



2024 Equine Infectious Anemia Cases in the United States

January 1 – December 31, 2024

This document summarizes equine infectious anemia (EIA) cases and testing reported in the United States during 2024. Following current guidance, approximately 400 EIA-approved laboratories sent monthly summary testing data directly to Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS). All positive cases were confirmed by the National Veterinary Services Laboratories (NVSL), and the VS Equine Health Team compiled case information in collaboration with State Animal Health Officials.

Reporting of EIA testing is summarized on a calendar-year basis. During 2024, a total of 1,292,655 EIA tests were conducted, resulting in detection of 147 positive horses on 63 premises (Table 1). These results compared to 1,364,247 tests and 61 positives on 45 premises in 2023. Figure 1 is a map depicting reported numbers of horses and premises testing positive for EIA by State and county in 2024. Figure 2 presents a summary of EIA testing from 2005 to 2024. Historical data and additional information on EIA are available online at <https://www.aphis.usda.gov/livestock-poultry-disease/equine/infectious-anemia>.

Table 1. Test results reported for equine infectious anemia in the United States, 2024

| State | Tests Performed | Positive Horses | Positive Premises |
|---------------|-----------------|-----------------|-------------------|
| Alabama | 18,562 | 0 | 0 |
| Alaska | 1,124 | 0 | 0 |
| Arizona | 19,066 | 3 | 3 |
| Arkansas | 23,538 | 0 | 0 |
| California | 24,509 | 15 | 3 |
| Colorado | 21,923 | 0 | 0 |
| Connecticut | 8,421 | 1 | 1 |
| Delaware | 3,601 | 0 | 0 |
| Florida | 94,758 | 0 | 0 |
| Georgia | 36,646 | 0 | 0 |
| Hawaii | 566 | 0 | 0 |
| Idaho | 13,810 | 0 | 0 |
| Illinois | 23,557 | 1 | 1 |
| Indiana | 13,200 | 0 | 0 |
| Iowa | 18,997 | 0 | 0 |
| Kansas | 14,950 | 0 | 0 |
| Kentucky | 64,993 | 0 | 0 |
| Louisiana | 23,127 | 16 | 5 |
| Maine | 5,849 | 0 | 0 |
| Maryland | 23,959 | 0 | 0 |
| Massachusetts | 12,899 | 0 | 0 |
| Michigan | 32,182 | 0 | 0 |

2024 Summary of Equine Infectious Anemia Cases in the United States

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|---------------------|------------------|------------|-----------|
| Minnesota | 27,080 | 0 | 0 |
| Mississippi | 16,270 | 0 | 0 |
| Missouri | 53,123 | 0 | 0 |
| Montana | 15,569 | 0 | 0 |
| Nebraska | 10,749 | 1 | 1 |
| Nevada | 15,201 | 0 | 0 |
| New Hampshire | 6,608 | 0 | 0 |
| New Jersey | 16,488 | 0 | 0 |
| New Mexico | 13,592 | 26 | 13 |
| New York | 40,350 | 0 | 0 |
| North Carolina | 48,276 | 3 | 2 |
| North Dakota | 7,529 | 0 | 0 |
| Ohio | 33,143 | 0 | 0 |
| Oklahoma | 51,892 | 0 | 0 |
| Oregon | 7,291 | 0 | 0 |
| Pennsylvania | 44,705 | 0 | 0 |
| Rhode Island | 2,045 | 0 | 0 |
| South Carolina | 27,568 | 1 | 1 |
| South Dakota | 10,632 | 0 | 0 |
| Tennessee | 44,980 | 1 | 1 |
| Texas | 183,158 | 78 | 31 |
| Utah | 7,040 | 0 | 0 |
| Vermont | 5,541 | 0 | 0 |
| Virginia | 42,224 | 0 | 0 |
| Washington | 4,709 | 0 | 0 |
| West Virginia | 9,487 | 0 | 0 |
| Wisconsin | 34,217 | 0 | 0 |
| Wyoming | 12,951 | 1 | 1 |
| Puerto Rico | 0 | 0 | 0 |
| U.S. Virgin Islands | 0 | 0 | 0 |
| U.S. Totals | 1,292,655 | 147 | 63 |

