



VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Updates from the State Veterinarian's Office Spring 2015

WHAT'S INSIDE

*Letter from the
State Veterinarian*

Trichomoniasis Update

Scrapie Detected in Virginia

*Interstate Certificates of
Veterinary Inspection*

*USDA Eases Into
Enforcement Of Animal
Disease Traceability Rule*

*Mid-Atlantic Secure Milk
Supply Program (MA-SMS)*

*Drug Residue Investigations
in Virginia*



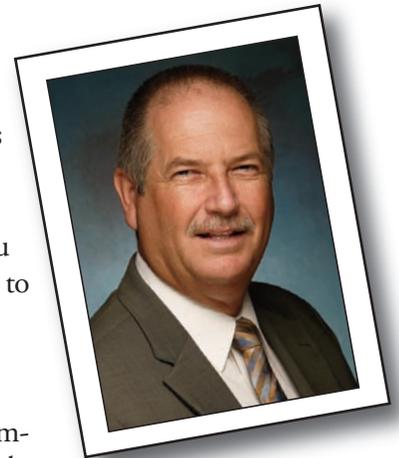
LETTER FROM THE STATE VETERINARIAN

The support of private practice veterinarians is essential to the implementation and ultimate success of all state and federal regulatory animal health efforts. Thank you for everything that you do to enhance the public image of veterinarians, to mentor the careers of new veterinarians and to protect both animal health and food safety.

During the last ten years, we have all had to change the ways that we do some things to accommodate local and international scrutiny of animal health and animal ownership. Increased public interest in animal welfare, the importance of international markets to our livestock commodities, animal disease traceability as a major animal health program and changes to the National Veterinary Accreditation Program will continue to affect the way that we do business well into the future.

Society expects transparency and accountability from all animal owners in the management of animal care. These public expectations include opinions on how animals are treated when they are in the food production system, how animals are used recreationally and how communities and local governments should manage pet populations and breeders. Virginia citizens expect our pets and livestock to be protected by the Virginia Comprehensive Animal Care Laws. Practitioners can proactively impact animal welfare by providing clients with instructions for animal care, handling and transportation. Your communities respect and value your opinions and guidance, which allows you to impact all of these issues at the local level.

The United States livestock and poultry industries know that participation in world trade enhances their profitability. Pork, beef, dairy and poultry all work to move 20 percent or more of their product through the world market. The ability of our industries and the USDA to demonstrate to their trading partners that our animal products are safe, both for humans and animals, is critical for maintaining market access. The surveillance and documentation that some of our trading partners require seems burdensome or illogical to



Continued on page 6

TRICHOMONIASIS UPDATE

“Trich” is a disease we have all heard about but have not had issue with in Virginia. Trichomoniasis is a venereal disease of cattle caused by the protozoan *Tritrichomonas foetus*. Virginia’s cowherd is a naïve population with it only being diagnosed 1-2 times in the last 20 years through our state lab system. This disease is often introduced by a single animal, most frequently an infected bull. The protozoan is transmitted during the breeding process with infection rates of 30-60 percent after a single service. Unlike other diseases, Trich offers few clinical signs until the disease is well established. Bulls are asymptomatic with no changes in semen quality or physical condition. In cows, the first sign of a problem is often the multiple number of times they come into heat. The protozoa causes an early embryonic death leading to repeated services, with an extended breeding and subsequent calving season. Cows may exhibit a slight vaginal discharge associated with embryonic/fetal death. Cows will typically develop immunity and shed the infection after repeated heat cycles. This may result in significant economic losses due to lighter late calves and cows culled that are not bred back, especially in controlled time-limited breeding seasons. In herds that do not pregnancy check or that calve year round, infection goes undetected for extended periods. Unfortunately, the immunity is short lived and the cows are prone to re-infection. There is a commercially available vaccine that is effective in the cowherd, but not in males. Bulls, especially mature ones, remain lifelong carriers despite a variety of innovative treatments. Culling and slaughter of infected bulls is recommended.

