For the last few months, we've been discussing Johne's disease and the enhanced risk that many seedstock operations face. We're finally offering this voluntary program to livestock producers. Veterinarians who provide services to enrolled livestock operations need to complete a training that explains program details including testing protocols and the process to advance in certification status. The intent of this program is to provide buyers a qualitative assessment of the risk of the disease when adding animals to their herd whether they be breeding bulls or females. See column on page 3 for more details. *By Marty Zaluski, DVM*

## WHAT'S NEW

- ⇒ USDA welcomes new veterinarian in charge—p. 6.
- ⇒ MVDL hires a new pathologist—p. 6.

## Johne's Certification Program

As mentioned in past editions, the Department of Livestock has created a state herd certification program in response to concern about increasing numbers of Johne's positive animals, in particular in Montana's purebred industry. The department recently conducted three webinars for veterinarians interested in participating in the newly developed Montana program. The program includes three main areas of focus: 1) education, 2) biosecurity and risk management, and 3) individual animal and herd testing. This article will focus on the testing protocol options available for participating producers.

There are two herd-level testing options defined within the program. Herd-level testing is a requirement for producers participating at levels two, three, or four.

**TESTING OPTION 1:** Conduct ELISA test on all cattle greater than two years of age followed by individual fecal PCRs on any animal positive on the ELISA. If the animal tests negative to the follow-up PCR, a repeat PCR will need to be conducted six months later. A positive ELISA test, negative initial PCR test and a negative 6-six month PCR test does not require the animal to be removed and will not affect a producer's program status.

**TESTING OPTION 2:** Collect individual fecal samples from all cattle greater than two years of age and submit for PCR testing. Fecal samples can be pooled in groups of five. For a positive fecal pool the laboratory will conduct individual PCR testing at additional expense to the owner. Therefore, veterinarians submitting fecal samples for PCR testing need to submit individual fecal samples to the laboratory. Pooling cannot be conducted on the farm.

The sensitivity and specificity of the PCR, combined with the ability to pool samples, and the quick turnaround time, make PCR a popular testing option. The downside to using PCR for Johne's is that a negative test, especially in a younger animal or in an animal that tested positive to an ELISA test, is difficult to interpret with confidence. A positive PCR will be considered a confirmatory test and will require animals to be removed from herds.

Previously, bacterial culture was recommended as a primary test option for Johne's disease. However, this is no longer a routinely used test because there are significant time

delays and the test needs to be outsourced to another lab from the MVDL.

Culture may still be used when a producer wishes to challenge the results of an ELISA or PCR test. But, culture is not recommended for use as a primary test for the Montana Johne's Control program.

The department may review a veterinarian's alternate testing protocol if different than those mentioned here. Consideration will be given to protocols that match the test sensitivity of the two program test protocols.

The testing costs at the Montana Veterinary Diagnostic Lab (MVDL) are:

Test	Current Cost
ELISA	\$4.40–8.80
Individual PCR	\$34.65
Pooled PCR	\$40.42

Veterinarians should also remember that positive pooled PCR tests would require individual PCRs to be run on the number of animals represented in the pooled sample.

For veterinarians interested in participating in the Johne's program but who were unable to participate in the webinars this past month, MDOL will be offering a pre-recorded webinar in October. Please see upcoming MDOL Update emails for more details.

As a reminder, federal regulations prohibit the movement of Johne's positive cattle across state lines unless animals are destined for slaughter. This restriction includes positive cattle from herds with confirmed infections.

If you have questions about animal disposition, please contact Dr. Anna Forseth, [anna.forseth@mt.gov](mailto:anna.forseth@mt.gov). ✉ By Anna Forseth, DVM

## Brucellosis (RAP TO FP)

The Rapid Automated Presumptive (RAP) test has been the primary screening test for brucellosis testing in U.S. laboratories since the USDA "Standard Operating Procedures for Submission and Testing of Brucellosis Serological Specimens" was released in 2014. The test is valuable due to its relatively high sensitivity (78%), nearly 100% specificity, low cost, minimal labor needs, and rapid turnaround time.

This summer, the United States Department of Agriculture (USDA) informed state animal health officials that USDA can no longer produce antigen for the RAP brucellosis test. NVSL was the sole supplier of the antigen and provided it to laboratories in the US at no cost. The antigen can no longer be produced following an unrepairable breakdown of the bioreactor that creates it.

