



VIRULENT NEWCASTLE DISEASE

FACT SHEET

WHAT IS VIRULENT NEWCASTLE DISEASE?

Virulent Newcastle disease (VND) is a contagious and fatal viral disease affecting all species of birds. Previously known as exotic Newcastle disease, VND is a foreign animal disease in the U.S. and is considered one of the most infectious diseases of birds and poultry in the world. The mortality in unvaccinated birds can reach 100 percent and VND can even infect and cause death in vaccinated poultry.

SIGNS & SYMPTOMS

VND affects the respiratory, nervous, and digestive systems. The time it takes for a bird to become ill after exposure to the virus (incubation period) ranges from 2 to 15 days. An infected bird may show the following signs:

- Respiratory: sneezing, gasping for air, nasal discharge, coughing
- Digestive: greenish, watery diarrhea
- Nervous: depression, muscular tremors, drooping wings, twisting of head and neck, circling, complete paralysis
- Reduction in, or complete loss of, egg production
- Swelling of the tissues around the eyes and in the neck
- Sudden death

TRANSMISSION

VND is spread primarily through direct contact between healthy birds and infected birds' droppings and secretions from the nose, mouth, and eyes. The virus is present in high concentrations in body fluids and discharges and spreads rapidly through birds in confinement.

VND can also be spread by mechanical means. Virus-bearing material can be picked up on shoes and clothing and carried from an infected flock to a healthy one. The disease is often spread by vaccination and debeaking crews, manure haulers, rendering-truck drivers, feed-delivery personnel, poultry buyers, egg service people, and poultry farm owners and employees.

The disease can survive for several weeks in a warm and humid environment on birds' feathers, manure, and other materials. It can survive for very long periods in frozen material. However, the virus is destroyed rapidly by dehydration and by the ultraviolet rays in sunlight.

DIAGNOSIS

Producers who suspect poultry to be infected with VND, or observe clinical signs of the disease, such as high morbidity and mortality, should immediately contact the Texas Animal Health Commission (TAHC) or United States Department of Agriculture Animal and Plant Inspection Service-Veterinary Services (USDA-APHIS-VS) for testing, if necessary. Upon laboratory confirmation of the disease, the TAHC will work closely with the bird owner to prevent disease spread. Response personnel will visit the operation and work to efficiently take samples, quarantine the premises and inventory poultry.

REPORTING VND

The TAHC should be notified of all suspected and confirmed cases of Virulent Newcastle disease within 24 hours of diagnosis. Reports can be made to any TAHC region office or to the TAHC headquarters at 1-800-550-8242.

PREVENTION

Poultry producers and dealers should follow good biosecurity practices to prevent the introduction of VND into their flocks.

- Establish an "all-in, all-out" flock-management policy;
- Protect against direct exposure to wild birds, or water and ground contaminated by wild birds;
- Close bird areas to nonessential personnel or vehicles;
- Provide employees with clean clothing and disinfection facilities and directions for their use;
- Thoroughly clean and disinfect equipment and vehicles (including tires and undercarriage) when entering or leaving the farm;
- Ban the borrowing or lending of equipment or vehicles;
- Ban visiting other poultry farms, exhibitions, fairs, and sales or swap meets (if visits must occur, direct workers to change footwear and clothing on their return);
- Ban bringing birds in slaughter channels back to the farm; and
- Do not bring birds to the farm unless you know the health status of the flock of origin.
- Buy from a reputable hatchery or dealer, and request certification from suppliers that the birds were legally imported or come from U.S. stock and were healthy before shipment.