What is pericardial effusion?
- Pericardial effusion is the abnormal accumulation of fluid within the sac surrounding the heart (pericardium).
- There is normally only a very small amount of fluid in that sac to protect the heart and provide lubrication to prevent friction between the moving heart and surrounding organs.
- Pericardial effusion usually causes fluid accumulation in the belly and causes symptoms of weakness, breathing difficulties, and sometimes collapse.

How is it diagnosed?
- An echocardiogram (ultrasound or sonogram of the heart) by a veterinary cardiologist is the gold standard for definitive diagnosis.
- Physical examination, chest x-rays, electrocardiograms and overall history can also assist in making the diagnosis of pericardial effusion.

What Causes Pericardial Effusion?
- The most common condition is bleeding from a tumor - some are aggressive and some are not.
- If a tumor is seen, consultation with a veterinary oncologist is often recommended.
- Infections and heart failure can also cause fluid to abnormally accumulate in the heart sac.
- Sometimes there is no known cause (idiopathic) - up to two thirds of patients do not have an identifiable cause on initial examination.

What is the prognosis?
- The outcome is widely variable and depends on the cause of the problem.
- We are actively researching the utility of cardiac biomarkers to help discern the underlying cause of pericardial effusion.

How is it treated?
- Removal of the fluid within the pericardial sac (pericardial tap) may be required.
  - This is done by inserting a catheter through the chest wall via ultrasound guidance and withdrawing the abnormal fluid present within the sac around the heart.
- Surgical removal of the pericardium may be recommended in cases of recurrent pericardial effusion. This procedure results in a significant improvement in quality of life and long-term survival in these types of patients.