What is a Heart Murmur?

A heart murmur is an abnormal heart sound that is heard when listening to the heart with a stethoscope. Instead of hearing a lub dub your veterinarian hears a swooshing sound. The murmur is caused by abnormal turbulent blood flow. Abnormal turbulent blood flow can occur when blood passes across abnormal heart valves or across abnormal structures within the heart. It can also occur when blood flows very fast across normal structures (such as when an animal is excited) or if an animal is anemic (low blood volume) or dehydrated. Your veterinarian will grade the heart murmur out of 6, with a 1/6 being very soft to a 6/6 being the loudest murmur. In some instances, the louder the murmur, the more significant the abnormality within the heart.

Sometimes chest x-rays, bloodwork and an echocardiogram (ultrasound of the heart) will need to be performed to determine the cause of the heart murmur. This is especially important if the animal is showing signs of cardiac disease like coughing, labored breathing, exercise intolerance, fainting, open mouth breathing(for cats), weakness, and abdominal distention.

**If you have a new puppy or kitten:**

Soft heart murmurs (grade 1/6 to 2-3/6) can occur in young animals and are often of no consequence to them. These types of murmurs are called “innocent” murmurs. They are soft and usually go away by 14 weeks of age.

Loud heart murmurs (Grade 3-4/6 to 6/6) in a new puppy or kitty should be evaluated by a cardiologist. This may indicate that congenital (present at birth) heart disease is present.   The cardiologist will perform an echocardiogram as well as other tests (EKG, blood pressure, etc.) to assess the heart and determine if congenital heart disease is present. Depending on the disease present, some congenital diseases can be fixed or made better with an interventional catheter procedure.

Adult dogs with murmurs with primary cardiac disease either have a leaky or deteriorated heart valve (most toy breeds) or a cardiac muscle disease called cardiomyopathy. Certain large breed dogs such as **Doberman pinscher, Irish Wolfhound, Great Dane, Boxers, St. Bernards, Newfoundlands, Cocker Spaniels, Dalmatians or Portuguese Water Dogs** are predisposed to cardiac disease.

Heart murmurs in cats are due to the excitement of the veterinary visit (physiologic heart murmurs) or due to underlying heart disease. An echocardiogram is necessary to differentiate between a heart murmur that is just due to excitement versus a heart murmur from underlying heart disease. Hypertrophic cardiomyopathy is the most common acquired heart disease seen in cats. **Maine Coon, Norwegian Forest Cat, Ragdolls, British Shorthairs, American Shorthairs or Devon Rexes are more predisposed to cardiac disease.**

**Anatomy of the Heart**

