

# *HEART DISEASE IN DOGS*



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# HEART DISEASE IN DOGS

- Heart disease affects dogs a bit differently than it does humans. They are, however, still susceptible to it, and it can have serious—even fatal—consequences.
- The vast majority of dogs don't suffer from coronary artery disease, typically caused by bad diet (although they like a good slice of bacon as much as most humans, to be sure). But they can suffer from congestive heart failure, a progressive decrease in the heart's ability to pump blood to the rest of the body (not be confused with a heart attack, where the blood supply to the heart is suddenly cut off). Because the heart is the engine that transports oxygen throughout the body, congestive heart failure ultimately affects other organs as well.
- As with many progressive diseases, it's possible for your dog to live with heart disease for many years without showing any symptoms. It may worsen over time, and symptoms may slowly



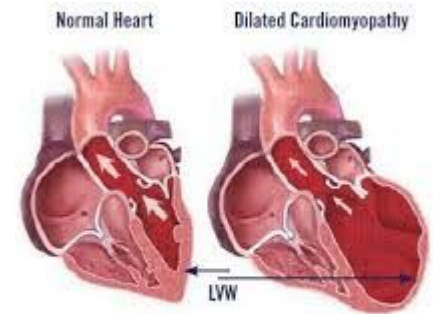
# Causes

The vast majority of heart disease cases in dogs—some 95 percent—are considered “acquired” heart disease. Typically the result of normal wear and tear, they can also be caused by **injury** or infection. They’re most often seen in middle-aged and **older dogs**. Some of the most common types of acquired heart disease are:

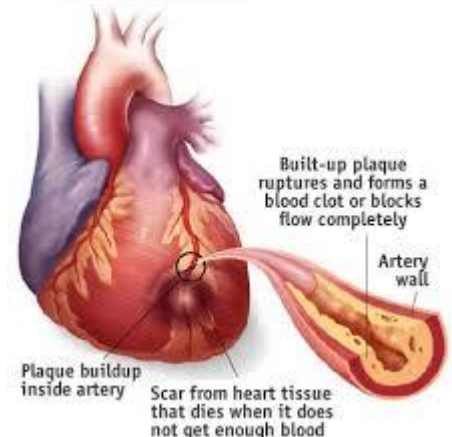
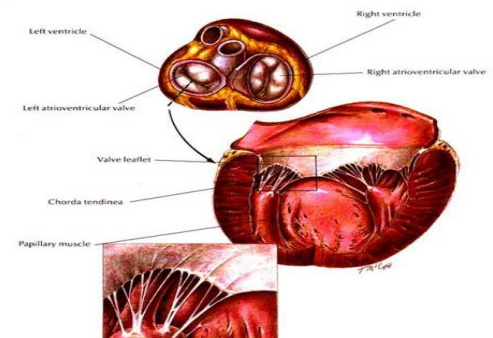
- ❑ Chronic valvular disease, when the valves of the heart weaken with age and begin to leak.
- ❑ Myocardial disease, when the heart muscle weakens, causing it to enlarge.
- ❑ Arrhythmias, when there’s a problem with the body’s electrical system, which tells the heart how to beat.
- ❑ Pericardial disease, when the protective sac that surrounds the heart fills with fluid, preventing normal beating of the heart.

Congenital defects, the other cause of heart disease, are comparatively rare problems a dog is born with. You’ve probably heard of a **heart murmur**, which is caused by a defect in the heart that disrupts blood flow, creating a “whooshing” sound that can be heard through a stethoscope. Heart murmurs aren’t necessarily anything to worry about. Among **puppies**, the condition usually clears up on its own by four to six months of age.

Other congenital defects often involve the improper development of a specific part of the heart, or a small hole in one of the chambers. There are many different



Note the thin left ventricular wall (LVW), dilated LV chamber, and depiction of decreased forward blood flow with DCM.



# Symptoms



A dry cough after exercise

A dry cough that worsens at night

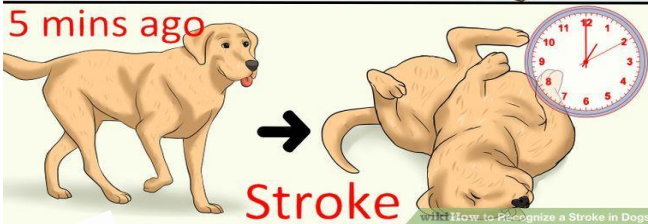
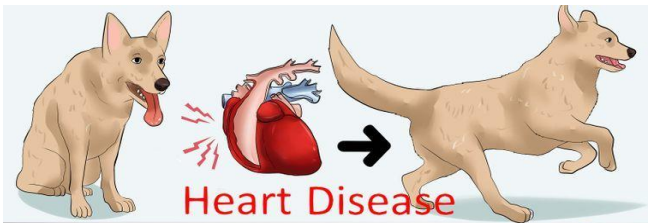
Shortness of breath

Weight loss (which may occur rapidly, over the course of just a few weeks)

Fatigue

Fainting spells

Swollen abdomen (pot belly)



# Diagnosis

A blood and urine test to check for any other problems that could be affecting your dog's heart.

Chest X-rays. These use radiation in low doses to make images of your dog's internal organs.

An EKG. This test measures electrical signals from your dog's heart and tells how fast it's beating and if that rhythm is healthy.

An ultrasound. Ultrasound uses sound waves to look at the size, shape, and movement of the heart.

Heartworm antigen test. Your vet will take blood from your dog to test it for heartworms.



# Treatment



If a minor congenital defect is discovered in your puppy, chances are the vet won't recommend surgery. If your pup's diagnosed with patent ductus arteriosus, a defect between the aorta and pulmonary artery that results in excess blood flow to the lungs, he'll probably need surgery. Without it, 60 percent of puppies will die before their first birthday (the rate drops to 10 percent with treatment).



With acquired heart disease, the most likely treatment is an ACE inhibitor, a drug that reduces the stress on the heart (and may slow the deterioration of muscle) by reducing blood volume and pressure. It doesn't treat the underlying heart disease, but it does improve the symptoms.



Other drugs used to treat heart disease include beta blockers, nitroglycerine to immediately dilate the veins, or digitalis to control a rapid heartbeat. Diuretics such as **Lasix** help manage fluid accumulation in the lungs or elsewhere.



It's important to draw a distinction between heart disease and heart failure. Heart failure comes as the result of heart disease. It's rarely a sudden event, but more likely a progressive failure of the body's organs because of a failing heart. ACE inhibitors are often used to improve a heart failure patient's quality of life.

# How to prevent heart disease



Feeding your pet a good diet is a must for many reasons, not least that your dog will enjoy better energy and health. Likewise, exercise is important to keep your dog in good shape.



Because heart disease has so many causes, there's little you can do to prevent it. But paying careful attention to your dog can help you spot the signs of a problem sooner—and sooner is always better when it comes to treatment.



**THANKS FOR  
ATTENTION**

