



## **CANINE INFECTIOUS TRACHEOBRONCHITIS (KENNEL COUGH)**

Kennel cough is usually caused by a group of infections, including Bordatella bronchiseptica bacteria and a virus such as adenovirus, parainfluenza virus or even distemper virus. It is characterized by sudden onset of a harsh, hacking or honking cough and is a lot like a chest cold in people, only becoming serious in unique situations.

When cilia lining the respiratory tract become damaged it is easier for bacteria to infect the airways. Dogs that become infected with Kennel cough are typically kept in a crowded situation with poor air circulation and lots of warm air. Bordatella bronchiseptica can actually bind to cilia and hinder the natural movement upward that is designed to protect the tract. Bordatella bronchiseptica can also secrete substances that interfere with immune cells that normally consume and destroy bacteria. This opens up the opportunity for infectious agents to invade the respiratory tract.

Diagnosis of Kennel cough is based on clinical signs and history of exposure. The incubation period is from two to fourteen days and the infection is fairly contagious among dogs and can be passed to rabbits, guinea pigs, pigs, and cats that are young and kept in groups. Kennel cough is not transmissible to humans but is closely related to Whooping cough.

A vaccine is available in intranasal and injectable varieties. Intranasal vaccines can be given as early as two weeks old and immunity lasts about ten to twelve months, with boosters given annually. This version stimulates the local immunity, right where the natural infection would be trying to take over. It takes just under a week to generate a good immune response after intranasal vaccination, which is faster than the immunity generated by the injectable vaccine. The injectable is given as a booster and provides good systemic immunity as long as two doses are given after four months of age. At WHVC, the initial Bordatella vaccine is given intranasally and subsequent boosters are given in the injectable form. We recommend a booster every six months. Most boarding kennels require dogs to be up to date on this vaccine.

Treatment of Kennel cough consists of supportive care with or without cough suppressants and/or antibiotics. Treatment isn't always necessary because the infection is generally self-limiting. Dogs that aren't treated should begin to show some improvement after about a week. If the dog does not appear to have improved by then, they should have a re-check appointment and chest radiographs may be recommended.

The spread of Infectious tracheobronchitis can be prevented through proper kennel management and vaccination.