LETTER FROM THE STATE VETERINARIAN

Thinking over the last ten years and the regulatory and other animal issues that I have encountered as the Virginia State Veterinarian, I am amazed by the variety in the nature, the size, the duration and the complexity of the issues. Since 2005, this office has engaged in discussions or actions concerning bovine spongiform encephalopathy, the national animal identification system, avian influenza, porcine epidemic diarrhea, equine herpesvirus myeloencephalopathy, feral cats, feral hogs, cock fighting, dog fighting, diagnostic laboratory information and other database management systems and budgets. Some have involved a few people and the entire universe seemed vitally interested in some. Some have lasted for decades and some were resolved in days or weeks. Discussions, planning and response have ranged from the farm or premises level to the international level. Throughout these varied experiences, I have found a few generalizations that consistently hold true for my work, and I bet they hold true for many of you as well.

1. Zoonotic diseases and animal welfare issues will always get a high level of public and media attention.
2. As a profession, we do have a responsibility for the client education, the monitoring and the meeting of appropriate animal welfare standards.
3. Early detection, diagnosis and effective control programs are essential for the control of animal disease.
4. Biosecurity and traceability are essential for disease control.
5. Most of us would rather talk about biosecurity and animal traceability than to practice it.
6. Most efforts are resource related, and you cannot compensate indefinitely for resource deficiencies.

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January 1, 2017 will significantly change the way medically important antibiotics are used in animal agriculture. In 1996, the FDA issued A Guidance for Industry (GFI) document #209 that instructs drug sponsors to change label instructions from growth promotion, feed efficiency and milk production to therapeutic prevention of disease. GFI #209 recommends the appropriate or judicious use of medically important antimicrobial drugs in food-producing animals. For drug uses that are considered necessary for assuring animal health, GFI #209 helps minimize antimicrobial resistance development by requiring veterinary oversight or consultation before or during treatment. In the case of disease prevention, the FDA believes it is important that such use is appropriately targeted to animals at risk for a specific disease and the duration of use is limited and risk-based. Drugs currently not available over the counter (OTC) or injectable drugs will not be affected.

Veterinarians play an important role in animal and human health and their oversight is an integral part of the Veterinary Feed Directive (VFD) process. This will help ensure that medically important antimicrobial drugs will be used in feed according to label directions and only when appropriate to meet specific animal health needs. Under FDA’s GFI #213 it will be illegal to use medically important antibiotics for production purposes. Producers will need to obtain authorization from a licensed veterinarian to use medically important antibiotics for prevention, control or treatment of a specifically identified disease. This rule would include virtually all food drugs except dewormers (Ivermectin, fenbendazole), ionophores (monensin, lasalocid), beta agonists (Ractopamine, Zilpaterol), coccidiostats (decoquinate, diclazuril), bacitracin zinc and other drugs not used in humans. In short, veterinarians can no longer provide an antibiotic simply because a producer wants to use it. The veterinarian can only recommend a drug in direct response to a disease challenge. The veterinarian and producer should explore whether alternative approaches could better manage existing conditions. This may include more targeted use of antibiotics based on labels revised to align with judicious use principles, alternative non-antibiotic therapeutic options, changes in management/production practices or other interventions.

A VFD is not a prescription because the law regards drugs in feed in a category separate from prescription drugs. The category was created to provide veterinary supervision without invoking state pharmacy laws for prescription drugs. The affected drugs are those that fall in any of these seven classes: aminoglycosides, lincosamides, macrolides, penicillins, streptogramins, sulfonamides and tetracyclines.

The FDA is requiring that any veterinarian issuing a VFD be licensed to practice veterinary medicine and operate in compliance with appropriate state-defined veterinarian-client-patient relationship requirements (VCPR). The key elements of the VCPR are that the veterinarians engage with the client (the producer) to assume responsibility for making clinical judgments about the patient’s health; have sufficient knowledge of the patient by virtue of patient examination and/or visits to the facility where the patient is managed; and provide for any necessary follow-up evaluation. VFDs will be required for each use of a drug. The FDA has approved the existing VA VCPR definition. A valid VFD will include: drug name, amount, indications for use, location, number and kind of animals, name/address/phone of veterinarian, treatment date, VFD date, feeding instructions, withdrawal time, warning and/or cautionary statements and the veterinarian’s signature. The VFD must be hand delivered, mailed or forwarded electronically to the feed mill.