Fortunately, MDOL has been looking at options to replace the aging RAP over the last few years for other reasons. The software and hardware needed to run the RAP are no longer supported and therefore cannot be upgraded or fixed when a problem arises. Additionally, other tests have been developed more recently with comparable or higher sensitivity and specificity ratings.

The USDA approved testing protocol has included the use of RAP or Buffered Acidified Plate Antigen (BAPA) for screening and the Fluorescent Polarization Assay (FPA) with the Compliment Fixation (CF) test for confirmation of non-negatives. If a sample tested negative on any of the serologic tests (run in a series) no further testing was done.

Non-negative animals are classified as suspects or reactors based on the results of all tests. Reactor animals are most often sacrificed and cultured. Suspect animals are sometimes tested again or sacrificed. This sequence of testing has given us the highest level of sensitivity and specificity possible with available serologic tests. In other words, we minimize false negatives (sensitivity) and false positives (specificity).

Greater Yellowstone Area (GYA) state laboratories as well as other state and USDA laboratories run nearly a million RAP tests each year. After USDA announced the RAP antigen would no longer be available, state animal health officials began talks with USDA

about alternatives. BAPA was considered, but has not been utilized often in the past due to labor needs and the length of time it takes to get results (at least 48 hours). The BAPA has similar sensitivity and specificity to the RAP.

A second option to replace the RAP test is the FPA. The FPA test has nearly a 100% rating for both sensitivity and specificity but has only been used for confirmation (rather than screening) because it costs laboratories nearly two times that of the RAP to run.

The brucellosis ELISA test is another test that we felt could be an option for a screening test. The test however is not currently validated in the U.S. for testing of serum for brucellosis and the validation process can be costly, time consuming, and may not yield the desired result of a usable test.

Following discussions with USDA cattle health staff, laboratories have been allowed to choose between the BAPA or FPA plate for screening. As before, when using the FPA plate as a screening test, the FPA tube and CF will be used as a confirmatory test.

Following an evaluation, MVDL and the University of Wyoming laboratory decided to use the FPA for screening. Although the FPA is more expensive for laboratories to run, we can have results in half the time as the BAPA with less employee input. Laboratories that perform testing on mostly slaughter samples (Idaho, Kentucky, and Texas labs) were more likely to utilize BAPA. MVDL was able to secure federal funds to offset the cost of using the FPA for a year, and therefore minimize the impact of a necessary price increase for testing. ✂ By *Eric Liska, DVM*

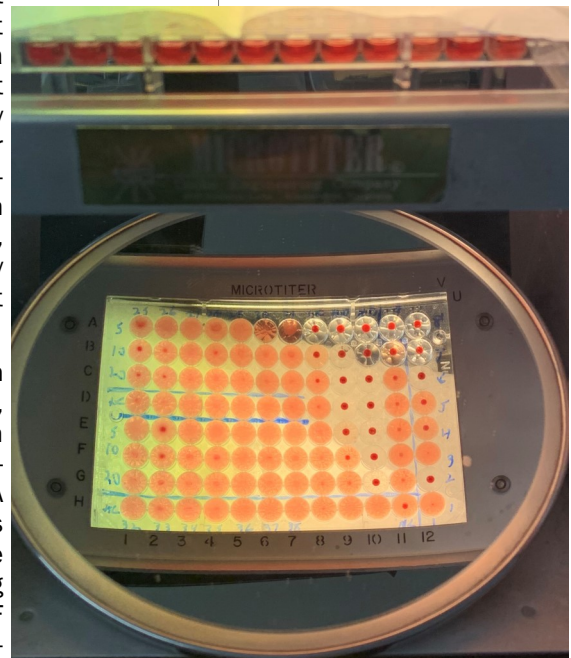


Figure 1.. FP tests at Montana Veterinary Diagnostic Lab  
Source: MDOL staff

## Global VetLink (GVL)

A reminder, in 2020 MDOL will no longer be printing paper certificates of veterinary inspections for distribution to veterinarians and in 2021 will no longer accept paper CVIs. The first of these dates is fast approaching! If you have not already begun exploring electronic options for the issuance of CVIs, please contact the Department for help getting started! Please remember that for veterinarians who have adopted electronic options, the department will accept paper certificates in those rare instances where electronic systems fail.