A positive diagnosis is most often accomplished by testing the bull. It is recommended that the bull have 2 weeks of sexual rest prior to testing to allow for buildup of organisms in the crypts of the bull’s prepuce. Conventional testing recommendations are for 3 negative cultures of preputial washings to be taken one week apart before a bull should be considered negative. The availability of PCR testing has led many practitioners to test via PCR rather than culture. It is important to differentiate testing protocols for diagnosing a bull as not infected with Trich versus those testing protocols designed to meet regulatory requirements for states that have requirements. Currently, a single negative PCR result on a preputial wash/scraping is accepted as diagnostic for many state import requirements, but this is up to the receiving state. While this is considered to be a practical

approach, a single test should not be considered to be definitive evidence that a bull is not infected with Trich.

All states west of the Mississippi have Trich entry requirements, as well as a few eastern states. When advising clients, be sure to check with the state of destination for specific testing requirements and any statements required on the CVI. Most states will accept bulls less than 18 months of age with a “virgin bull statement,” but some states only accept that statement on bulls less than 12 months of age. When selling bred females, some western states require a pregnancy statement that the cows are at least 120 days pregnant. When purchasing animals from western states, it is recommended that producers ensure that the bulls are test-negative for Trich before bringing them to Virginia. As with all diseases, it is much easier to prevent rather than to treat and eradicate it once here.

Samples for either culture or PCR must be submitted in a proprietary culture media known as InPouch TF, which is a small bag containing a growth and transport media that also inhibits the growth of yeast, mold and bacteria. InPouch bags are available from the VDACS Regional Animal Health Labs (RAHL) and should be ordered and received prior to collecting the preputial washes. Once samples are collected from the bull and inoculated into the In Pouch, it is critical that handling and shipping instructions are followed. Culture for *T. foetus* is done at the RAHLs in Harrisonburg, Lynchburg, Warrenton, and Wytheville at a price of \$12.00 per test. Upon receipt, InPouches are incubated for 6 days, and examined daily for evidence of trichomonads. A final report will be issued approximately 1 week following submission. PCR testing, which looks for the specific molecular fingerprint of the *T. foetus* organism, is more sensitive than culture and can be completed sooner. It is done at the Wytheville RAHL, and uses the same InPouch sample as is used for culture. The cost for an individual PCR test is \$40 and results are available, depending on lab testing volume, after 3-6 days. PCR samples can also be pooled for screening within the laboratory, and therefore some savings can be realized by submitting samples from multiple animals for test by pooling. Pools of up to 5 animals can be tested for \$75 per pool, with the caveat that if the pool is positive, each individual must be tested as a follow-up.

SCRAPIE DETECTED IN VIRGINIA

In May 2014, USDA APHIS notified VDACS of a presumptive Scrapie positive ewe detected at slaughter that had come from a Rockingham County premises. One week later, USDA's National Veterinary Services Laboratory (NVSL) confirmed the preliminary positive finding on the submitted brainstem tissue (obex). The Virginia premises was identified by tracing a sheep slaughtered in New Jersey to the premises of origin according to its Scrapie tag via the Regulatory Scrapie Surveillance System [RSSS]. We immediately placed a quarantine to prevent movement of animals to and from the exposed premises.

Working closely with USDA, we also initiated an epidemiological investigation. The index ewe was sold as a routine cull because of her age and was demonstrating no clinical signs of disease. The initial genotyping of the index sample resulted in a unique and seldom seen genotype footprint of "AV-QR." This genotype has demonstrated that the "AV" subgroup switches off the protective "R" portion of the "QR" group, resulting in an animal that is essentially a "QQ" genotype, therefore susceptible to the disease. The index commercial operation primarily raised lambs for private and restaurant consumption, but to complicate things a bit, there had been a group of 40 breeding animals sold from this operation 2 years earlier resulting in a second premises to investigate. When the quarantine was imposed, there was a large group of lambs ready for market at the index farm. With the cooperation of the producer, the lambs were "fast-tracked" for sampling. Those lambs not found to be genetically susceptible to the disease were then allowed to move into slaughter channels.

USDA and VDACS mobilized combined personnel teams for several visits to the two premises over the next several months. The first task was to collect serum from all of the "exposed" animals to examine their genotype and potential susceptibility to the Scrapie prion. Four hundred twenty animals were tested on both premises and 78 animals were determined to be genetically susceptible to the disease. All 78 animals were then rectal biopsied and none was determined to be Scrapie positive from this live animal test. During several sessions at the Harrisonburg Regional Animal Health Laboratory, all susceptible animals were euthanized with multiple tissues collected for submission to NVSL. One additional animal was identified as Scrapie positive on histopathology evalu-

ation at NVSL. The owners received fair market value for all euthanized animals from USDA; the owners were satisfied with the indemnity and were cooperative.

