

Will my dog develop heart failure?

Not all dogs with MVD develop heart failure.

Dogs with MVD who go into heart failure are normally those who have developed an enlarged heart. Usually, dogs with both MVD and an enlarged heart will develop heart failure within 2 years.¹

Why is it important to find out if my dog's heart is enlarged?

Finding out whether your dog has an enlarged heart is very important, as this will allow your vet to:

- Monitor the progression of your dog's disease
- Provide you with a more accurate prognosis (a forecast as to what might happen)
- Design a management plan for your dog
- Identify when treatment should be initiated

Dogs with MVD need to be checked regularly by their vet in order to monitor the progression of their disease and have changes made to their management and treatment plan

How can my vet tell if my dog's heart is enlarged?

There are currently two ways to tell if a dog with MVD has an enlarged heart:



Chest X-rays



Ultrasound scan

Both tests can be used to detect an enlarged heart; your vet will discuss with you which tests will be right for your dog. Neither test is painful but they may require your dog to go into the practice for a few hours or see a heart specialist.

If your dog has an X-ray or an ultrasound scan and their heart is of normal size, this is a good sign. This means that your dog is at lower risk of developing heart failure within two years. However, MVD is a disease that gets worse over time. Therefore, your vet will recommend that your dog has these tests repeated each year to monitor how their heart disease is progressing.

For more information about MVD or your dog's heart murmur, please speak to your vet

Reference: 1. Boswood A, Haggstrom J, Gordon S *et al.* (2016). Effect of pimobendan in dogs with preclinical myxomatous mitral valve disease and cardiomegaly: the EPIC study – a randomized clinical trial. *Journal of Veterinary Internal Medicine* 30 (6):1765-1779.

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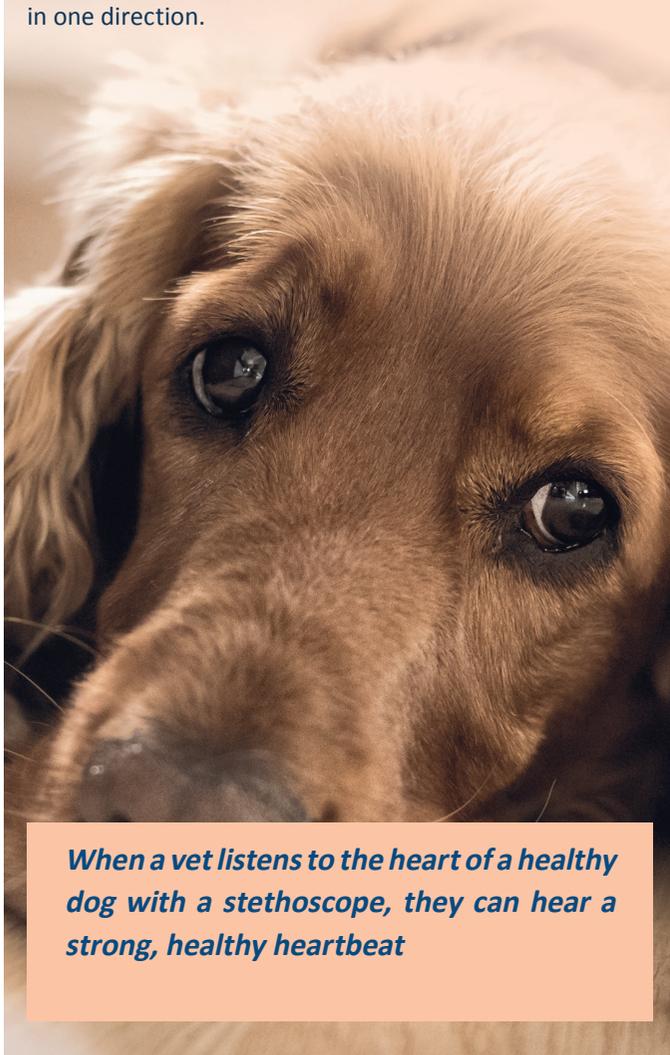
WHY DOES MY DOG HAVE A HEART MURMUR?

