

The Canine Influenza Virus

by Cathy Heintz

The canine influenza virus, H3N8 a subtype of Influenza A, which was first seen in 2004 and mutated from an Equine virus, is once again in the forefront due to a recent outbreak in Virginia. The virus is very contagious and spreads rapidly, especially in confined areas where multiple dogs are found, such as kennels, shelters, veterinary clinics, grooming salons and dog show venues. The virus has been detected in 30 states to date.

H3N8 is spread by coughing and sneezing and causes severe respiratory infection and cough but with this strain there is no specific season for infection. The respiratory secretions can be carried by humans on their clothes, shoes and hands from infected dogs to uninfected ones. Solid surfaces such as bowls, toys and bedding can also spread the virus. Washing items with soap and water will kill the virus. The virus's incubation period is relatively short from 2-5 days and dogs that are infected shed the virus for a week to 10 days after clinical signs begin. This is a new pathogen and because of such, all dogs, regardless of breed or age are susceptible to infection. Almost every dog exposed to the virus becomes infected and 80% of those will show clinical signs. The 20% not showing signs can still shed the virus and continue to spread the disease. Death may occur in 5% of those dogs with severe form of the disease.

Most affected dogs show signs similar to kennel cough, which can cause a misdiagnosis. Some will develop severe pneumonia with high fever, increased respiratory rate, and labored breaths. The cough, which is usually a soft moist cough can also, be a dry cough like bordatella and can persist for 10-21 days despite treatment with antibiotics and antitussants. Many dogs will have a heavy pus-filled nasal discharge caused by a secondary bacterial infection. Those requiring treatment, like most viral infections are best served with supportive care.

Diagnosing canine influenza in the first 3 days of initial cough or fever can be done with a blood draw for serological testing via PCR or antigen test. Throat swabs or tracheal washes can also be used for PCR analysis or virus isolation. Talk to your veterinarian and the diagnostic lab they use as to the preferred test.

There is now an inactivated whole virus vaccine available from Intervet/Schering Plough to help with the control of the disease. The vaccine will not prevent the disease but may reduce the strength and length of the clinical signs, especially helping to minimize the damage to the lungs. It has shown to reduce viral shed and the length of shed time. Vaccinated dogs that become infected will develop less severe symptoms and have a lesser chance of spreading the virus.

This was written for informational purposes only. Talk to your veterinarian to determine if your dogs are at risk or if the vaccine is the right way to go for you and your dogs.

Information found from CDC website, AVMA website, New York Times article "10 Things To Know About H3N8 Dog Flu", July 2, 2009.