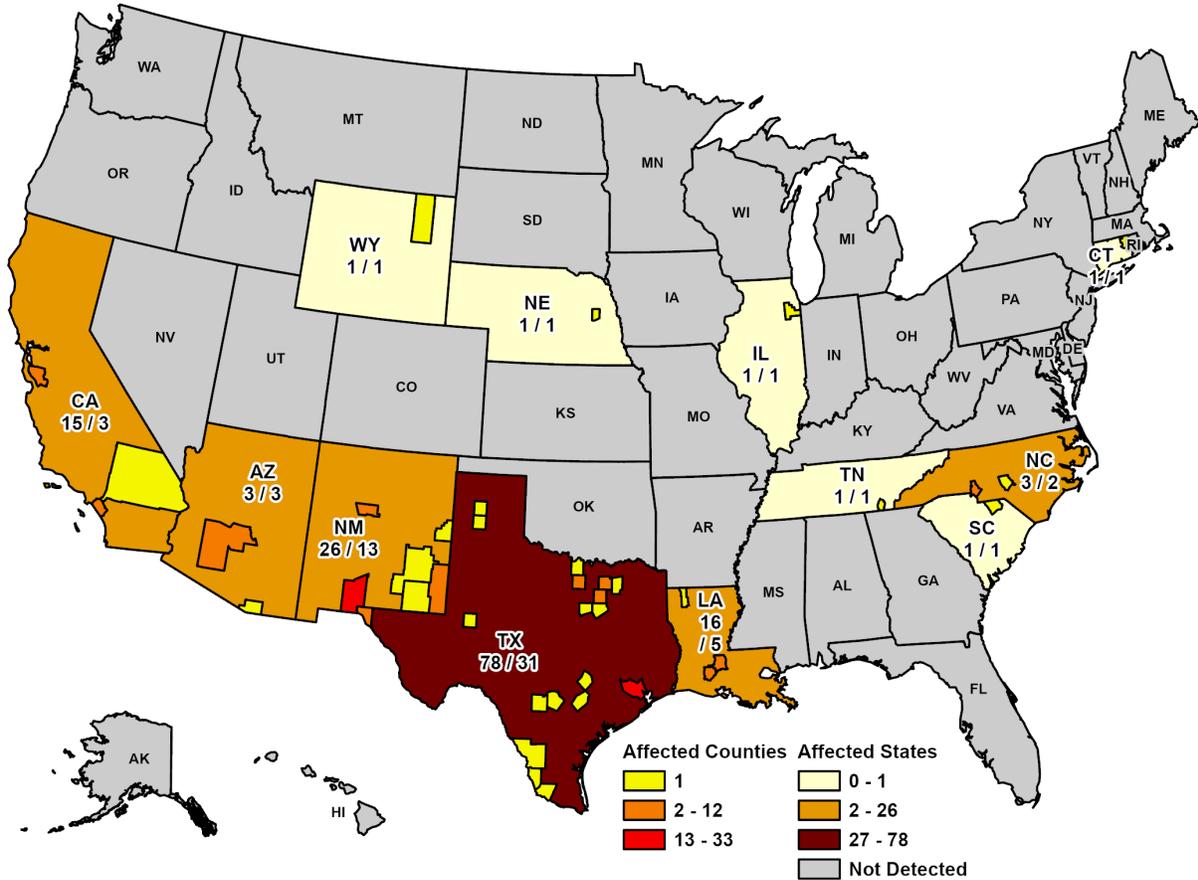


Figure 1. Reported numbers of horses and premises testing positive for EIA by State and county, 2024

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. Most EIA cases were previously found to occur from natural transmission by biting fly vectors in untested and undertested populations. Increasing cases of iatrogenic transmission (disease resulting from medical activity) are now being identified.

