

Heart Disease:

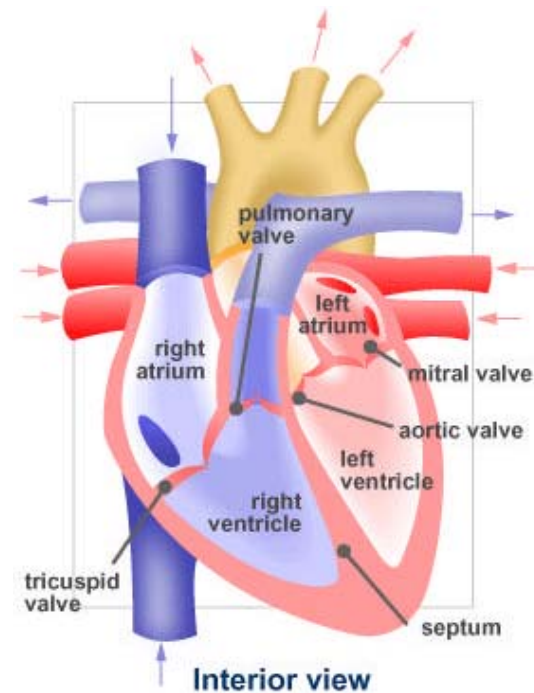
A Common Problem Among Dogs

What does the Heart do?

The heart, blood and blood vessels make up the system that supplies the body's tissues and organs with oxygen and nutrients. **Oxygen-Depleted Blood** comes from all parts of the body to the chambers on the right side of the heart. The blood is then pumped through the lungs, where oxygen is added to it. **Oxygen-Rich Blood** returns from the lungs to the left side of the heart and is pumped out, delivering oxygen to all the body's tissues.

What are the different types of Heart Disease?

There are two types of heart disease: congenital and acquired. Congenital heart disease is present at birth and is rare. Acquired heart disease develops overtime, usually beginning during middle age and affecting many older dogs. The most prevalent type of acquired heart disease is **Chronic Valvular Disease (CVD)**. This causes the heart valves to gradually lose the ability to close effectively, causing abnormalities in blood flow. The second most common kind, **Dilated Cardiomyopathy (DCM)**, causes the walls of the heart to become thin and weak, and the chambers to dilate. Both CVD and DCM result in the same serious condition, which is caused **Heart Failure**



Normal



Dilated



What is Heart Failure?

Heart Failure occurs when the heart cannot pump enough blood to meet the body's needs. Because the heart is not pumping effectively, blood may back up in the heart, lungs or other organs. Blood vessels constrict and blood pressure increases. As a result, fluid may leak out of the vessels, especially of the lungs and liver, and cause congestion of the lungs or fluid accumulation in the abdomen and other tissues.

How can I tell if my dog has Heart Failure?

The early signs of heart failure are hard to detect. A decrease in activity, or coughing, during periods of exercise are both early signs of heart failure, but owners may consider these normal signs of aging. It is difficult to tell without a thorough examination. As heart failure progresses, however, these early signs become more severe. In addition, your dog may develop other signs such as rapid breathing, abdominal swelling and weight loss.

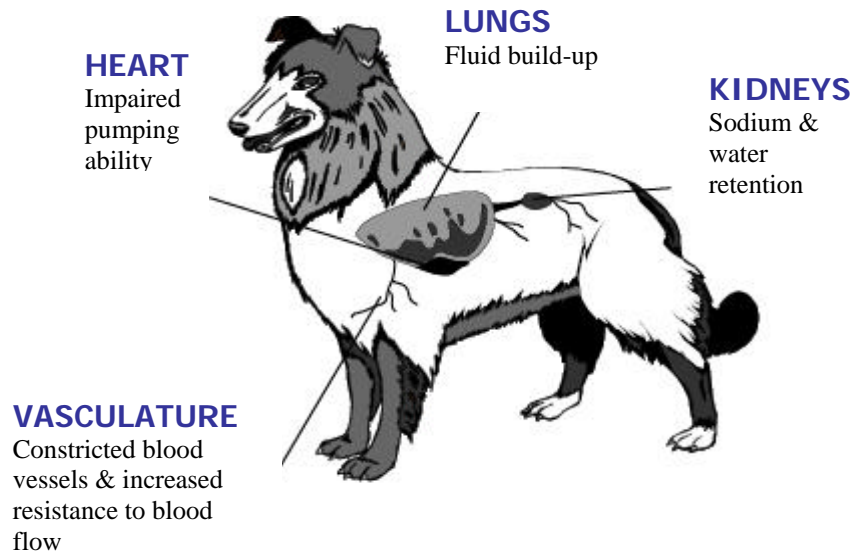
Can my dog be treated for Heart Failure?

Yes. Although there is no cure for heart failure, new treatments are helping dogs enjoy longer life with better quality. Success of treatment depends on factors such as progression of disease, presence of other illnesses and age. A complete evaluation of your dog will help us determine what medications, dietary changes or exercise are necessary. Periodic exams and laboratory testing will help us modify your pet's medication as needed. Early detection of heart failure provides the best chance of successful treatment.

SIGNS OF HEART FAILURE

- ✓ Lack of energy
- ✓ Irregular & rapid breathing
- ✓ Lack of appetite & weight loss
- ✓ Coughing
- ✓ Weakness
- ✓ Fainting
- ✓ Abdominal Swelling

How Does Heart Disease Affect My Dog?



How is Heart Disease Diagnosed?

You'll be asked to provide background information about your pet, along with your observations of any problems you've noticed. We will perform a physical examination including:

- Listening to the heart & breathing sounds
- Taking the pulse
- Inspecting the gums
- Feeling internal organs for swelling

A number of procedures may be recommended to evaluate your dog and determine the best treatment. These include:

- Chest Radiographs
- Electrocardiogram
- Blood & Urine Samples
- Ultrasound