

INFECTIOUS TRACHEOBRONCHITIS

KENNEL COUGH

Kennel cough is a very common condition of dogs caused by a number of different bacteria and viral agents. The most common cause is the bacteria *Bordetella bronchiseptica*. Kennel cough is highly contagious and outbreaks are common in pet stores, boarding kennels, shelters, puppy training classes, and other situations where large numbers of dogs are stressed and in close contact with each other. Most *Bordetella* infections follow viral respiratory infections that breakdown the dogs natural defenses and allows the bacteria to move into the respiratory tract. Clinical signs vary between dogs, but in typical cases, the dog will develop a dry hacking cough approximately 4-6 days after exposure. Other clinical signs may include ocular and nasal discharge, fever, anorexia, and lethargy. Kennel cough will usually clear without treatment, but it can before the cough resolves. During this period, the affected dog is contagious to others and the respiratory viruses spread easily. Occasionally, kennel cough can progress into bacterial pneumonia as the bacteria infects the lungs. Kennel cough pneumonia is a very serious condition that requires intensive medical therapy for the dog to recover.

Symptoms

- Dry hacking or honking type of cough
- Ocular discharge
- Nasal discharge
- Lethargy
- Anorexia
- Fever

Diagnosis

Diagnosis is usually based on history & clinical presentation. Most dogs present with a dry hacking cough easily elicited if the trachea (wind pipe) is touched or squeezed gently and no other signs of being ill. Vitals, attitude, and appetite are normal except for the cough that seems to bother the owners more than the dogs. Although puppies are particularly susceptible to kennel cough, it can be picked up by dogs of any age.

If coughing is severe, persistent, or if dog is ill, diagnostics are indicated including blood work, chest radiographs and possibly a culture of lung fluid. Kennel cough can progress to bacterial pneumonia especially in stressed puppies (ie newly bought pet store pups with other problems such as intestinal parasites and diarrhea) and dogs that are brachycephalic with short faces such as Bull Dogs, Pugs, & Boxers, etc.

Treatment- breaking the cough cycle

- **Most cases of kennel cough are self limiting.** Treatment is aimed at breaking the cough cycle using cough suppressant medication.
- If *Bordetella bronchiseptica* is suspected, many veterinarians will prescribe antibiotics to prevent a secondary pneumonia. Even on antibiotics, pneumonia

- can still develop in a small amount of dogs.
- **All infected dogs should be isolated** from other animals until clinical signs (esp coughing) has resolved.
 - **Severe cases** that do not respond to conservative therapy require hospitalization, aggressive care (IV fluids & antibiotics) and further diagnostics. Most non-responsive cases are due to development of secondary bacterial pneumonia.

Prognosis

Excellent with conservative care at home for most cases, fair in dogs that develop pneumonia or have underlying disease.