This incident is an excellent example of how epidemiological investigations can work; the animal was properly identified when it left Virginia, USDA identified and collected the proper samples at slaughter and prompt notification was delivered to both VDACS and the producer. This USDA/VDACS cooperation and rapid response to the incident resulted in a producer who was willing to work with the investigation and cleanup efforts. Currently, the quarantines have been lifted, but both flocks are enrolled in a USDA Post Exposure Management Monitoring Plan (PEMMP) that will allow close evaluation of animals for the next 5 years. Resolution of this investigation has also resulted in no change in our USDA Scrapie "Free" state status.



INTERSTATE CERTIFICATES OF VETERINARY INSPECTION

Interstate Certificates of Veterinary Inspection (ICVIs) have long been required for interstate movement of animals. Practitioners have several ways of meeting this requirement for their clients. VDACS has printed carbon paper forms for many years and Virginia-accredited veterinarians may request those large animal CVI forms from the VDACS labs. If those forms need to be shipped from the lab, shipping charges will apply and costs associated with the printing of the booklets may also be passed on to practitioners in the future. For small animal CVIs, an electronic copy of the USDA Form 7001 is available that can be printed and utilized in the same manner. This form is available on the USDA-APHIS website or it can be e-mailed to the practice.

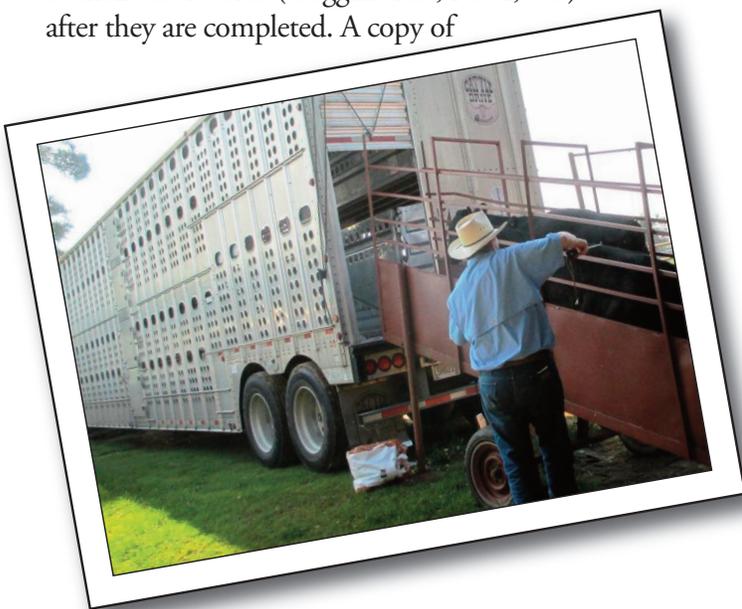
Several paperless options exist and are available for use by small and large animal practitioners alike. There are two main advantages to these electronic solutions: (1) for VDACS, the data can be collected and incorporated into a database which provides for a more efficient manner of searching when the need arises for a disease investigation; and (2) in some cases, these electronic solutions are more convenient for practitioners. This is certainly not always the case, but the evolution of electronic CVIs does provide some attractive options for practitioners interested in an electronic option that may mesh well with the laptop or tablet they may be using.

Global Vet Link (www.globalvetlink.com) is a private company that offers electronic ICVIs to be written and submitted. Clients can create an account and gain access to their test records (Coggins Test, ICVI, etc.) after they are completed. A copy of

the ICVI is automatically submitted electronically to the issuing and receiving states. Global Vet Link, through their Smart Engine System, provides a single solution to lookup state import and Animal Disease Traceability (ADT) requirements, as well as to generate ICVI certificates which will verify these requirements. The single solution approach will increase the efficiency of animal movement and disease containment. As Global Vet Link is a private company, they charge the veterinarian for use of the system.

