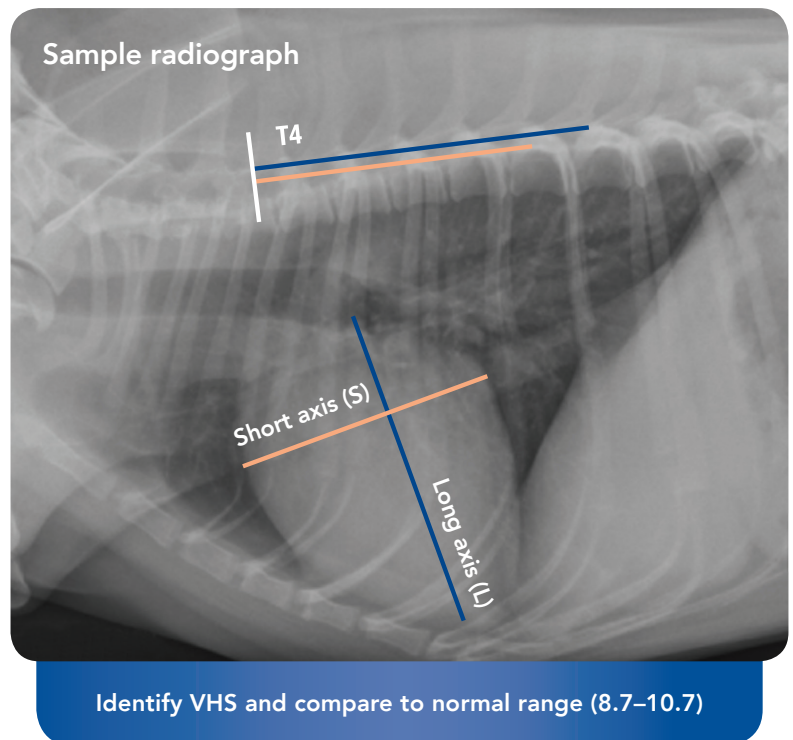


# CALCULATE YOUR PATIENT'S VERTEBRAL HEART SCORE (VHS)<sup>1</sup>

## FOLLOW THESE STEP-BY-STEP INSTRUCTIONS

- 1** Using a lateral thoracic radiograph, ensure the thoracic vertebrae T4 to T12 are clearly delineated.
- 2** Using **calipers**, measure the longest axis of the cardiac silhouette from the carina of the mainstem bronchus to the apex (designated "L").
- 3** Transfer this long axis measurement to the vertebrae, starting at the cranial edge of T4, and count the number of vertebrae that fall within the caliper points.
- 4** Using **calipers**, measure the short axis at the widest part of the cardiac silhouette, perpendicular to the long axis measurement (designated "S").
- 5** Transfer this short axis measurement to the vertebrae, starting at the cranial edge of T4, and count the number of vertebrae that fall within the caliper points.
- 6** Sum the 2 measurements.  
**VHS = L + S**



## SAMPLE VHS CALCULATIONS FROM RADIOGRAPH ABOVE

This example: **Long axis line = 5.2**, **Short axis line = 4.4**

$$\begin{aligned} \text{VHS} &= L + S \\ &= 5.2 + 4.4 \\ &= 9.6 \\ &= \text{in normal range} \end{aligned}$$

You can use VHS calculations to help identify dogs with advanced preclinical mitral valve disease. For more information, visit [www.epictrial.com](http://www.epictrial.com).

Reference: 1. Buchanan JW, Bucheler J. Vertebral scale system to measure canine heart size in radiographs. *J Am Vet Med Assoc.* 1995;206(2):194-199.