Virulent Newcastle disease diagnosed in California

A presumptive diagnosis of virulent Newcastle disease (vND) was made on May 16, 2018 on birds and swabs submitted to the CAHFS San Bernardino and Davis branches, respectively. All samples originated from a small flock of backyard exhibition chickens in Los Angeles County. CAHFS’ presumptive diagnosis was confirmed by the United States Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) on May 17, 2018. This is the first case of vND, previously referred to as exotic Newcastle disease (END), in the U.S. since 2003.

The two birds necropsied had multiple lesions suggestive of vND, including edema of the head, hemorrhage of trachea, esophagus, proventriculus, intestine and cloaca, and necrosis of the cecal tonsils.

The California Department of Food and Agriculture (CDFA) is working with federal and local partners, including CAHFS, and poultry owners in response to the finding of vND. State officials have quarantined potentially exposed birds and are testing for the disease.

Virulent Newcastle disease is a highly contagious and deadly viral infection in birds. Clinical signs include sneezing, coughing, nasal discharge, green diarrhea, depression, neurologic signs, swelling around the eyes and neck, and sudden death.

It is essential that all poultry owners follow good biosecurity practices to help protect their birds from infectious diseases. These include simple steps like washing hands and scrubbing boots before and after entering a poultry area; cleaning and disinfecting tires and equipment before moving them on or off the property; and isolating any birds returning from shows for 30 days before placing them with the rest of the flock.

In addition to practicing good biosecurity, all bird owners should report sick birds or unusual bird deaths through California’s Sick Bird Hotline at 866-922-BIRD (2473). Additional information on Newcastle disease and biosecurity for backyard flocks can be found on CDFA’s web site.

CAHFS offers diagnostic services for all avian species. Oropharyngeal swabs and/or sick/dead birds are the preferred samples for diagnosis of Newcastle disease. Please contact any of the four CAHFS branches if you need additional information on sample submission or go to CDFA’s web site.

Virulent Newcastle disease is not a food safety concern. No human cases of Newcastle disease have ever occurred from eating properly cooked poultry products. In very rare instances people working directly with sick birds can become infected. Symptoms are usually very mild, and include conjunctivitis and/or mild fever-like symptoms, which typically resolve in a few days, but if they worsen you should seek medical attention.

Lab Locations

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