

THE COUGHING CANINE

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Coughing is a normal mechanism of the body that is used to remove or rid itself of excessive airway secretions or debris. While some coughs are very innocent and non-problematic, some coughs can be caused by diseases or illnesses that are fatal if left untreated. Coughing can vary greatly in sound, intensity, and productiveness. Some of these characteristics can aid in determining the cause of the cough but do not always dictate if the cough is life threatening.

In general, the causes of coughing can be divided into two categories—respiratory causes and cardiac causes. The remainder of this article will look at several of the more common causes of coughs in dogs.

1. Infectious tracheobronchitis or kennel cough. Kennel cough results from the exposure to Bordetella bacteria and a respiratory virus. They act together to cause a dry, hacking cough. For the most part, the disease remains in the upper airways (i.e. upper airway infection) and will not result in pneumonia in a healthy animal. In many instances kennel cough can be self limiting. Treatment varies by case and may include antibiotics. Kennel cough is typically preventable with proper vaccination.
2. Pneumonia. The same set of organisms that cause upper airway infection or tracheobronchitis can invade deeper into the lungs and cause pneumonia in some animals. When this occurs the sound and productiveness of the cough will typically change and the animal will become more ill. Treatment will vary greatly depending on severity and activity level of the pet.
3. Collapsing trachea. Some breeds of dogs, especially the smaller breeds, are prone to sporadic collapse of the trachea. The result is a dry, choking, type of cough. It is typically worse with exercise or excitement and ceases within moments of occurrence. In rare cases, the collapse can be severe enough to cause the dog to collapse or pass out. Treatment varies by severity and can range from none to medication to surgery.
4. Congestive heart failure (CHF). In the late stages of cardiac disease, fluid can accumulate within the airways and cause a dry to moist sounding cough. The cough is typically associated with exercise intolerance, weakness, cyanosis (blue to grey coloring of the gums), collapse, and death if left untreated. CHF can be the end result of a chronic heart murmur. Thus it is important to monitor dogs with heart murmurs carefully.
5. Heartworm disease. Heartworms are spread by mosquitoes and are very common in our part of the country. In the later stages of heartworm disease, a cough can result. Heartworms are easily diagnosed through a blood test and are 100% preventable by the administration of a monthly heartworm medication. If left untreated, heartworm disease is fatal.

6. Fungal infection. Several types of fungus including Blastomycosis and Histoplasmosis can cause a cough. These infections are typically severe and progressive without appropriate diagnosis and treatment. The fungal spores are in the environment and enter the body through inhalation. Young, male dogs that hunt and dig are highest at risk but any age or sex of dog can be infected. Treatment is available and is typically prolonged. The inappropriate administration of steroids and/or delayed diagnosis and treatment can result in death for animals with a fungal related respiratory infection.

7. Allergic or inflammatory bronchitis. Allergies typically cause skin problems in animals, however in some instances pulmonary disease can result. There are many causes and triggers so treatment can vary depending on the cause and severity of the inflammation.

8. Cancer. Many types of cancer can infiltrate the lung tissue and result in coughing. While some cancers can start in the lungs, the vast majority spread to the lungs from other sites in the body. Surgical removal is typically not an option unless there is a single mass that started in the lungs. Thus, chemotherapy is often needed to treat animals that have a cough due to cancer.

9. Foreign bodies. Certain objects such as grass awns, small seeds, etc. can be accidentally inhaled into the lungs. If they are not expelled by the initial coughing response or end up deep within small airways they can cause a chronic infection and cough. Removal of the object is essential to cure the cough.

Since many things result in coughing a variety of tests may be needed to determine the exact cause. These may include: x-rays, bloodwork, bronchoscopy (visualization of the airway with a small camera), culture and sensitivity, cytology, biopsy and histopathology. Determining the exact cause of the cough is the best way to determine the exact combination of treatments that will be needed to cure the disease.

Lastly, it is important to note that cats will typically cough much less frequently than dogs, even when they are affected by the same diseases. In many instances, cats with some of the similar conditions will not cough at all. This makes diagnosis and treatment in the earliest stages of disease more difficult. Thus it is very important to have coughing cats examined and treated promptly.

****The information provided here is for educational purposes only and is not intended to take the place of a veterinarian. As always, if you have concerns about the health status of your pet, do not hesitate to contact a veterinarian.****