

Coughing in Dogs



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Viral and Bacterial Infections

Viruses and bacteria most commonly cause respiratory infections. Some of these agents primarily affect the upper part of the respiratory system and irritate the trachea (windpipe), while others cause infection deeper in the lungs (pneumonia). Infectious causes of cough are more common in young dogs but can also be seen in older dogs. A well-known example of this type of cough is the condition referred to as “kennel cough.” Kennel cough can be caused by several different viruses (adenovirus, parainfluenza, etc.) and/or a type of bacteria called *Bordetella bronchiseptica*. Most cases of kennel cough are self-limiting and resolve within 7-10 days, but occasionally infection can result in bacterial pneumonia, which needs to be treated with an antibiotic.



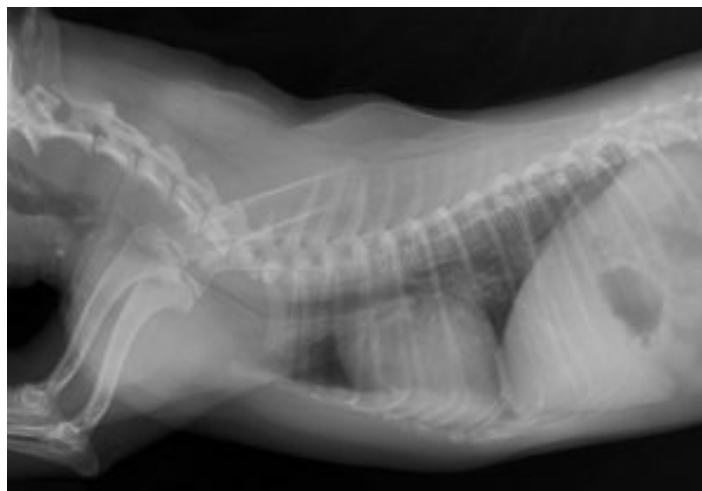
Bronchitis

Inflammation occurs when the body sends out cells from the immune system to fight against infectious agents such as bacteria or viruses. The condition is called bronchitis, when the inflammation occurs in the main air passages in the lungs. Acute bronchitis is usually a sequelae of viral infection and causes a cough that often brings up mucus. Bronchitis that lasts more than two months is referred to as chronic bronchitis.

Chronic bronchitis may result from inflammation created by the severe coughing of acute bronchitis. Frequent exposure to cigarette smoke or strong fragrances can also predispose to chronic bronchitis, as can seasonal allergies. Chronic bronchitis is usually diagnosed when other causes of cough have been excluded via blood tests, x-rays, and sampling of the fluid in the airways. Treatment often includes steroid medications to reduce inflammation and cough suppressants to prevent the cough from causing further inflammation.

Tracheal Collapse

The trachea is a flexible tube composed of rings of cartilage. Tracheal collapse occurs when the cartilage rings weaken, allowing the trachea to flatten and eventually collapse into itself. The resulting cough is a dry hack that has been said to sound like a goose honk. The cough is most prominent when the dog is picked up, excited, or pulling against a collar. Small breed dogs are most commonly affected if overweight or routinely exposed to cigarette smoke. Medical management of tracheal collapse involves weight loss, cough suppressant medications, and anti-inflammatory medications. Some dogs will no longer respond to medical management as the disease progresses. In some of these cases, a stent (spring-like wire tube that expands outward) may be inserted into the trachea to help keep it open.



Heartworm Infection

Dirofilaria immitis, the worm that causes heartworm disease, is transmitted to dogs through mosquito bites. The worms live in the heart, lungs, and surrounding blood vessels and can cause severe damage to the body. Since adult worms can cause irritation and inflammation in the lungs, one of the early signs of heartworm disease is often a mild, persistent cough. The cough tends to be worse after exercise.

Any persistent cough should be brought to the attention of your veterinarian. It is helpful if you can describe the cough (Does the dog bring any fluid up with the cough? Does it happen during a particular activity, such as eating or running? Is it worse during a specific time of day?) and/or obtain a video recording to show your vet. Most coughs can be treated or managed with medication, but a proper diagnosis is required first.