8.4 Equine Infectious Anemia

This module describes the disease, the policy, the tests, the forms and the distribution of the results for equine infectious anemia (EIA).

Equine Infectious Anemia

Clinical Disease

1. EIA is a viral disease of equines characterized by a variable clinical course, including fever, jaundice, anorexia, depression, muscle weakness and wasting, edema of the ventral abdomen and legs, lifelong persistence of virus in the infected animal, and pathological changes which are immunologically mediated.

Diagnosis

2. A tentative diagnosis of the disease may be made on clinical signs. Confirmation is by means of the enzyme linked immunosorbent assay (ELISA) or other official test. The test is performed on equine serum.

Policy

3. EIA is a reportable disease and was made reportable under the *Health of Animals Act* in 1972-the year a reliable test for the disease became available. At that time the disease was considered to be endemic throughout the northern areas of the country and the reactor rate was approximately 2.9%.

4. EIA suspects and reactors must be reported to the CFIA. Confirmed reactors are handled in accordance with National Animal Health Program requirements. A CFIA veterinarian will take appropriate measures in consultation with the owner of the reactor equine to prevent exposure of other equines to infection. Measures taken in the case of non-clinical animals are isolation of the equine or destruction with compensation. Clinically affected equines are required to be destroyed with compensation. Funding for the National Control Program originates from an industry supported fund collected as a check-off fee on samples submitted for EIA analysis at accredited laboratories.

5. All equines (horse, ass, mule, or zebra) are test eligible, regardless of age or sex.

6. Before taking the blood sample, always advise the owner of the consequences of a positive test.

Testing for Domestic Activities and Export to the U.S. and Mexico

7. Accredited veterinarians are authorized to collect and submit blood samples to EIA-accredited laboratories:

   a) from horses, mules, asses, and zebras that are tested for export to the U.S. and Mexico;

   b) from horses, mules, asses, and zebras that are tested to meet domestic health requirements such as those established by racetracks, fairs, private stables, zoos, or for suspected disease.

   Note: Although accredited veterinarians may test animals that are suspected of being exposed to or infected with EIA, any suspicion of its presence must be reported to a veterinary inspector, which normally would be a CFIA veterinary inspector as EIA is a reportable disease.

Documentation

8. Form *CFIA/ACIA 3937 Equine Infectious Anemia (EIA) Serum Test Report and Certificate* must be used for each animal being tested except as noted in the paragraph below. It is essential that the forms be completed entirely and completely. In the box entitled "owner," enter either the name of the owner or the person having care or custody of the animal. Complete the diagram and provide a complete written description of the animal.

9. If a number of animals are being tested for 'Domestic Purposes,' samples from more than one equine may be submitted accompanied by an *CFIA/ACIA 4679 Equine Infectious Anemia (EIA) Multiple Serum Test Report*, as long as the equines reside on the same premises, belong to the same owner, and are **permanently** and uniquely identified (tattoo, cold brand or electronic implant). The identification must be recorded on the submission form. Test results reported on this form are not acceptable for exporting animals.

10. The top three copies of the forms should accompany the blood samples. The fourth (dark yellow) copy should be retained for reference by the accredited veterinarian until the test results are received from the laboratory.

    Note: Accredited laboratories will refuse submissions that are not accompanied by the appropriate documentation (*CFIA/ACIA 3937* or *CFIA/ACIA 4679).* Refer to a CFIA district veterinarian for examples of completed forms.

Distribution of Test Results

11. In the case of **negative** test results, *CFIA/ACIA 3937* or *CFIA/ACIA 4679* will be marked with the test results and signed by the authorized laboratory personnel. The top copy (owner's) of the laboratory report is returned to the accredited veterinarian who submitted the sample. A copy is forwarded by the accredited laboratory to the district office nearest the horse's location. Test results will not be released by telephone, and a copy of the original will be faxed to the district office only if requested by the accredited veterinarian.

12. In the case of **non-negative** test results, the Area Office nearest the horse's location will be notified of the result within 24 hours by the accredited laboratory. The top and second copies of *CFIA/ACIA 3937* are forwarded to the Area Office. The third copy and the remaining serum will be forwarded to the federal laboratory or centre of expertise to conduct confirmatory testing. This process will delay the reporting of results. Negative results will be processed as above. Positive results will be reported to the accredited veterinarian by the district veterinarian.

Testing Suspect Animals

13. The district veterinarian must to be notified whenever EIA is suspected, but samples from animals suspected to be infected with EIA may be submitted to an accredited laboratory for the purpose of confirmation of diagnosis in the same manner as for non-suspect animals.

References

Copies of the *CFIA/ACIA 3937* and *CFIA/ACIA 4679* forms are available from from your district veterinarian.