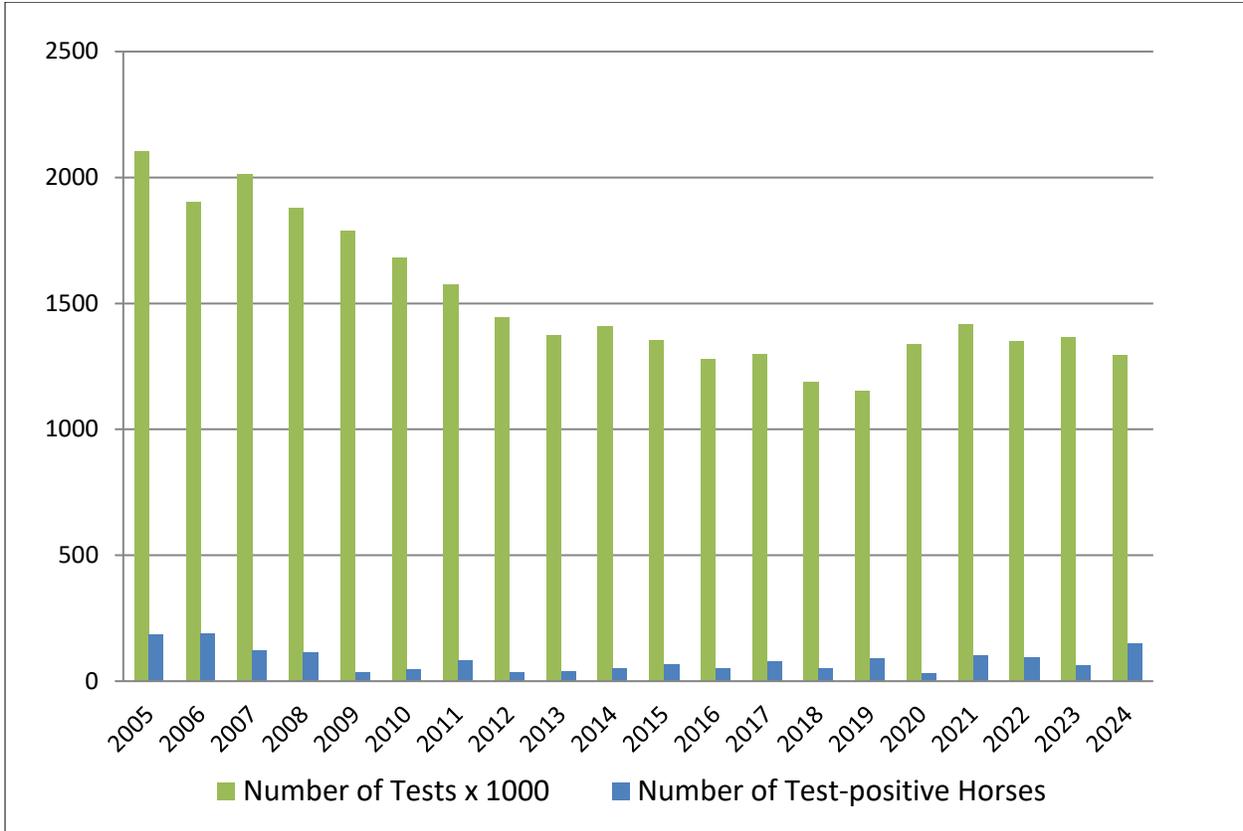


Figure 2. Reported numbers of EIA tests and positive cases in the United States, 2005–2024

In 2024, there were 120 confirmed cases of EIA in either current or former Quarter Horse racehorses and 5 cases in Thoroughbred racehorses where iatrogenic transmission was the method of disease spread. Iatrogenic transmission in this equine 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 also been identified. EIA-positive cases in this emerging high-risk population are frequently found in clusters, indicating a horse trainer or owner repeatedly using unhygienic practices which caused 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 are needed to mitigate the continued spread of EIA.

Of the remaining 22 positive EIA cases identified in the United States during 2024, 1 originated from untested/undertested herds where natural transmission was likely occurring over a long period, 10 horses were suspected or confirmed to have been illegally moved into the United States from Mexico where the disease is endemic, 5 horses were infected by an outbreak due to iatrogenic transmission associated with a veterinary clinic, and 6 horses were infected from an unknown/undetermined source.

Current APHIS guidance for EIA-approved laboratories now provides more comprehensive EIA testing data than previously existed. Figure 3 captures the number of EIA tests performed in 2024 by month. March, April, and May, respectively, were the busiest months when EIA testing occurred in 2024.