This article is the fourth in a series outlining available options for electronic CVIs. This month's featured product is Global VetLink (GVL). GVL provides animal health practitioners with an easy-to-use, cloud-based software solution for digital Certificates of Veterinary Inspection (CVIs) for all species of animals.

Veterinarians can use this electronic CVI on any iOS, Android device, or desktop. GVL is able to issue CVIs for both small and large animals with built in state movement requirements. GVL also has Coggins functionality for EIA testing of equids. Once a CVI is issued, a copy is automatically sent to the state of origin and destination. Animal owners are able to access their online records using MyVetLink.

GVL users are able to save contacts to easily populate future CVIs. Additionally, you can save frequently used statements and animal information. Digital photos of animals can also be uploaded to the CVI. Once a health certificate has been issued the final certificate is locked from edits or alterations.

One additional feature of GVL is the Extended Equine Certificate of Veterinary Inspection (EECVI). This is the newly adapted six-month horse passport. Whereas the previous paper version was only accepted by five western states, the new EECVI is currently recognized by 27 states, with that number continuing to grow.

For additional information, please see the GVL website at [www.globalvetlink.com/products/eecvi/](http://www.globalvetlink.com/products/eecvi/). To register for a GVL account, visit [www.globalvetlink.com/signup](http://www.globalvetlink.com/signup). The GVL sales team will follow up with you to finish setup. GVL's customer support and training is available seven days a week. Please contact Sara Starkey with questions. (406) 444-1587 or [SStarkey@mt.gov](mailto:SStarkey@mt.gov).  
 ✂ By Sara Starkey

## Montana Veterinary Diagnostic Lab (MVDL) Update

Chronic wasting disease (CWD) is a fatal, neurological disease affecting deer, elk, and moose. The disease was first detected in Wyoming and Colorado and has since spread throughout North America, including Montana. Recently, the confirmation of multiple positive cases of CWD in deer around Libby, Montana has prompted increased efforts to detect the spread of CWD within the state. These cases represent the first time CWD has been detected west of the Continental Divide in Montana. Currently Fish Wildlife and Parks (FWP) has established a CWD management zone in the Libby area and has implemented measures in an attempt to control the spread of the disease.

Official CWD tests are performed only at USDA Animal and Plant Health Inspection Service (APHIS) approved university, state, or federal veterinary diagnostic laboratories. At this time, diagnostic tests approved by USDA are limited to enzyme-linked immunosorbent assay (ELISA) and immunohistochemistry (IHC) assays. Recently, MVDL was able to obtain federal grant funding to facilitate the purchase of equipment required for both the ELISA and IHC tests for CWD.

Upon testing availability, Fish Wildlife and Parks has agreed to update their website to indicate that CWD testing is available at the MVDL. The availability of the ELISA test will be later in the year as we are still awaiting the last piece of critical testing equipment from the manufacturer.

The MVDL is committed to improving and expanding its diagnostic testing services into the future and looks forward to being able to provide these CWD testing services for Montana in the coming months. ✂ By Gregory Juda, PhD.



Figure 2. White Tail Deer  
 Source: MDOL Staff

## Feral Swine

Recent reports of feral swine to the north of Montana's border have garnered significant attention. In addition, the Montana Invasive Species Council (MISC) has been working to include feral swine in their efforts. While the Department of Livestock (MDOL) has been working for years to prevent the introduction of feral swine into Montana, these events have brought with them increased awareness of the severity of the issue.

Feral swine damage crops and riparian areas; impact susceptible wildlife populations; and are capable of carrying disease that can be spread to domestic pigs, other livestock species, people, and wildlife. In 2015, the Montana Legislature passed a bill that prohibits feral swine in the state.

**PROHIBITION:** The law prohibits the following actions:

- Importing, transporting, or possessing live feral swine
- Intentionally, knowingly, or negligently allowing swine to live in a feral state
- Hunting, trapping, or killing feral swine or assisting in hunting, trapping, or killing feral swine
- Intentionally feeding feral swine
- Expanding the range of feral swine
- Profiting from the release, hunting, trapping, or killing of feral swine.

**DEFINITION:** The term feral swine applies to any "hog, boar, or pig that appears to be untamed, undomesticated, or in a wild state or appears to be contained for commercial hunting or trapping." Genotypic or phenotypic descriptions of feral swine were not used as domestic swine can revert to a feral state within just a few generations. One group of pigs reported along the Montana Canadian border in recent months was a band of potbellied pigs that had been turned loose.

