## **EXOTIC NEWCASTLE DISEASE IN CAGED (EXOTIC) BIRDS**

Introduction: Exotic Newcastle Disease (END) is a highly contagious viral disease of many species of birds. END can cause high mortality (up to 90%) in chickens. Psittacine as well as other caged birds are also susceptible to END. Birds illegally smuggled into the United States are not quarantined and tested by United States Department of Agriculture (USDA) and birds may carry END virus. Therefore, END is a threat to the cage bird industry. An END outbreak in cage birds in Florida in 1980 resulted in the death of approximately 8000 birds and the depopulation of 30,307 birds in 23 states that cost the USDA \$1,166,253.00.

**Symptoms:** Are highly variable and non-specific in cage birds. One of the classical symptoms of END is tremors and involuntary shaking of head and body when the bird attempts movement. Other symptoms may include anorexia, depression, diarrhea, paralysis, twisted neck, respiratory difficulty, ocular discharge, loss of weight, *etc.* Similar symptoms may be seen with other avian diseases also. Therefore, confirmatory testing in a laboratory is necessary for a diagnosis of **END**.

**Incubation period:** May vary from 2 to 17 days depending on the species of the bird, management factors, concurrent infections, *etc*. Cockatiels, budgies, amazons, cockatoos are highly susceptible. Other species such as Lory's, macaws, canaries, finches, Mynah's, African grey's may not show symptoms but may act as carriers.

**Lesions:** Range from none to hemorrhages in the digestive and respiratory tracts, plaques in the pharynx and glottis. Other lesions may include hepatosplenomegaly and ascites.

<u>Diagnosis:</u> Can be made in live bird by virus isolation from feces, cloacal and tracheal swabs. Lung, intestine, brain, liver and spleen are suitable organs for virus isolation. Serology can be used for screening.

**<u>Treatment:</u>** There is no treatment for END. Vaccination is not advisable.

If unusual mortality is observed notify **END task force hotline 1-800-491-1899**. Submit dead birds to one of the CAHFS laboratories located in:

 San Bernardino:
 Tele: 909-383-4287

 Fresno:
 559-498-7740

 Turlock:
 209-634-5837

 Davis:
 530-752-8700

The premises are quarantined until diagnosis is made.

**END** is a federal reportable disease and any person or veterinarian who suspects it should report the disease to the state veterinarian.

Prepared by Dr. H. L. Shivaprasad, California END task force, 10/24/02.