



CANINE INFLUENZA

The Animal Health Diagnostic Center at Cornell has reason to believe that canine influenza virus is now present in the New York City area. Additionally, the University of Florida has reported outbreaks in shelters, humane societies, boarding facilities and veterinary clinics in Florida, predominantly in Broward, Dade, Palm Beach and Duval Counties.

Reports have been received indicating an unusual form of "kennel cough" has been seen in a number of veterinary practices. Six animals recovering from this clinical presentation are all serologically positive for canine influenza virus. Previous tests of New York State dogs have all been negative.

Canine influenza virus is a relatively new finding in dogs. It was first identified in racing greyhounds and this virus appears to have been the cause of significant respiratory problems on the tracks throughout the US for the last 2-3 years. The Virology Lab at Cornell isolated the first influenza virus from an animal that died from the infection. The virus was sequenced at CDC and was found to be closely related to equine influenza virus. Evidence of infection of non-greyhounds by influenza virus has been found in Florida within the past year.

Because this is a newly emerging pathogen, all dogs, regardless of breed or age, are susceptible to infection and have no naturally acquired or vaccine-induced immunity. Virtually 100 percent of exposed dogs become infected. Nearly 80 percent have clinical signs. There are two general clinical syndromes - the milder syndrome and a more severe pneumonia syndrome. The milder disease syndrome occurs in most dogs.

In the milder disease, the most common clinical sign is a cough that persists for 10 to 21 days despite therapy with antibiotics and cough suppressants. Most dogs have a soft, moist cough, while others have a dry cough similar to that induced by *Bordetellabronchiseptica*/parainfluenza virus infection. Many dogs have purulent nasal discharge and a low-grade fever. The nasal discharge likely represents a secondary bacterial infection that quickly resolves with treatment with a broad-spectrum, bactericidal antibiotic.

Some dogs develop a more severe disease with clinical signs of pneumonia, such as a high fever (1040F to 1060F) and increased respiratory rate and effort. Thoracic radiographs may show consolidation of lung lobes. Dogs with pneumonia often have a secondary bacterial infection and have responded best to a combination of broad-spectrum, bactericidal antibiotics and maintenance of hydration with intravenous fluid therapy. Fatal cases of pneumonia have been documented, but the fatality rate so far is low, at 1 percent to 5 percent.

There is no vaccine for canine influenza virus at this time. This virus is spread by aerosolized respiratory secretions, contaminated inanimate objects and even by people moving back and forth between infected and uninfected dogs. This is an enveloped virus that is most likely killed by routine disinfectants, such as quaternary ammoniums or 10 percent bleach (do not mix the two). Because the virus is highly contagious and all dogs are susceptible to infection, veterinarians, boarding facilities,

shelters and pet stores should use isolation protocols for dogs that have a "kennel cough."
Suspect animals should be examined by a veterinarian.

This is a document from the New Jersey Veterinary Medical Association with their permission to distribute

New Jersey Veterinary Medical Association
66 Morris Ave Suite 2A
Springfield, NJ 07081
(973) 379-1100