

What is Heart Disease?

Heart (cardiovascular) disease is any condition of the heart or blood vessels that disrupts the normal function of the heart and vasculature to deliver oxygenated blood to the body. Heart diseases can be congenital (i.e. present from birth) or acquired (i.e. occur later in life). Many heart diseases in animals are heritable (passed on through generations). Heritable heart diseases can be congenital or acquired. Often, heritable heart diseases occur with a higher prevalence in certain breeds of animals.

A principal function of the Cardiology service is to determine an accurate diagnosis of the type of heart disease present. Once a diagnosis is established, available treatment options and prognosis can be discussed

How Do I Know if My Pet has Heart Disease?

Symptoms of heart disease in animals can take many forms including activity or exercise intolerance, shortness of breath or difficult breathing, restlessness during sleep, fainting, and blueness (cyanosis). Often, heart diseases in animals will not cause obvious symptoms until the disease becomes advanced.

Primary-care veterinarians can sometimes detect the presence of heart disease through a regular physical examination before symptoms occur. Clinical signs that suggest the presence of heart disease include the presence of abnormal heart sounds (eg. heart murmurs), abnormally fast, slow or irregular heartbeat, abnormal arterial or venous pulses, or abnormal color of the membranes. Usually a cardiac evaluation will be recommended when these abnormalities are detected.

Types of Heart Disease

Many types of heart diseases occur in animals. Some of the more common are:

- **Congenital Heart Defects:**
 - Patent ductus arteriosus (PDA): persistent fetal vessel connecting the aorta and pulmonary artery
 - Ventricular septal defect (VSD): hole in the heart
 - Pulmonic stenosis (PS): narrowing of the pulmonic valve
 - Subvalvular aortic stenosis (SAS): narrowing below the aortic valve
 - Tricuspid valve dysplasia (TVD): malformation of the tricuspid valve
 - **Mitral Valve Disease:** degeneration of the mitral valve leading to severe valve regurgitation (leak). This is the most common heart disease in dogs.
 - **Cardiomyopathies:** diseases of the heart muscle
 - Dilated cardiomyopathy: progressive dilation and weakness of the heart muscle.
 - Hypertrophic cardiomyopathy: thickening of heart wall
 - Boxer arrhythmogenic cardiomyopathy: causes serious arrhythmias in boxers
 - **Cardiac Arrhythmias:**
 - Bradycardias: abnormally slow heart rhythms

- Trachycardias: abnormally fast heart rhythms
- **Pericardial Effusion:** fluid accumulation in the heart sac (pericardium)

What is Heart Failure?

Heart failure is not a specific heart disease, but rather is the final common manifestation of many types of heart disease. Heart failure can manifest as inadequate blood flow to the body (low-output heart failure), accumulation of fluid behind the heart (congestive heart failure), or both. Many different types of heart disease can result in heart failure. Symptoms of heart failure can include weakness, lack of energy, shortness of breath or difficulty breathing, cough, restlessness during sleep, abdominal distension, poor appetite, or weight loss.

Heart failure can be treated. Sometimes the underlying disease causing heart failure can be corrected, reversing the heart failure. Alternatively, heart failure can be effectively treated with drug therapies for periods of months to years depending on underlying casues.

How Do We Treat Heart Disease?

Heart diseases can be effectively corrected or managed through a variety of [Medical, Interventional, or Surgical Therapies](#).