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**UPDATE:
HURRICANE
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EQUINE PIROPLASMOSIS UPDATE

In November 2009, the Texas Animal Health Commission (TAHC) received a report of a horse that tested positive for Equine Piroplasmosis (EP). A subsequent epidemiological investigation led to a finding of more than 200 infected equine on a ranch in Texas. Responding to that apparent outbreak, researchers from the U.S. Department of Agriculture (USDA) and Agricultural Research Service (ARS) and officials from the TAHC collaborated to determine the scope and extent of this disease at that location. Since that time, nearly 300,000 U.S. horses have been tested for EP. From that testing pool, 262 more EP-positive horses (252 *Theileria equi*-positive and 10 *Babesia caballi*-positive) have been identified across the U.S. Epidemiological studies on each of these positive cases did not demonstrate transmission of the disease through the tick vector, as was determined to be the case on the Texas ranch. In that location, the four tick vectors are abundant in their habitat, and natural tick-borne transmission was occurring. In contrast, transmission of the disease in the 262 additional positive equine revealed a more threatening mode of disease spread, that of iatrogenic transmission.

Since January 2017, there have been 25 new cases of Equine Infectious Anemia (EIA) and 16 new cases of EP reported to the Texas Animal Health Commission. In the case of EIA, infected horses are either euthanized by private veterinarians or branded and quarantined in isolation from other horses. After an epidemiologic investigation of a case, potentially exposed horses are tested and held under movement restriction for at least 60 days, allowing for two negative tests within that timeframe. Client education is aimed at preventing disease spread by proper sanitation of equipment and tools, discouraging reuse of syringes and needles, vector control, annual test-

ing or testing upon change of ownership, as is required by law.

In the case of EP, a similar epidemiologic investigation restricts those potentially exposed horses for 30 days, during which time two negative tests are obtained before restrictions are lifted. Options for the owners of an infected horse include enrollment in an official treatment program, euthanasia, export or permanent quarantine in isolation from other horses. In February 2013, a USDA program for treatment of horses infected with EP was launched, making it possible for horses infected with *T. equi* to have a chance at being cleared of infection and released from quarantine. In the case of the Texas ranch outbreak, 140 out of 163 horses (86 percent) enrolled in the treatment program have successfully met all test-negative requirements and are eligible for release. Of the 262 other positive horses identified across the U.S., 162 have either died or been euthanized, 18 have been exported and 55 were enrolled in the treatment research program. Twenty-six of those 55 horses (47 percent) that enrolled in the treatment program have met all of the requirements for release from quarantine.

Client education with EP is aimed at preventing further transmission of disease by vector control and educating on the potential for disease transmission by blood or blood-product contamination. The reuse of intravenous blood sets and hypodermic needles between horses is always discouraged. Likewise, preventing the contamination of multi-dose vials is emphasized. Particularly in the case of EP, the illegal practices of blood doping and blood packing as a means of performance enhancement are highly discouraged. Studies have shown that the use of erythropoietin (EPO) as a performance enhancement is not solely due to

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increased tissue perfusion and increased oxygen saturation of the blood. Rather, other factors such as mood enhancement, cardiac inotropy, plus a natural noradrenalin release, may be contributing to performance enhancement (Böning, 2011). This illegal practice could lend itself to contaminated vials and shared hypodermic needles and increase the risk of spreading EP.

Even more hazardous to disease transmission is the practice of blood packing, or the use of transfusion as a means of performance enhancement. Likewise, studies have shown that aerobic performance by augmenting hemoglobin concentration may be expected only until the optimal hematocrit is reached, above which maximal cardiac output declines due to the steep increase of blood viscosity (Böning, 2011). Since the horse is a “natural blood-packer” by virtue of splenic contraction, optimal hematocrit is often achieved naturally by that physiologic response to adrenalin release alone. Physiologically speaking, blood doping or blood packing may be all for nothing except increasing the risk of disease transmission. Performance enhancement by such practices is either not scientifically proven or has been proven to be counter to the expected gain. Client education to avoid these practices is encouraged.