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HIGHLY PATHOGENIC AVIAN INFLUENZA 2015

From December 2014 to June 2015, the US experienced the most devastating foreign animal disease outbreak in history based on the number of infected birds that died or were depopulated. The total cost to the USDA was over $1 billion, and there were many other costs to the poultry industry. The 2015 High Pathogenic Avian Influenza (HPAI) H5N2 serotype was very aggressive and caused high mortality. Viral particles were captured in air samples as much as 100 meters from infected poultry barns. Up to 30-40 percent mortality was reported in infected flocks. The states of MN and IA experienced the most catastrophic loss in commercial poultry-mostly turkeys and laying hens. The closest confirmed case to Virginia was in a Canadian goose located in Western Kentucky. As this article goes to print, the last confirmed case of HPAI H5N2 detected was in June 2015. The USDA Animal and Plant Health Inspection Service (APHIS) VS and State Departments of Agriculture are preparing for the reoccurrence of the H5 HPAI for the current flu season.

USDA and State Departments of Agriculture have both an international and a domestic role in controlling the spread of avian influenza (AI) and reducing its effects on both agriculture and public health. The government and poultry industry is aware of and is preparing for the emergence of new types of the AI virus. The nature of the influenza virus is such that mutations occur easily. Therefore, new strains can occur naturally at any time within avian hosts. The concern is whether the changes would impart the potential to cause severe disease or increase transmissibility between birds or mammals. Regardless of these changes, plans that are currently in place include surveillance, disease reporting, biosecurity, movement control and rapid depopulation; these plans can be adjusted and applied to effectively control virus outbreaks.

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7. Maintenance of domestic and international market access is critical to animal agriculture.
8. We are much more effective when we are working with good and honest people and there are a lot of good and honest people in the veterinary community, the agricultural industry and VDACS.
9. The veterinary profession is among the very best equipped professions to manage our existing and future zoonotic, emerging and animal disease concerns.

I will be retiring during the summer of 2016 and I want to thank you for your support and friendship during my private and public practice veterinary careers. I have been blessed to encounter the finest of people along every path that I have walked. I sincerely look forward to our paths crossing in the future.

Richard L. Wilkes, D.V.M.
If the number of horses being imported into Virginia from Europe is any indication of the state of the economy, then we all have reason to be optimistic. This year in Virginia, we had the largest number of mares and stallions that went through contagious equine metritis (CEM) quarantine since 2006. Contagious equine metritis is a highly contagious disease of the equine reproductive tract, caused by the bacteria *Taylorella equigenitalis*. Mares can have an acute infection 10-14 days post breeding. Clinical signs are a thick, milky mucus vaginal discharge. Mares can become chronically infected with a less obvious discharge or they may become a silent carrier of the organism. CEM rarely induces abortion or infertility in mares. Stallions do not have any clinical signs, but they may serve as carriers for years, potentially infecting any mares that they breed. Chilled or frozen semen from a carrier stallion also serves to disseminate the infection in resident horses.

CEM was not known to occur in the United States until the late seventies. It had a major impact on the breeding season in Kentucky following its importation from Britain. A second large outbreak occurred in 2008. An epidemiologic study ultimately found 27 stallions and 5 mares that had been infected. All of the cases were traced back to one stallion that had been imported from Denmark in 2000. Since then an ongoing surveillance program has detected 3 other index cases in horses that reside in the US. Trace back studies of those cases have uncovered a number of infected mares and stallions that demonstrate how one horse can have a far reaching effect on the breeding industry.

To protect the U.S. equine industry, horses imported from CEM-affected countries must test negative for the disease before entering the United States. In addition, USDA accredited veterinarians who have been qualified for the program work with state veterinarians and USDA officials to help imported mares and stallions and their owners through a 3-6 week quarantine process once in the United States. During this time, mares and stallions are tested and treated for CEM before being released from quarantine. Permits to import a mare or stallion must be obtained from the Office of Veterinary Services (OVS) in the Virginia Department of Agriculture and Consumer Services (VDACS) before importation. Geldings do not have to undergo CEM quarantine and testing. Currently there are 15 veterinarians qualified to perform this work in Virginia. To be eligible for qualification, a veterinarian must be an USDA accredited equine veterinarian experienced in equine reproduction. The Office of Veterinary Services in Virginia provides training materials and guidance to meet the requirements for interested veterinarians.

