

# TRACHEOBRONCHITIS (INFECTIOUS): DOGS

## About the Diagnosis

Acute tracheobronchitis (kennel cough) is a respiratory disease that affects puppies and adult dogs. It is highly contagious between dogs of all ages but is not contagious to people. This disease may consist of several organisms, including bacteria (*Bordetella bronchiseptica*), viruses (parainfluenza, canine adenovirus 2), fungi, and others. This disease is characterized by sudden, intense episodes of coughing that may sometimes be productive (sounds moist, produces phlegm) but are usually nonproductive (dry, hacking cough). Nasal discharge may also be present. The cough usually becomes worse when the dog is excited or exercising. Your veterinarian may be able to evoke a coughing response by placing gentle pressure on the dog's neck in the area under the collar to confirm that what you are seeing at home and what the veterinarian has triggered is the same thing.

This disease is commonly called **kennel cough** because there is often a history of boarding in a kennel or hospital during the week (approximately) before the dog starts coughing. The dog may have attended a dog show during the previous week where it was exposed to other dogs with similar symptoms. The organisms that cause this disease spread in the air and during face-to-face direct contact between dogs. Kennel cough is usually diagnosed based on a combination of the history (recent exposure to other potentially infected dogs) timed with the subsequent onset of cough several days later. The veterinarian may recommend that x-rays of the dog's chest be taken or that blood work be done if other abnormalities are detected during a physical examination.

There is a vaccination that is commonly given to puppies and adult dogs several days before boarding and/or hospitalization that helps decrease the chance of contracting kennel cough. No vaccine is 100% effective in this respect, however. Discuss this vaccine with your veterinarian if you plan to board your dog or if you know that your dog will be exposed to other dogs in the future. Some kennels require dogs to be vaccinated several days prior to accepting them for boarding.

## Living with the Diagnosis

Kennel cough usually resolves without treatment or is self-limiting in dogs that are otherwise healthy. However, very young puppies and dogs that have other diseases and may be immunocompromised (weakened immune system) could develop more serious problems if they contract kennel cough. Dogs diagnosed with this disease should be isolated from other dogs in the household until the symptoms resolve. Dogs with kennel cough usually feel perfectly normal and healthy other than the coughing. Dogs in which the cough persists more than 1 week or so or who develop symptoms of not feeling well along with the cough at any time (loss of appetite, loss of energy, labored breathing, etc.) may have a more serious problem than just kennel cough and need to be rechecked promptly by the veterinarian.

## TREATMENT

There is no specific medicine used for treating kennel cough. Although dogs with kennel cough generally heal spontaneously (without treatment) if the dog is otherwise healthy, the coughing episodes can be frustrating for both the dog and owners. For this reason, the veterinarian may recommend giving a medicine to suppress the cough, if it is a dry, nonproductive cough. Occasionally, in some dogs, some of these medicines may make the dog drowsy. Therefore, it is very important that dogs taking certain cough suppressant medicines not be allowed to jump up and down off furniture or go up and down steps without supervision because they may fall and injure themselves. Medicine that dilates the smaller airways leading to the lungs may be prescribed to help the dog breathe more comfortably. Occasionally, these medications may make a dog anxious, excitable, or jumpy, and if this is the case, you should contact your veterinarian without delay to avoid continuing a medication that your dog is not tolerating. The veterinarian may also prescribe an antibiotic to help control the bacterial component of the infection, but this is almost never necessary.

For dogs with other preexisting, immunosuppressive diseases (uncommon), treatment may be more extensive.

## DOs

- Talk to your veterinarian about a vaccine for your dog to decrease the chance of contracting kennel cough if you know that your dog will be exposed to other dogs in the future (boarding in a kennel, attending dog shows, etc.).

- Observe your dog closely if you are giving a cough medicine that can cause drowsiness or that can cause anxiety. If this is the case, contact your veterinarian to determine whether the dosage should be changed or a different medication substituted.
- Give medicine only as directed.

## **DON'Ts**

- Do not allow your infected puppy or adult dog to have face-to-face contact with other dogs, since doing so spreads the disease.

## **When to Call Your Veterinarian**

- If your puppy or adult dog has episodes of coughing that do not appear to be resolving.
- If your dog develops symptoms of feeling poorly, including lethargy, loss of appetite, difficulty breathing or increased respiratory effort, and so on.
- If your dog will be boarding at a kennel or will be in close contact with other dogs in the future. Discuss the advantages and drawbacks of vaccination given your dog's specific situation.
- If your dog does not appear to be getting better after giving the prescribed medicine.
- If you observe any signs of an adverse reaction to the medicine such as hives (bumps under the skin), weakness, vomiting, diarrhea, anxiety, seizures, and so forth.
- If you are having difficulty giving the medicine to your dog.
- If your dog begins coughing, sneezing, or develops a nasal discharge after being vaccinated against kennel cough.

## **Signs to Watch For**

- Watch for coughing that affects your dog's quality of life (interferes with sleep, exercise, play), lethargy, weakness, and depression. These symptoms may indicate complications or another disorder altogether (not kennel cough), and under such circumstances a recheck is warranted.
- Phlegm produced during coughing or nasal discharge that is yellow or greenish in color, which might indicate an infection warranting further testing and antibiotic treatment.