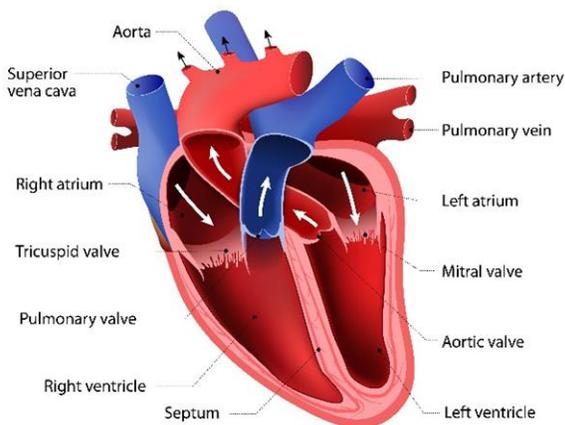


What is a Heart Murmur and What Does It Mean for my Pet?

When a veterinarian is listening to your pet's heart with a stethoscope, they normally hear two sounds. This is often described as a rhythmic "lub" and "dub". A heart murmur is an abnormal extra sound caused by turbulent blood flow. We often distinguish between congenital heart murmurs and acquired heart murmurs. A congenital heart murmur is present since birth, whereas an acquired heart murmur is one that a pet acquires as they age. Hearing a heart murmur may be the first sign that your pet has heart disease, but it is not a final diagnosis so additional diagnostic tests are required. A heart murmur may be caused by a variety of reasons.

Heart Anatomy



Causes of heart murmurs include: any malformations of the heart, as when there are abnormal communications between any areas of the heart that are not normally connected; any narrowing (termed "stenosis") within a chamber or vessel causing the blood to squeeze past the obstruction like water flowing through a pinched hose; and any valves that are leaking when they should be closed. Turbulence can also be caused when the heart pumps more forcefully, or if the blood is too "thin" if a patient is anemic. Young animals can have "innocent" murmurs. These are benign or physiological murmurs that are not caused by heart disease.

So there are a variety of reasons for a heart murmur. **The only way to know for certain the cause and significance of a heart murmur is to perform an echocardiogram or heart ultrasound.**

A heart murmur should not be cause for panic as many pets can have normal lives or take years before they develop symptoms or need treatment. Some murmurs are not caused by cardiac problems. However, it is important to identify the cause early to give you the best prognostic information and treatment recommendations. If a pet may be used for breeding it is important to see with an echocardiogram if there is a hereditary defect that could be passed onto its offspring.

Veterinarians often assign a heart murmur a grade describing the loudness of a murmur. There are 6 grades, with a low number being softer in intensity than a higher number. The grade or loudness of the murmur is only sometimes related to the severity of the heart abnormality causing it, and different veterinarians may assign a slightly different grade.

An echocardiogram is a non-invasive diagnostic tool that uses sound waves to look right inside the heart. Using Doppler technology we can determine the speed of blood flow through the heart, visualize the source of the turbulent blood flow ("see the cause of the heart murmur"), and measure the dimensions of the heart. It is painless and generally does not require sedation, but it may require clipping the fur. Usually you may be present with your pet when Dr. Atkinson performs this test. The technique uses sound waves to actually visualize the heart in action.