The Institute for Infectious Animal Diseases (IIAD), in partnership with the Texas Center for Applied Technology (TCAT), a part of the Texas A&M Engineering Experiment Station, developed a mobile ICVI application to support veterinary practitioners submitting animal health certificate records from the field. The app, "ICVI," strives to expand the toolbox of capabilities available to veterinary practitioners, allowing them to easily submit electronic animal health certificates or store that information within the application for forwarding when data connectivity becomes available. This real-time information sharing is an alternative to email or web-based system and helps improve communication between veterinarians and state animal health offices by supporting certificate submission from the field. This application is available from the Apple store as a free download – go to the app store and search for "ICVI." After you download it and provide the initial information requested (your name and accreditation number, etc.), we will verify your accredited status and approve you to use the app. After you provide that requested information, please also e-mail our office at cvi@vdacs.virginia.gov to let us know that you have done so. There is currently no charge for this app. A version for Android devices is currently in development.

This is not meant to be an all-inclusive list of electronic CVI options; there are additional electronic solutions that are available and probably more in development. If there are any questions concerning options available for issuing ICVI's, please contact the Office of Veterinary Services (OVS) nearest you.



USDA EASES INTO ENFORCEMENT OF ANIMAL DISEASE TRACEABILITY RULE

REPRINT – original article by Burt Rutherford in BEEF Magazine

While the long and often controversial effort to develop a national animal identification (ID) system may not be completely finalized yet, complying with animal ID and movement regulations is now the law of the land. And it has been for a while. U.S. cattle producers and their veterinarians have been working under USDA's Animal Disease Traceability (ADT) rule for the past 18 months. However, USDA and state animal health officials have been emphasizing education and cooperation rather than enforcement in an effort to achieve compliance with the ADT rule, according to Chelsea Good, Livestock Marketing Association (LMA) vice president of government and industry affairs.

Speaking during a webinar sponsored by Global-VetLINK, Good says the ADT rule became effective on March 11, 2013. For the first year the rule was in place, USDA and state animal health officials concentrated on education, explaining the requirements and nuances of the rule to cattle producers. In March 2014, USDA announced it would begin phase 2 of implementing the rule, which includes enforcement. However, Good says USDA doesn't intend to take a heavy-handed approach to enforcing the rule. "But they are going to pursue penalties in situations where an individual is repeatedly failing to comply with ADT requirements, despite receiving education and opportunities to come into compliance." Good says quite a few letters of information have been sent to producers regarding compliance with the ADT rule and LMA is beginning to hear about some investigations as the first cases of enforcement come to light. "But in terms of actual case numbers, we're pretty low at this point," she adds.

For cattle producers, the biggest area of compliance is moving sexually intact cattle 18 months of age or older across state lines. The rule does not apply to cattle moved in-state, she says, nor does it apply to feeder cattle. USDA plans to address rules for feeder cattle movement in a separate regulation to be published later, she says. Cattle that fall under the rule must be identified and have an Interstate Certificate of Veterinary Inspection (ICVI), commonly called a health certificate. However, the ADT rule gives states quite a bit of flexibility on what can be considered an official ID and official paperwork,



so check with your local veterinarian and your state veterinarian's office for specifics.

According to Good, USDA has outlined three enforcement priorities. "First, the cattle that are required to be officially identified are, in fact, identified; second, that ICVIs or health certificates are properly administered; and third, that the collection of ID is happening at packing houses." Given the flexibility that states have in implementing the ADT rule, Good says developing a resource, such as a smartphone app, as a one-stop information source for all state and federal requirements is important. The United States Animal Health Association and the National Institute of Animal Agriculture, along with state animal health officials, are pursuing such a resource, she says.

**For more Information concerning
Animal Disease Traceability, contact
your local VDACS
Veterinary Services Office
or the USDA.**

Harrisonburg 540.209.9120

Richmond 804.786.2483

Wytheville 276.228.5501

USDA - Richmond 804.343.2560

Virginia Department of Agriculture and Consumer Services • State Veterinarian's Office
102 Governor Street • Richmond, Virginia 23219 • www.vdacs.virginia.gov/animals/index.shtml

MID-ATLANTIC SECURE MILK SUPPLY PROGRAM (MA-SMS)

When one or more cases of Foot and Mouth Disease (FMD) are identified in the US, control orders will be imposed on animal and animal product movements under the authority of federal and state animal health officials in order to prevent additional spread of disease. Because cattle may be infected and shedding FMD virus before clinical signs appear, raw milk transported from dairy farms in the control zone must be treated as potentially infected. Milk trucks and drivers are considered moderate to high risk for disease spread unless strict biosecurity procedures are followed.

