

Equine Piroplasmosis Situation Report

August 18, 2010

Index Case

- The first Equine Piroplasmosis (EP) case in the current situation in South Texas was detected in October, 2009. A total of 2,330 horses have been tested in association with this case, with 409 of these horses found to be *Theileria* (formerly *Babesia*) *equi* positive. Results of the disease investigation indicate infection may have been present on the index premises as far back as 1990.
- Two species of ticks, *Amblyomma cajennense* ("Cayenne tick") and *Dermacentor variabilis* ("American dog tick"), collected from the index ranch have proven capable of transmitting *T. equi* to other horses under laboratory conditions. One or both of these ticks are the most probable agents in the spread of piroplasmosis in the South Texas outbreak, though intrauterine transmission likely played a role.
- Tracing of horses from index premises is almost complete, with 182 of 187 animals located and tested or determined to be deceased. To determine if disease transmission was occurring elsewhere, cohorts to the 69 positive trace animals were tested, with only 1 of 913 found to be test positive.
- Testing of 616 horses on 77 adjacent premises found only 1 positive animal, indicating this is not a geographic outbreak. The single positive horse was a cohort to another positive horse off the index ranch, and was likely exposed in that manner.

Subsequent Cases

- In response to the South Texas case, a number of states and some equine events put test requirements in place for horses entering the state or event. See the TAHC website at <http://www.tahc.state.tx.us/> for links to the states with requirements on Texas horses. This "movement" testing has led to the disclosure of 41 horses positive to *T. equi*, and 1 horse positive to *Babesia caballi*, another protozoan known to cause piroplasmosis.
- None of the positive horses found through movement testing are related to the index case summarized above. Nine of the 42 were imported from countries where EP is endemic, and entered the US prior to August, 2005 while the CF test was still being used, or entered the US from Canada, which is considered EP free, and no test was required. The remaining 33 are Quarter Horse racing horses.
- No evidence has been found to indicate disease has been transmitted from the imported horses found to be positive. Disease transmission between QH racing horses is thought to be via contaminated needles or tattoo instruments, or through the use of contaminated blood products.

Activities in Texas

- TAHC and USDA-APHIS-VS are working together to conduct full disease investigations on each case. Standards for isolation of positive horses and retesting of exposed horses have been developed and are being followed. Movement of positive horses is only allowed by waiver granted by the Executive Director.
- There is ongoing communication with disease experts, industry representatives, and the Texas Racing Commission to gather input for setting policy and direction.
- Rules adopted during the June 15 meeting of the TAHC Commissioners require the identification of positive horses. The link to this and other rules can be found on the TAHC website.
- TAHC staff have encouraged states with the most restrictive entry requirements to take a more scientific approach and adjust their requirements to the facts of the current situation.
- TVMDL received approval to run EP tests conducted for interstate and event testing. Labs in 6 other states have been approved as well.
- TAHC has requested a list of all horses imported from EP endemic countries prior to 2006. This request is still under consideration by USDA-APHIS-VS top officials.
- TAHC maintains a representative on the National EP Working Group, and the EP subcommittee of the USAHA Committee on Infectious Diseases of Horses.
- TAHC continues to support research projects on EP being conducted by USDA-ARS in Pullman, Washington. Current projects include treatment studies, transmission studies, and development of genetic fingerprinting.
- A large portion of TAHC's resources are being expended in this unforeseen, monumental disease response effort. TAHC receives no federal or specific state funding for EP related activities.

National Level

- The American Horse Council and USDA hosted an Equine Issues Workshop and Forum in Washington, DC, this past June.
- The National EP Working continues its efforts to provide direction to the response effort on a national level.
- Other states with recently disclosed EP positive animals include New Mexico, California, Florida, Colorado, Oklahoma, Ohio, Massachusetts, Georgia, North Carolina, and Illinois. Most of these horses are QH racing horses, or were imported from EP endemic countries.