For more information on the USDA-directed treatment for Equine Piroplasmosis, contact your regional office of the TAHC. [iv](#)

Reference

Böning, D., Maassen, N., Pries, A., (2011). *The Hematocrit Paradox – How Does Blood Doping. Int J Sports Med, 32: 242 – 246.*



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Clearing the Air About ICVIs

Just recently, a U.S. Department of Agriculture (USDA) Veterinary Services (VS) colleague and I had an opportunity to present two National Veterinary Accreditation Program (NVAP) modules to a small group of veterinarians in North Texas. A local practice owner, concerned about comments made by a couple of recent graduates, contacted me and asked that we get together in a small venue and discuss animal identification and associated interstate/international certificates of vet-

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animal identification not utilized. With one or two errors, an accredited veterinarian can expect to get what I consider a nice, educational phone call by yours truly with the hopes of identifying and correcting the issue. Just a phone call. We can talk about the issue, and I will detail to you what we need to meet the standards to help you succeed the next time you write

accurate and complete documents that allow your clients to move their animals safely and legally. This is also a great revenue stream for your practice.

There will be times when you have questions, so please feel free to contact my staff as well as Dr. Andy Schwartz's when you are stumped or need clarification on movement and identification issues. We wish to support you and your clients as they move livestock in commerce or for recreation. Put our office numbers in your cell phone. We can be a great resource for you in times of need.

Now, let's go back to that presentation opportunity I mentioned in the first paragraph. If your practice has a serious need of personal instruction, we might be able to help. The accredited veterinarian who organized the meeting included multiple practices in his service area. That is a true colleague and mentor! All of the participants got to hear one message and meet the individuals who manage the VS programs in Texas, putting faces to the names and voices. In addition, all in attendance received certificates of participation and gained two modules toward their NVAP renewal requirements. We plan to make this an annual event for his practice area. We also included four other veterinarians via Skype. Isn't technology fabulous? I would entertain the possibility of doing something similar in other areas of the state. We can tailor the presentations to your needs. Just let us know what those might be. **TV**

erinary inspection (ICVI). The recent graduates had expressed concern over the challenging process of writing ICVIs and the perceived consequence of submitting these documents with errors. They were under the impression that, if they made errors, they would most likely lose their accreditation status as well as their license!

Hold on a minute! Let's clear this up.

While it is possible to lose your accreditation for submitting falsified ICVIs, this is, thankfully, a very infrequent event in Texas. This is not to say we don't see errors, because we routinely see between 25 to 50 ICVIs per month that are rejected by either the state of destination or the Texas Animal Health Commission (TAHC). Expectations are that we, as accredited veterinary professionals, complete our related tasks completely and accurately. The greater majority of errors are minor, with the most common being illegibility, incompleteness (no permit, no test result included, etc.) and official

one. TAHC is tracking the approved ICVIs as well, and we often collaborate on the educational process. Certainly with a repeat offender demonstrating disregard for proper documentation, other options for education and discipline may have to be used, including Letters of Information (LOIs), Letters of Warning (LOWs) or informal conferences that could lean toward more stern correction. Again, this is infrequent in Texas, with most errors being minor and only requiring verbal education to correct the deficiency. This is how it should operate.

I currently have only six field veterinary medical officers for the entire state of Texas. TAHC can add another 10 or so, but it is very easy to see we can't be everywhere for everyone and everything. We count on you, as accredited veterinarians, to perform accredited work, especially related to interstate animal movement. VS and TAHC want you to succeed. We need you to! It is in our best interest, as it is in yours, to help you produce



How to Contact TAHC or Texas VS

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TAHC Region Office Map: http://www.tahc.texas.gov/agency/TAHC_RegionalOfficeMap.pdf