

Animal and Plant Health Inspection Service

Veterinary Services

April 2020

2019 Equine Infectious Anemia Cases in the United States

January 1 – December 31, 2019

This document summarizes State reporting of equine infectious anemia (EIA) cases in the United States during 2019. State animal health officials report EIA testing and case information to APHIS Veterinary Services (VS) through the National Animal Health Reporting System (NAHRS). The NAHRS is an online reporting tool enabling States to submit animal disease information to VS through the Internet with assurance of secure data transfer and information confidentiality. For States that did not use NAHRS, APHIS-VS requested EIA information by e-mail and recorded the data in the NAHRS database.

Reporting of EIA testing is summarized on a calendar-year basis. During 2019, a total of 1,151,584 EIA tests were conducted, resulting in detection of 89 positive horses (Table 1.) These results compared to 1,187,536 tests and 51 positives in 2018. Figure 1 displays a map depicting reported numbers of horses and premises testing positive for EIA in 2019. Figure 2 presents a summary of EIA testing from 2000-2019. Historical data and additional information on EIA are available online at https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/equine/eia

Table 1. Test results reported for equine infectious anemia in the United States, 2019

State	Tests Performed	Positive Horses	Positive Premises
Alabama	10418	1	1
Alaska	01	0	0
Arizona	7553	1	1
Arkansas	35318	2	1
California	24690	0	0
Colorado	22491	0	0
Connecticut	1650	0	0
Delaware	3572	0	0
Florida	110473	7	2
Georgia	37793	6	3
Hawaii	272	0	0
Idaho	10612	1	1
Illinois	17074	1	1
Indiana	26063	1	1
lowa	19560	10	1
Kansas	15532	1	1
Kentucky	54028	0	0

¹ All samples are sent to out-of-State laboratories and Alaska does not receive notification of the number of tests performed at these laboratories.

State	Tests Performed	Positive Horses	Positive Premises
Louisiana	27719	3	3
Maine	1929	0	0
Maryland	24939	0	0
Massachusetts	13227	0	0
Michigan	31776	0	0
Minnesota	22757	1	1
Mississippi	21586	0	0
Missouri	55452	0	0
Montana	5388	0	0
Nebraska	7200	0	0
Nevada	8799	0	0
New Hampshire	14439	0	0
New Jersey	19157	0	0
New Mexico	17228	1	1
New York	38215	0	0
North Carolina	25045	0	0
North Dakota	7452	0	0
Ohio	46729	0	0
Oklahoma	55767	1	1
Oregon	6993	0	0
Pennsylvania	30541	0	0
Rhode Island	1657	0	0
South Carolina	37124	0	0
South Dakota	9033	0	0
Tennessee	28286	5	2
Texas	91978	45	16
Utah	6529	0	0
Vermont	3787	0	0
Virginia	30987	0	0
Washington	5511	0	0
West Virginia	8221	0	0
Wisconsin	35243	2	1
Wyoming	13580	0	0
Puerto Rico	180	0	0
U.S. Virgin Islands	31	0	0
U.S. Totals	1,151,584	89	38

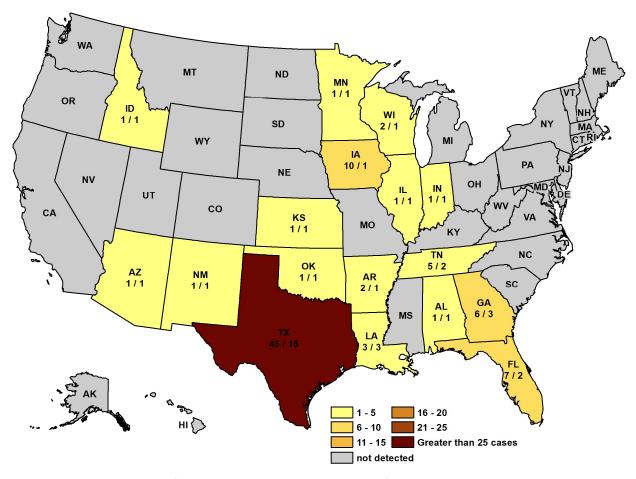


Figure 1. Reported numbers of horses and premises testing positive for EIA, 2019

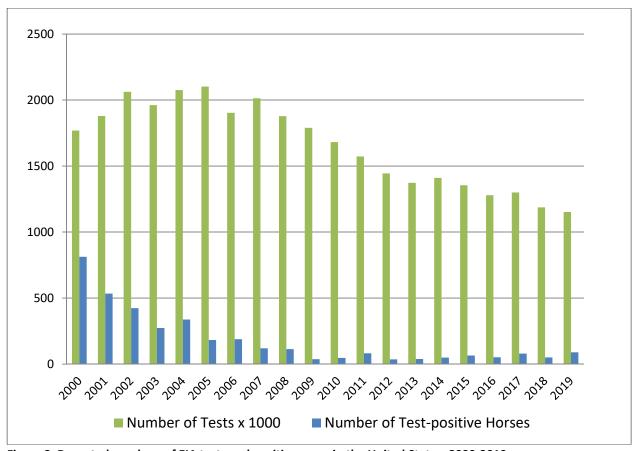


Figure 2. Reported numbers of EIA tests and positive cases in the United States, 2000-2019

Although the current prevalence of EIA in the U.S. equine population remains very low, at an estimated national prevalence of around 0.004 percent, the epidemiology of EIA-positive cases has shifted in recent years. The majority of EIA cases were previously found to occur from natural transmission by biting fly vectors in untested and under-tested populations. Now, increasing cases of iatrogenic transmission are being identified.

In 2019, at least 75 of the 89 confirmed cases of EIA were found in Quarter Horse racehorses with iatrogenic transmission either suspected or confirmed as the route of infection. Iatrogenic transmission in this population is occurring through unhygienic practices by horse trainers and owners. Practices include re-use of needles, syringes, and IV sets; administration of blood transfusions from untested donor horses; use of illegal blood products from other countries; and infectious blood contamination of multi-dose drug vials. Some of the iatrogenic transmission cases in the Quarter Horse racehorse population are found in horses participating in unsanctioned racing. However, there are also recognized crossover cases between unsanctioned and sanctioned racing in some parts of the United States. Cases in sanctioned Quarter Horse racehorses with no obvious connection to unsanctioned racing have been identified as well. Frequently, EIA-positive cases in this emerging high-risk population are found in clusters, indicative of a horse trainer or owner repeatedly using unhygienic practices that cause disease spread to multiple horses. These cases are preventable by good hygienic practices and basic biosecurity measures. Thus, increased education and outreach to trainers and owners of Quarter Horse racehorses is needed to mitigate the continued spread of EIA.