Different states have different approaches to qualify quarantine facilities. Some states have one or two facilities that service the entire state. In Virginia, any commercial or private stable can serve as a quarantine facility as long as it meets certain criteria. Facilities must contain stalls that can isolate quarantined horses from all other horses by at least 30 feet or have a solid wall that extends at least eight feet. The stalls must be capable of being cleaned and disinfected and have drainage that will not contaminate any other area where non-quarantined horses live or move. A separate area adjacent to the stall must be available and included in the quarantine area to contain bedding, feed stuffs, cleaning, veterinary and grooming equipment. Manure and soiled bedding must be stored in an area that cannot be accessed by other animals for the duration of the quarantine. Biosecurity must be maintained with footbaths, coveralls, gloves and boots. Only the people who are absolutely necessary to the care of the horse are allowed in or near the quarantine area. A veterinarian from the Virginia Office of Veterinary Services must inspect the facility and provide training before a permit is issued. Facilities must be inspected once a year to maintain active status.
As diseases such as bovine tuberculosis and brucellosis were eradicated from much of the eastern U.S., mandatory “first-point” testing at livestock markets was halted in many states and the number of voluntary tests conducted on Virginia farms declined. Unfortunately, declines in the number of animals tested also meant that fewer animals were tagged with official identification (ID) that could be used to trace animals in the event of a serious disease outbreak. As a result, the Animal Disease Traceability or ADT program was initiated to promote the use of official ID tags through voluntary vaccination and testing programs, regulation of federally approved livestock markets and on health papers required for interstate movement and many livestock exhibitions. As the ADT program concludes its 11th year in Virginia, it’s a good time to reflect on accomplishments to date and the challenges that remain.

The Office of Veterinary Services within VDACS has been distributing official USDA metal tags (silver bright, Bangs, swine and scrapie) for many years, and in 2008 introduced 840-series electronic tags based on advice from the livestock industry. The “840” numbering system was designed to replace many different tag numbering schemes used in the past that identifies animals as being born in the U.S., and requires all 840 tag manufacturers to report identification numbers from tags sold to a central database. Over the past 7 years, VDACS has distributed more than 180,000 electronic tags to veterinarians, livestock markets and producers involved in animal health programs. In addition, VDACS has worked with veterinarians, markets, producer groups and Virginia Cooperative Extension to introduce electronic data capture systems that can record tag numbers quickly and efficiently. For example, we have made electronic versions of vaccination and test charts available to private veterinarians and approximately 30 percent of all vaccination and test records are now submitted electronically, greatly reducing the amount of time it takes to process animal health information. Data loggers are in place at 17 Virginia livestock markets and capture 15,000-20,000 animal records every year. This past year, VDACS worked with Virginia Cooperative Extension and 4-H programs to provide official identification tags for all animals involved in 4-H exhibitions statewide. There is no doubt that the above accomplishments have greatly improved animal disease traceability in Virginia.

One of the last areas where we need to improve our ability to capture important traceability information is on interstate certificates of veterinary inspection. An official ID is now required to be listed for most types of animals moving on interstate certificates. However, the vast majority of health certificates arrive in paper form; often several days after animals have been transported. Since it is very difficult to efficiently search paper documents for animal ID records, important traceability information often takes days to find and in the event of an animal health emergency would greatly hamper our efforts to respond to inquiries from other states and the USDA. To fix this problem, we are working on an electronic, internet-based animal entry permitting system that will allow veterinarians in other states to provide animal identification and health information in digital form before animals are shipped to Virginia. Within minutes of information being submitted, data will be searchable in a centralized database and can be quickly shared with animal health officials to improve response to animal health issues when they arise.

Finally, VDACS has also sought to update and improve state animal health regulations that govern the movement of livestock into Virginia and through public livestock markets, cattle dealers and buying stations.