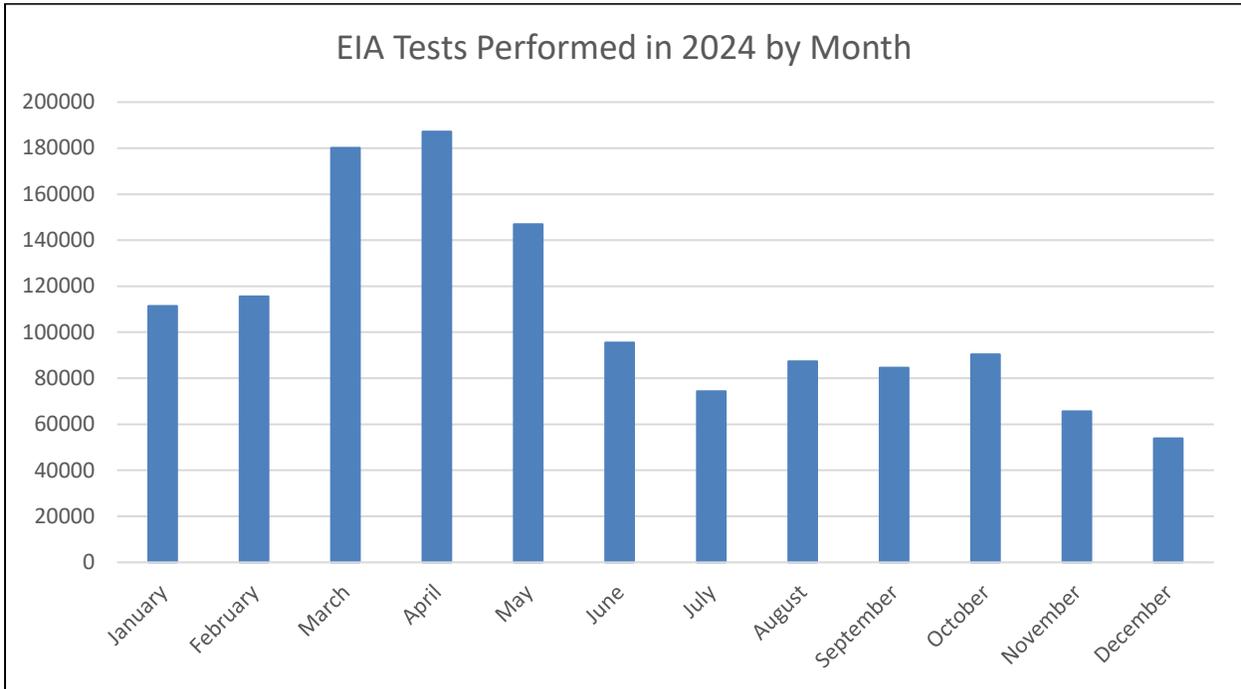


Figure 3. Reported numbers of EIA tests performed in the United States in 2024 by month

Two EIA test types are authorized for use by approved laboratories in the United States: 1) agar gel immunodiffusion (AGID) tests, commonly called Coggins tests, and 2) enzyme-linked immunosorbent assay (ELISA) tests. Figure 4 depicts the number of AGID tests performed throughout the United States in 2024, compared to the number of ELISA tests performed. Both test assays were used in 2024 with nearly equal frequency.

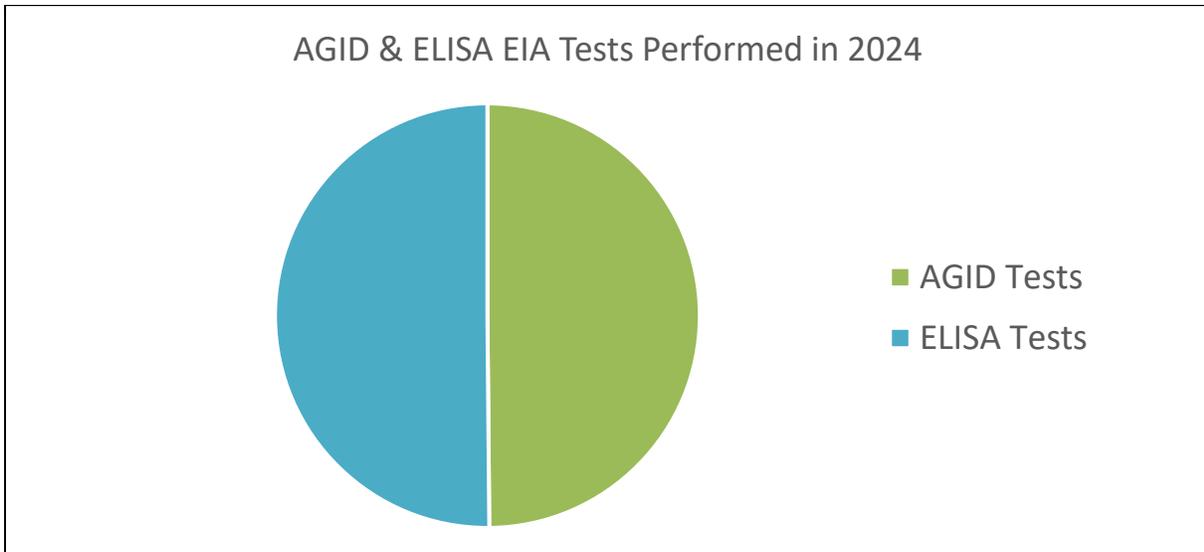


Figure 4. Reported numbers of AGID and ELISA EIA tests performed in the United States in 2024

