2023 Equine Piroplasmosis (EP) Annual Report

Background

Equine piroplasmosis (EP) is a foreign animal disease in the United States and is immediately reportable to state and federal animal health officials. The disease can be contracted by any equid (horses, donkeys, mules, or zebra) and is caused by infection with blood-borne parasites, either *Theileria equi* or *Babesia caballi*. While natural tick-borne transmission of the disease is not currently present on the U.S. mainland, sporadic cases of iatrogenic transmission (human-caused by medical procedures) in high-risk populations, such as Quarter Horse racehorses, are being documented.

Unhygienic practices being used by horse owners and trainers in this high-risk population are contributing to disease spread and include the re-use of needles, syringes, and intravenous administration sets between horses, administration of illegal blood products from other countries, direct blood transfusion between horses to increase athletic performance (blood doping), and administration of multi-dose drug products that have become blood-contaminated by non-sterile handling techniques between horses. In addition to transmitting EP between horses, these practices are concurrently transmitting other blood-borne equine diseases, such as equine infectious anemia (EIA). A source of continued EP incursion into the U.S. is the illegal movement of horses from EP-endemic regions, such as Mexico.

Active surveillance for EP occurs in the U.S. through testing to enter sanctioned racetracks, export, interstate movement, and diagnostic testing. Traceback and cohort testing on all exposed horses is conducted in response to any EP-positive case found. Horses confirmed as EP-positive have the following disposition options: lifetime quarantine, euthanasia, export from the country, or long-term quarantine with enrollment in the EP-treatment program. Horses enrolled in the treatment program must be confirmed as permanently cleared of the EP pathogen and test EP-negative on all available diagnostic tests to be released from quarantine.

Summary of 2023 Testing and EP-Positive Cases

- There were 18,049 domestic U.S. horses tested for EP from January to December 2023 and a total of 14 new EP-infected horses were identified in 6 states. Eleven (11) of these horses were Quarter Horse (QH) racehorses with iatrogenic transmission involved in the epidemiology of the infection, 1 horse had an undetermined source of transmission, and 2 horses were suspected or confirmed to have been illegally moved from Mexico. Two (2) of the 14 EP-positive horses were found to be dual infected with EIA which was likely transmitted by iatrogenic infection in the QH racehorse case and by natural infection in Mexico for the other dual infected horse which was illegally moved from Mexico.

2023 EP Cases by State: 14 EP-infected horses found in 6 states (Jan-Dec 2023)

State Found	# EP-positive (*T. equi* unless noted)	# Dual infected with EIA	Risk Group
Florida	1	0	Undetermined
Georgia	4	0	QH racehorses
New Mexico	1	0	QH racehorse
North Carolina	2	1	QH racehorses
Oklahoma	1	1	Illegally moved from Mexico
Texas	5 (1 *B. caballi*-positive)	0	4 QH racehorses; 1 horse illegally moved from Mexico
Total	**14**	**2**	11 QH racehorses; 1 undetermined; 2 horses illegally moved from Mexico

- For questions regarding this report, please contact:

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