We recognize that the inability to ship milk for an extended length of time would be financially devastating to a dairy farm, and compounded across many farms, would cause significant damage to the dairy industry. The Secure Milk Supply Program has been developed to allow milk to move from a control area if specific biosecurity measures are taken.

For a dairy farm within a control area to ship milk during an FMD outbreak, dairy producers, milk haulers

and milk processors can voluntarily choose to have their State Animal Health officials (auditors) in the Mid-Atlantic Region (VA, NY, NJ, PA, DE, MD, NC, WV, SC, and GA) pre-event certify their premises. The Mid-Atlantic Secure Milk Supply auditors can evaluate dairy farms to be permitted for milk shipment in the event of a major biosecurity threat such as FMD or other foreign animal diseases. Conformance to the biosecurity requirements and protocols will facilitate continued movement of raw milk from farms within movement restricted areas to milk processing plants in order to help preserve the viability of dairy farms and dairy businesses without impairing disease control and eradication efforts. To obtain a pre-permit certification, the dairyman must complete a 2-hour training course and pass an on-farm biosecurity audit. Additional information is available by contacting the following Virginia Regional Veterinary offices: Harrisonburg at 540.209.9120 or Wytheville at 276.228.5501 and the website <http://securemilksupply.org/>.

Letter from State Vet. Continued

Continued from page 1

some of us at times. Please continue to be patient as we all work to jump through the necessary hoops to provide our industries with as much market access as possible.

Unique animal identification and accurate movement documentation always improve the efficiency and efficacy of disease investigations. The livestock industries, veterinary practices and government must continue to improve the identification and documentation processes. You and your clients will experience some frustration as you deal with corrections of paperwork from state and federal veterinarians and increased scrutiny of interstate animal movements. Processes and technology will improve to allow us to provide and capture critical pieces of information while minimizing the effects on normal commerce and routine practice. By helping your clients to understand and implement the animal disease traceability program requirements, you will facilitate VDACS' efforts to comply with this federal regulation.

All accredited veterinarians should submit renewal applications for USDA accreditation between 2013 and

2015. USDA has made this process as practitioner-friendly as possible by offering the required courses through online training, at meetings and as written material. Thank you to all of the veterinarians that are renewing their accreditation. There are more than 2,000 veterinarians accredited in Virginia, and the role of the accredited veterinarians in animal health programs is likely to expand as government continues to shrink in order to balance budgets.

At VDACS, the Office of the State Veterinarian is committed to providing you with information and tools to help you better serve your clients and their animals. Please do not hesitate to share your thoughts for ways that we can better support you. Thank you for all of the good work that you do.



Richard L. Wilkes, D.V.M.

DRUG RESIDUE INVESTIGATIONS IN VIRGINIA

When an animal is slaughtered at a plant under inspection by USDA's Food Safety Inspection Service (FSIS), tissues from that animal are sampled for violative drug residues. If any drug metabolite levels are found to be in excess of the violative limits established by FSIS, the carcass is condemned, and the Food and Drug Administration (FDA) is notified. Usually, the information provided to FDA includes the name, address, and phone number of the consignor of the animal based off of either an official identification tag or a backtag placed at the livestock market.

For first time offenders, FDA refers the information to the VDACS Office of Veterinary Services for an investigation and they request that we perform the investigation and provide the report back to them within 30 days. OVS veterinarians and inspectors that have been through training provided by FDA perform the investigation. The investigation typically involves making initial contact with the producer that has been identified and questioning them about the animal. If they owned the animal for any length of time before slaughter, they are presumably the source of the residue, but sometimes they are a dealer and provide our staff with the source of the animal. In that case, we would visit with that person as well. FDA requires that we complete specific forms and collect statements from the individuals who owned the animal.

Typically, for first time offenders, this investigation is a chance to educate the producer on the importance of following drug withdrawal times. In the majority of cases, it was a simple, unintentional mistake, and the producer recognizes the importance of following the drug withdrawal times in the production of a safe food supply. We recently completed an investigation on a dairy cow with a residue whose owner felt so bad about the residue that he sent a check for the value of the cow plus shipping to the packing plant where the carcass was condemned! This illustrates that most Virginia producers intend to do the right thing.