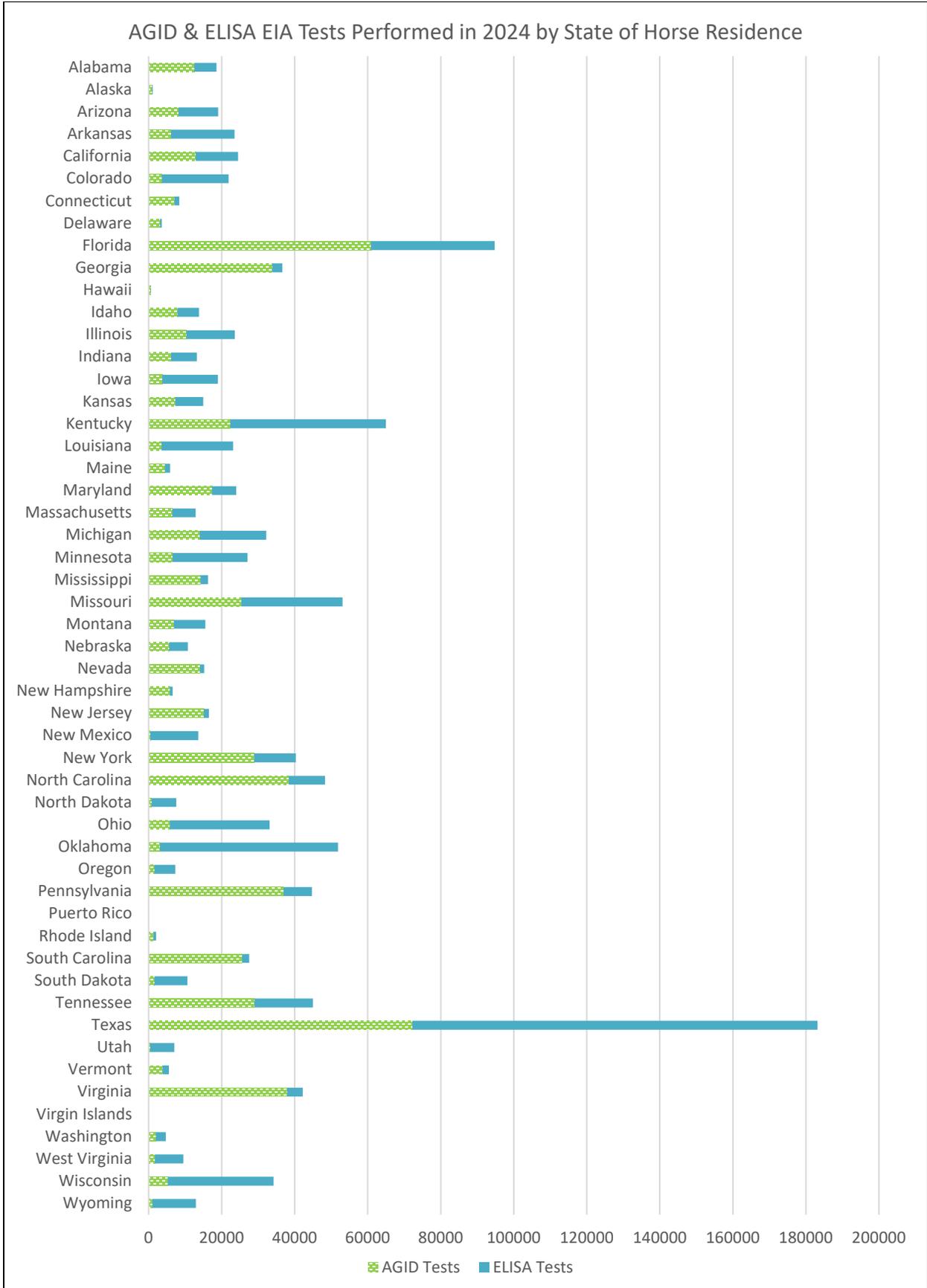


Figure 5. Reported numbers of AGID and ELISA EIA tests performed by State of horse residence in 2024

Figure 5 shows the number and type of EIA assays used to test resident horses in each State. Twenty-eight States, Puerto Rico, and the U.S. Virgin Islands reported fewer than 20,000 EIA tests performed on their horse populations in 2024. Nineteen States reported between 20,000 and 60,000 EIA tests performed on their horse populations in 2024. Three States—Florida, Kentucky, and Texas—reported over 60,000 EIA tests performed on their horse populations in 2024. Horse populations in 26 States were tested more frequently using an ELISA assay than an AGID assay. In comparison, horse populations in 24 States were tested more frequently using an AGID assay compared to an ELISA assay.