

Heart Murmurs

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My pet has a heart murmur – what does this mean?

A heart murmur is one of several types of abnormal sounds your veterinarian can hear when listening to your pet's heart with a stethoscope. Normally, two distinct sounds are heard when listening to the heart of a normal dog or cat. These are often described as "lub" and "dub". When listening with a stethoscope one hears: Lub-dub...Lub-dub....Lub-dub.

A murmur is an abnormal extra sound (which can sometimes drown out the normal sounds). Murmurs most commonly occur between the "lub" and the "dub" and have a "shooshing" or "whooshing" quality.

Hearing a murmur is not a reason to panic. Many dogs and cats with murmurs live normal lives and never need any treatment for heart disease. But the only way to know for certain is to work with your veterinarian to determine the cause and severity of the cause of the murmur.

What causes a heart murmur?

The short answer to this question is "turbulent blood flow." Like the water in a calm river or stream, blood flowing normally flows through the heart with laminar flow – that is, it is smooth and undisturbed. And like a river or stream, narrowing or other causes of more rapid flow will disrupt this smooth laminar flow. In a river the turbulent rapids emit sounds much louder and less tranquil than the calmer sections of river. In the heart we hear this turbulence as a murmur.

There are lots of things that can cause turbulent flow. To understand what can cause turbulent flow we need a brief lesson in heart anatomy and function:

In other cases, the turbulence develops because there is a "hole in the heart" between two chambers or two arteries that are not normally connected.

Another cause is a narrowing (stenosis) within a chamber or vessel through which the blood has to "squeeze" through, like water through a pinched hose.

Finally, turbulence can be heard when the blood is too "thin" (anemia) or even when a patient is very excited causing the heart to pump faster and harder than normal.

My pet's murmur has a "grade." What does this mean?
What should I do if my pet has a murmur?

Dogs

In many cases, a veterinarian will be able to determine the likely cause of a murmur in a dog just by listening. In some cases, no additional testing will be deemed necessary. However, to be certain, it is often best to work with your veterinarian to confirm the cause of the murmur as well as the severity of the condition that is causing the murmur. This will give you the best idea of what to expect in the future -- the prognosis for your pet. In other cases, where a pet may be used for breeding, a murmur may indicate the presence of a hereditary defect that could be passed on to progeny.

In both dogs and cats, your veterinarian may elect to perform chest radiographs (x-rays), an echocardiogram (ultrasound of the heart), or other imaging studies, or to refer your pet to a specialist for these procedures. The tests that are performed depend on the individual case.