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THE PAPER TRAIL

By Dr. Tom Lavelle

In transitioning from private large animal practice to working for the state, I became keenly aware of certain rules and regulations that I was conscious of but did not make a priority in practice. One of those rules is that as an accredited veterinarian, USDA regulations require you to submit copies of interstate health certificates to state animal health authorities within 7 days of issuance. For me, knowing why helps me comply with the requirement. Once we receive the Certificate of Veterinary Inspection (CVI or “health papers”), it is reviewed by a regional state veterinarian for accuracy and completeness. Details such as a complete 911 address for the shipper and receiver are essential for approval by us and the receiving state. This review is really for your benefit – we hope to catch any problems before the CVI is sent to the receiving state. Once it is reviewed and approved, it is sent to the state of destination. A similar process occurs when submitting official TB/Brucellosis test and vaccination records. This process assists in alleviating CVIs from being disapproved by the receiving state, which in turn, reduces the need for rework and resubmission. In addition to the original purpose of a CVI ensuring livestock are healthy for travel, it has also become an integral part of our ADT (Animal Disease Traceability) efforts. I repeatedly hear the comment, “why get a CVI when no one checks them?” Unfortunately, interstate livestock carriers with proper paperwork may be the “tip of the iceberg.” States around the nation are trying to tighten the loopholes and secure their borders, including Virginia. This past April, we conducted our first interstate livestock road check. This was a collaborative effort between VDACS (Virginia Department of Agriculture and Consumer Services), the Virginia State Police and the Department of Transportation. All livestock haulers were instructed by portable message board to exit into the weigh station as they entered Virginia on I-77. Trucks were weighed and asked to pull around to the parking area where drivers were asked to present their paperwork (health papers, driver’s license, bill of sale etc.) A one-page description of basic entry requirements was given to the drivers along with a more detailed explanation of official ID depending on the species. For haulers bringing animals into Virginia without proper paperwork, a hold order would be placed on those animals to the farm of destination. The hold order would be released after a private veterinarian provides the required CVI, testing or identification as needed to enter Virginia. These initial checks were intended to educate livestock haulers about entry requirements rather than issue citations.

CVIs are important and are reviewed at our office. We appreciate the hard work on your part to have them sent in a timely manner.

VFDs Cont.

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A commercial company (GlobalVetLink) is prepared to accept a veterinarian-initiated VFD electronically and will complete the required process for a fee. Phone-in VFDs are not allowed. While all feed additive drugs will require a VFD which allows for no extra-label use of these drugs, those drugs administered via water will require a prescription which can allow for extra-label use. The FDA intends to use a phased enforcement strategy for implementation of this final rule as OTC drugs become VFD drugs.

The FDA has contracted with the Virginia Department of Agriculture and Consumer Services (VDACS) to hire veterinary consultants who will provide targeted education and training for stakeholders subject to this final rule, such as veterinarians, producers, feed mills/distributors and others. These educational and training efforts are important for supporting effective implementation and compliance with the final rule.
The VDACS regional animal health laboratory (RAHL) system routinely performs a large number of diagnostic tests on samples from poultry. Most of those samples are submitted by poultry industry veterinarians and technicians for purposes important to avian health and the poultry industry. These tests include: diagnostic testing for economically important flock problems, serology done for vaccination monitoring, necropsies on dead birds, avian influenza surveillance, screening for Salmonella sp. by polymerase chain reaction (PCR) testing and advanced bacterial culturing techniques, environmental sampling for disease detection, as well as many other types of testing. Even though most of this commercial poultry testing is performed at the Harrisonburg RAHL, all four regional laboratories are capable of providing basic diagnostic services to poultry owners, thereby contributing to the overall health of Virginia’s poultry flock.

With the help of Cooperative Agreement funds available from the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA, APHIS), the laboratory system is able to provide necropsy services free of charge to backyard and small scale poultry operations. Birds that have died or are ill can be submitted to any regional diagnostic laboratory, and a full necropsy with ancillary in-house testing can be performed at no additional fee to the producer. Bacteriology, parasitology, histopathology, avian influenza and (when warranted) mycoplasma screening can help the backyard bird owner to identify disease and husbandry problems, thereby improving overall flock health.

If a bird owner has a sick or dead bird, or questions about health problems, he or she should contact the Laboratory Director/Veterinary Diagnostician at their regional animal health laboratory (www.vdacs.virginia.gov/about-division-of-animal-and-food-industry-services.shtml) for information on sample submission.

In addition, individual tests such as bacterial culturing for Salmonella sp and other pathogens, fecal flotation for detection of parasite eggs and other diagnostic tests can be performed for bird owners on a fee basis. Please see the Office of Laboratory Services’ fee schedule online at www.vdacs.virginia.gov/about-division-of-animal-and-food-industry-services.shtml for further information.

**DISEASE TRACEABILITY Cont.**

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The recently revised regulation entitled “Rules and Regulations Governing Livestock Dealers and Marketing Facilities for the Purpose of Controlling and Eradicating Infectious and Contagious Diseases of Livestock” became effective in November 2015. The new regulation clarifies the responsibilities of livestock markets, cattle dealers and buying stations with regard to applying official identification and recording identification numbers for all cattle handled by these entities that do not qualify as beef feeder cattle. This regulation brings Virginia into compliance with the federal Animal Disease Traceability Rule and should help improve the traceability of certain types of cattle that are imported to and exported from Virginia on a daily basis.
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