

## WHAT IS A HEART MURMUR?

An abnormal heart sound from turbulent blood flow.

## WHAT CAUSES A HEART MURMUR?

**Physiologic** causes are low intensity, structurally normal heart.

**Pathologic** causes are variable intensity, structural change to the heart that can impact health.



## POSSIBLE PHYSIOLOGIC CAUSES

- Innocent murmur in puppies
- Anemia
- Severe hypoproteinemia
- Fever
- Infection

## POSSIBLE PATHOLOGIC (STRUCTURAL) CAUSES

- Congenital – Defect that they were born with
  - Patent ductus arteriosus, ventricular septal defect, atrial septal defect, pulmonic stenosis, subaortic stenosis, etc.
- Acquired – Defect that has developed
  - Valvular leak secondary to degenerative valve disease (most common in small breed dogs), dilated cardiomyopathy (heart muscle disease, most common in large breed dogs), or bacterial endocarditis (heart valve infection, uncommon)

## HOW CAN YOU DIAGNOSE THE CAUSE OF A HEART MURMUR?

Echocardiogram (ultrasound of the heart) with a veterinary cardiologist. Other tests including bloodwork, chest x-rays, blood pressure, and electrocardiogram may also be recommended.

## CAN A HEART MURMUR BE TREATED?

Treatment will depend on the underlying cause. An innocent murmur requires no treatment. Some congenital causes can be surgically corrected (patent ductus arteriosus and pulmonic stenosis) by a veterinary cardiologist. Other congenital causes and acquired causes may be managed with long-term medications.

## WHAT IS THE PROGNOSIS OF A HEART MURMUR?

Prognosis is extremely variable and depends on the underlying cause. An innocent murmur requires no treatment and prognosis is excellent. With treatment of other physiologic causes, the murmur may go away. Pathologic (structural) causes can lead to heart enlargement and congestive heart failure (fluid accumulation in the lungs or the body), therefore, they should be monitored closely.



**KIMBERLY COOK,**  
DVM, DACVIM  
CARDIOLOGY

**D** Dayton



**MEGAN MCLANE**  
DVM, DACVIM  
CARDIOLOGY

**C** Cincinnati



**AUDREY RESTLE,**  
DVM  
Cardiology Residency Trained  
CARDIOLOGY

**C** Cincinnati



Your trusted partner  
in specialized veterinary care.

**CINCINNATI** 6995 East Kemper Road, Cincinnati, OH 45249 | **513.530.0911**

**DAYTON** 6421 Clys Road, Centerville, OH 45459 | **937.428.0911**

**www.CareCenterVets.com**

