



Coughing in Dogs

Do dogs cough?

Dogs do cough, and often retching or gagging is confused with a cough in dogs. A cough is an expiratory effort producing a sudden, noisy expulsion of air from the lungs. It is usually stimulated by an irritation or inflammation of the mucous membrane lining of the windpipe or *trachea*, bronchi or bronchioles in the lungs in an effort to expel some foreign material or accumulated inflammatory secretion or exudate. Bouts of coughing may be productive and may end with a retch and even bringing up of stomach contents.

What causes Dogs to cough?

In dogs, coughing can be a sign of an inflammatory problem affecting the lower respiratory tract, especially some form of bronchitis, or it can be inflammation to the trachea as occurs in 'kennel cough'. This inflammation will often be from infection particularly with viruses or bacteria such as *Bordetella*. Parasitic worms, especially heartworms, may be responsible in some cases. Allergies of various origins may also cause coughing. Dogs can cough for a variety of other reasons, including the presence of foreign material within the airway such as pieces of inhaled grass, or irritation from inhaled liquids or gases. Chest tumors can also occasionally cause coughing. Coughing is also a common clinical sign of heart disease in dogs and humans.

Coughing can also be seen with upper respiratory tract disease when irritation or inflammation affects the larynx or trachea, or a disease in the nose that results in excessive secretions draining into the larynx and trachea, causing irritation and coughing.

When does a coughing dog need veterinary attention?

It is normal for all dogs to cough occasionally, and provided that the dog is maintaining good health and the cough is not productive and not resulting in the production of phlegm or sputum, veterinary attention is not immediately indicated. However, if the cough persists for more than a few days, is severe, productive, or if the dog appears sick and losing weight, you should consult one of our veterinarians.

How is the cause of a dog's cough diagnosed?

Because most cases of coughing are associated with other signs of respiratory disease, an extensive initial work up may not be required. However, if the cough is severe or if it has been present for some time, then further investigation may be needed. A thorough medical history documenting the onset of the problem and its progression, any changes in the environment, or any other signs of illness in the dog, will be important. The diagnostic work-up may include blood tests, laboratory cultures of a wash sample from the lower respiratory tract, endoscopic examination and x-rays. Your dog may require a sedative for some of these procedures.

How will the cough be treated?

Treatment depends on the diagnosis and your dog's medical condition. Symptomatic treatment with decongestant medicines may be helpful in mild cases. In the case of viral with secondary bacterial infection or primary bacterial infection, antibiotics will likely provide rapid improvement. It is important not stop the treatment once the dog seems better. Complete the medication as prescribed otherwise the infection may return and be more difficult to treat.

If the coughing is a more chronic problem that has been present for one to two months, there may be permanent damage to the mucous membrane surfaces in the lungs such that they are not capable of healing. In these cases, infections may be recurrent. Targeted supplements that improve mucous membrane repair or act as immune stimulants may be helpful. Anti-inflammatory drugs may be used to suppress the inflammation particularly if there is an allergic basis and the allergen cannot be found and removed from the dog's environment. In the case of certain types of cancer, chemotherapy may be an option.

ADDITIONAL INSTRUCTIONS