For repeat offenders, the FDA typically investigates and the result is typically more unpleasant for the violator, with fines or jail time being possible. VDACS values performing these investigations as an opportunity to work in a more cooperative manner with producers that often have made an unintentional mistake. We always try to notify the herd veterinarian when one is

identified so that they are in the loop as well.

For the past few years, we have performed an average of approximately 5-10 investigations per year. Recently, we have seen violations for Ceftiofur, Ivermectins, Penicillin, Neomycin, Flunixin, and Sulfamethoxazole. Producers should be sure to follow proper withdrawal times for these drugs.



CONTACT INFORMATION

For general questions or communication, please email us at vastatevet@vdacs.virginia.gov, or feel free to contact any of our staff members below:

Dr. Richard Wilkes, *State Veterinarian*

804.692.0601

richard.wilkes@vdacs.virginia.gov

Dr. Bruce Bowman, *Harrisonburg*

Field Veterinarian

540.209.9120

bruce.bowman@vdacs.virginia.gov

Dr. Charlie Broaddus, *Program Manager*

Office of Veterinary Services

804.786.2483

charles.broaddus@vdacs.virginia.gov

Dr. Chris McNeill, *Lynchburg Regional Supervisor*

434.200.9976

chris.mcneill@vdacs.virginia.gov

Dr. Joe Garvin, *Program Manager*

Office of Laboratory Services

804.221.2543

joseph.garvin@vdacs.virginia.gov

Dr. Thomas Lavelle, *Wytheville Regional Supervisor*

276.228.5501

tom.lavelle@vdacs.virginia.gov

Dr. Don Hopson, *Harrisonburg Regional Supervisor*

540.209.9120

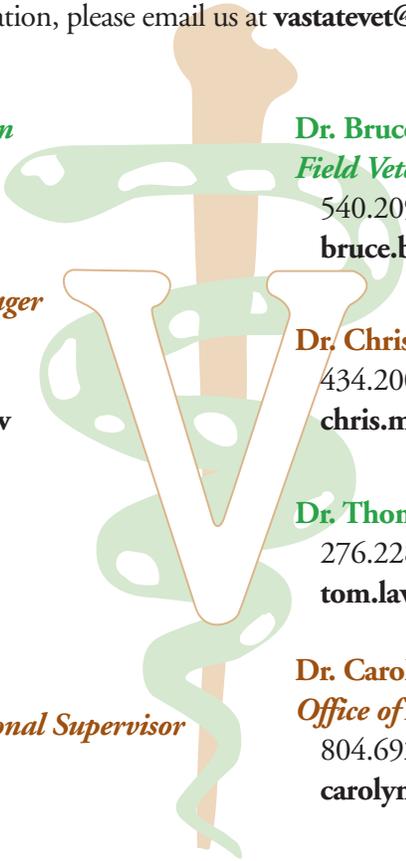
donald.hopson@vdacs.virginia.gov

Dr.Carolynn Bissett, *Acting Program Manager*

Office of Animal Care and Emergency Response

804.692.4001

carolynn.bissett@vdacs.virginia.gov



LABORATORY SERVICES	PHONE	FAX	E-MAIL
General Information and Billing Inquiries	804.786.9202	804.371.2380	LabServices.VDACS@vdacs.virginia.gov
HARRISONBURG LABORATORY 261 Mount Clinton Pike Harrisonburg, VA 22802	540.209.9130	540.432.1195	RAHLHarrisonburg@vdacs.virginia.gov
IVOR LABORATORY 34591 General Mahone Boulevard Ivor, VA 23866	757.859.6221	757.859.6428	RAHLIvor@vdacs.virginia.gov
LYNCHBURG LABORATORY 4832 Tyreeanna Road Lynchburg, VA 24504	434.200.9988	434.947.2577	RAHLLynchburg@vdacs.virginia.gov
WARRENTON LABORATORY 272 Academy Hill Road Warrenton, VA 20186	540.316.6543	540.347.6404	RAHLWarrenton@vdacs.virginia.gov
WYTHEVILLE LABORATORY 250 Cassell Road Wytheville, VA 24382	276.228.5501	276.223.1961	RAHLWytheville@vdacs.virginia.gov