**ERADICATION:** Preventing the introduction of feral swine in Montana has been a coordinated effort between Montana Fish, Wildlife and Parks, USDA Wildlife Services, and the Department of Livestock. The authority for management of feral swine however is squarely within MDOL to eliminate potential efforts to hunt feral swine. Should populations of feral swine become established and sportsmen develop an interest in hunting them, having the authority within MDOL prevents this constituency from gaining traction.

**NOTIFICATION/PENALTIES:** The law requires mandatory reporting of the presence or suspected presence of feral swine and establishes a penalty

for violations. Persons who suspect their presence are required to report sightings to MDOL and should call (406) 444-2976.

MDOL will respond to ensure that the suspected animals are not owned animals and then will work with FWP and USDA APHIS WS to eradicate any confirmed feral swine. Only MDOL employees or other approved agents are permitted to participate in control/eradication of feral swine.

However, land owners or lessees that encounter feral swine on their land or land under their control, may immediately eradicate the feral swine if the animals:

- Pose an immediate threat of harm to a person or property, or
- Will expand their range without immediate eradication.

Following their eradication, the responsible party is required to notify MDOL.

**EDUCATION:** The recent involvement of MISC in the campaign against feral swine in Montana has brought additional resources and opportunities to the table, including a Montana specific Squeal on Pigs campaign to educate Montanans' about the state's feral swine laws and provide a single outlet for reports. It is worth noting that while the presence of feral swine across our northern border is of great concern, the potential for introduction of feral swine into Montana by transport in a vehicle or trailer is equally troubling. Individuals who wish to create hunting opportunities in the state pose a significant threat for the introduction of feral swine.

Since the 2015 law took effect, MDOL has received one or two reports of potential feral swine per year. In one instance, pigs had been hauled in from Texas. The importer intended to release the pigs on their own property for future hunting activity. MDOL responded and the pigs were slaughtered for meat.

If you are interested in learning more about feral swine, the Department, along with MISC and USDA APHIS WS is holding a Feral Pig Summit in Billings on November 15. Look for additional detail in the coming weeks! ✂ By Tahnee Szyman-ski, DVM



Figure 3. Feral Swine Image  
Source: MDOL Staff

# Welcome Veterinarians!

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**Import Permit Office**  
(406) 444-2976

**Dr. Scott Beutelschies comes to Montana as the new Area Veterinarian in Charge for USDA, APHIS, Veterinary Services.**

Dr. Beutelschies is a graduate of the Louisiana State School of Veterinary Medicine (1991) and brings a depth of experience as a large animal practice owner for ten years, and federal service for the past 18 years.

During his 28-year veterinary career, he has lived in Louisiana, Oregon, West Virginia and California and worked in most western states serving both in practice and various roles within the USDA.

Most recently, he served as the USDA APHIS Emergency Coordinator for California, Nevada, Hawaii and Pacific Territories which enabled him to gain experience in preparedness and detection as well as the most effective responses to diseases of significance to the United States. This experience will serve him well to work cooperatively with the Montana Department of Livestock, producers, accredited veterinarians and other shareholders. *By Marty Zaluski, DVM*

Figure 4. Dr. Beutelschies  
Source: MDOL Staff



**Dr. Jonathon Sago to Join MVDL as Veterinary Pathologist**

Jonathon Sago, DVM, ACVP is joining the Montana Veterinary Diagnostic Lab as a veterinary pathologist beginning in October 2019.

Dr. Sago is a native of the Pacific northwest, specifically Warrenton on the northern Oregon coast. Dr. Sago is a graduate of Oregon State University where he attained a bachelor's degree in animal science in 2011 and completed his doctorate of veterinary medicine in 2015. After veterinary school, he spent a year in private general practice working primarily with dogs and cats on the southern Oregon coast.

Dr. Sago, more recently, completed a three-year residency in anatomic pathology at Kansas State University and achieved board certification this September.

Dr. Sago enjoys working in diagnostic medicine on all domestic animal species and works with owners, producers, and other veterinarians with the goal of improving animal health. *By Gregory Juda, PhD*

Figure 5. Dr. Sago  
Source: MDOL Staff



We're on the Web:  
[www.liv.mt.gov](http://www.liv.mt.gov)



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