EQUINE INFECTIOUS ANEMIA (EIA)

William Jeter, D.V.M. Diagnostic Veterinarian/Animal Disease Control Florida Department of Agriculture and Consumer Services

Florida's equine industry continues to be a vital part of the state's economy and the Florida Department of Agriculture and Consumer Services plays an important role in safeguarding this vital state resource from the potential devastating effects of equine infectious anemia (EIA). In October, 1973, the Department, with support and cooperation from the State's equine industries, implemented regulations to control the spread of this important disease.

EIA is an incurable viral disease that only affects members of the equine species. It is transmitted primarily via large biting flies (i.e., deer flies and horse flies), but may also be transmitted by use of contaminated needles, surgical and dental equipment and, less commonly, by breeding. Once a horse becomes infected, it remains infected for life, endangering the health of other horses. While some horses die of acute infections associated with a profound anemia, most will progress to either the chronic form of the disease or the inapparent carrier state. A horse with chronic EIA is the classic 'swamper' who has lost body condition and is lethargic and anorexic due to a chronic anemic state. These horses generally have recurring episodes of the subacute form of the disease. The inapparent carrier, although infected with the virus, appears to be clinically normal and healthy. However, they are still capable of transmitting EIA to other horses. Stress or disease may bring on acute or subacute episodes from time to time. Subclinical cases may go unnoticed because symptoms often appear to mimic other, more common, diseases. There are currently no vaccines or effective treatment for this disease.

EIA is a disease of worldwide significance. In some countries the disease incidence may reach 50% or more. In the United States, EIA has been reported in all 50 states. However, 92% of the test positive cases have originated from horses located in what is referred as the 'hot zone,' those states bordering the South Atlantic Coast, the Gulf of Mexico, the Mississippi River Basin, including Texas and Oklahoma. EIA transmission risks in these areas are considered higher because environmental conditions are more favorable for prolonged insect vector seasons.

The Department's EIA Control Program is designed to eliminate contact between known infected horses and the general horse population. This is accomplished by identifying positive horses via serological testing (i.e., Coggins Test), permanently identifying such horses and use of permanent quarantine and isolation to prevent exposure to other horses. A negative test for EIA conducted within the previous 12 months is required on all horses imported into the state as well as those moving within the state. Additionally, a negative test is required on all horses participating in events where horses are assembled, including horse shows, exhibitions, trail

rides, rodeos, and boarding facilities. A negative test is also required for change of ownership (i.e., public and private sales) and for breeding purposes.

Since 1972, more than 16 million horses have been tested for EIA in the United States. During that period, the number of positive horses disclosed has decreased steadily from over three percent to less than 0.10 %. By comparison, during the same time period, Florida went from approximately 7% positive tests to 0.02% today, well below the national average. During FY 99-2000, there were 120,402 EIA tests conducted in Florida and only 20 positive horses were disclosed. In spite of the State being located in the EIA 'hot zone,' Florida's EIA Disease Control Program continues to keep the disease incidence at a very low rate. This downward trend can be attributed to the Department's effective disease control activities, strict enforcement of our EIA regulations and strong support of the state's valuable equine industry.