

## Health Definitions

### What is SAS?

**Subaortic Stenosis** is a narrowing (stenosis) of the area underneath, the aortic valve, that causes some degree of obstruction or blockage of the blood flow through the heart. The narrowing can be mild, moderate, or severe; if moderate or severe, it can force the heart to work harder and potentially be harmful to the heart's health. Subaortic stenosis is a problem that affects dogs and most commonly occurs in large-breed dogs. Subaortic stenosis appears to be genetic in origin; the first signs of it may be present at birth (moderate or severe cases) or may appear in the first year of life (usually milder cases).

### What is ARVC?

**Arrhythmogenic Right Ventricular Cardiomyopathy** is a primary disease of the heart muscle. It most commonly affects the Boxer, however, it is also reported in the English Bulldog, American Staffordshire, and rarely in cats. It is characterized by the progressive replacement of normal heart muscle cells by fat and/or fibrous tissue. In more advanced cases, ARVC may also affect the left ventricle resembling another common cardiac disease: dilated cardiomyopathy. ARVC is an adult-onset inherited disease, with the presenting age and range of clinical symptoms in the offspring of affected parents being quite variable. The incidence of ARVC typically increases with age, with clinical signs often becoming apparent around middle age. Patients with the disease may present with asymptomatic cardiac arrhythmias that are noted on routine examination, fainting spells (syncope), congestive heart failure (coughing, respiratory difficulties, abdominal distention) or even sudden cardiac death.

Two genes have been isolated through the research at NCSU – North Carolina State University, for ARVC. They are ARVC-1 & ARVC-2. It is believed that there are additional genes. DNA test results for each are one of these three - Negative, Positive Heterozygous, Positive Homozygous. Dogs are not ARVC Clear even if they are Negative for the two known genes.

### What is DM?

**Degenerative Myelopathy** is a progressive disease of the spinal cord in older dogs. The disease has an insidious onset typically between 8 and 14 years of age. It begins with a loss of coordination (ataxia) in the hind limbs. The affected dog will wobble when walking, knuckle over or drag the feet. This can first occur in one hind limb and then affect the other. As the disease progresses, the limbs become weak and the dog begins to buckle and has difficulty standing. The weakness gets progressively worse until the dog is unable to walk. The clinical course can range from 6 months to 1 year before dogs become paraplegic. If signs progress for a longer period of time, loss of urinary and fecal continence may occur and eventually weakness will develop in the front limbs. Another key feature of DM is that it is not a painful disease.

### What is a 24 Hour Holter?

The **Holter Monitor**, named after its creator Dr. Norman Holter MD, records 24 hours of continuous heart rhythm (EKG or ECG) and heart rate (HR), while the dog goes about its normal daily activity in a home environment. The Holter is found to be a far superior test when compared to the 5-minute EKG, simply because of its 24-hour recording time. Of any device currently available, most Veterinary Cardiologists agree that the Holter monitor provides the earliest detection of ARVC in dogs.

### What is JRD?

**Juvenile Renal Dysplasia**, also referred to as juvenile nephropathy, is an important category of kidney diseases in canines. Dysplasia is defined as abnormal growth or development of cells or organs. In the case of JRD the kidney fails to develop properly during embryogenesis in the womb. At birth immature structures consisting of undifferentiated fetal cells or tissue types are found in the kidney, and are persistent throughout the life of the animal.

### What is an Echo/Doppler?

An **Echocardiogram**, sometimes referred to as an “echo”, is an ultrasound of the heart. An echo allows the clinician to “look inside” the chest to visualize the heart. The size of the heart chambers, the thickness of the heart walls, the heart valves and the heart blood flow patterns can be assessed.

### What is USG?

**Urine Specific Gravity** measures urine concentration. The kidneys have several important functions in the body, including eliminating waste products through the urine and regulating the body's fluid balance. The USG test tells your veterinarian how concentrated your pet's urine is (how much water it contains). If the SG is too high, it can mean inadequate amounts of water are being eliminated through the urine. If the SG is too low, it can mean the body is losing too much water through the urine. There is a relatively wide range of normal readings for a urine SG test, but there are also several medical conditions that can affect the result.

### What is SDMA?

**Symmetric Dimethylarginine** is a chemistry parameter that is a more reliable indicator of kidney function than creatinine. A renal biomarker specific to kidney function, SDMA has proven to be a more sensitive indicator than creatinine, enabling veterinarians to detect acute kidney injury and chronic kidney disease earlier than ever before.