UNDERSTAND MORE ABOUT YOUR DOG'S HEART MURMUR AND WHAT THE NEXT STEPS ARE

How does my dog's heart work?

Your dog's heart pumps blood around its body. Each heartbeat delivers fresh blood, rich in oxygen and nutrients, to all of the vital organs and tissues.

Inside, the heart is divided into 4 separate chambers. There are valves between the upper and lower chambers, which open and shut in sequence so that blood only flows in one direction.



When a vet listens to the heart of a healthy dog with a stethoscope, they can hear a strong, healthy heartbeat

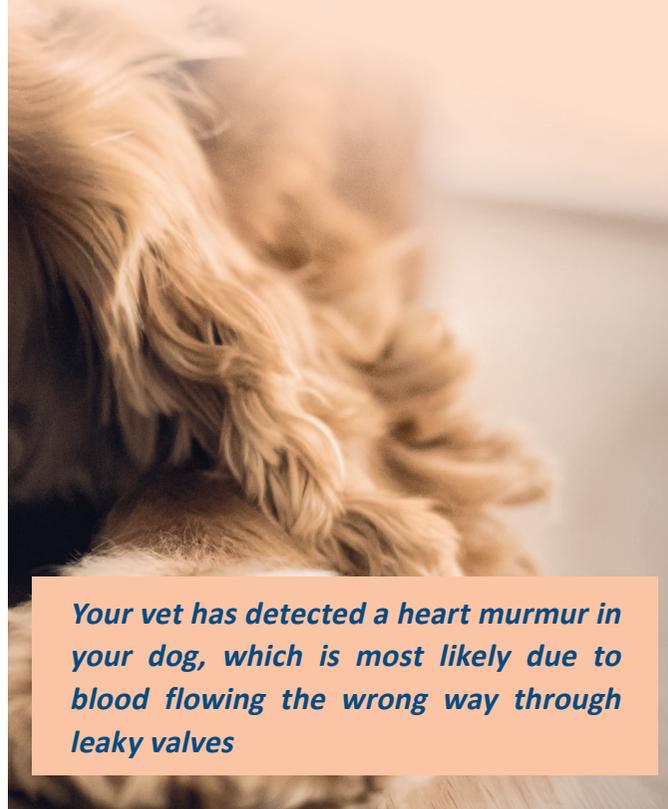
What is a heart murmur?

A heart murmur is an abnormal sound that is heard when listening to the heart with a stethoscope. It is caused when blood flows the wrong way through the heart.

What is MVD?

Mitral valve disease (MVD) is the most common heart disease in dogs. The disease is encountered in all breeds, although it is most common in small- to medium-sized dogs.

In MVD, the valve between the two chambers on the left side of the heart becomes thick, lumpy, distorted and leaky. With each heartbeat, blood is forced through the damaged valve in the wrong direction.



Your vet has detected a heart murmur in your dog, which is most likely due to blood flowing the wrong way through leaky valves

What is heart failure?

MVD is a progressive disease that gets worse over time. A dog with a leaky, damaged mitral valve can live for many years without showing any symptoms apart from a heart murmur.

However, for many dogs, the leak gets worse over time. As more blood flows the wrong way through the heart, the murmur gets louder and more pressure is put on the heart. To compensate, the heart must grow larger and pump harder.

Eventually, there comes a point when the heart cannot cope with the additional strain any longer, and fails to pump enough blood around the body. This is known as heart failure.

Signs of heart failure include:

- Increased breathing rate
- Tiredness
- Difficulty exercising
- Coughing
- Difficulty breathing
- Fainting/collapse

If you recognise any of these symptoms in your dog, please speak to your vet urgently as dogs in heart failure require medication