

Cardiac Exam

- A cardiac exam evaluates the function of the cardiovascular system.
- The exam is performed by your veterinarian to determine the health of your pet's heart.
- The exam is especially important for older animals, pets with a history of heart problems, or breeds that are at increased risk for developing heart problems.
- Early diagnosis and treatment of heart disease are very important.

What Is a Cardiac Exam?

A cardiac examination is an evaluation of the cardiovascular system, which includes the heart, lungs, and blood vessels. Many elements of a cardiac exam are usually performed (to some extent) during a routine physical examination in pets of all ages. However, for older animals, pets with a history of heart problems, or pets that are at risk for developing heart disease, more extensive testing is sometimes recommended.

What Happens During a Cardiac Exam?

During your visit, your veterinarian will ask you specific questions about your pet's heart health and overall health. Signs of heart disease can be vague and may include coughing, breathing problems, weakness, fainting episodes, and exercise intolerance (getting tired easily or refusing to exercise). A thorough physical exam is usually performed in combination with a cardiac exam. Your pet's vital signs, including blood pressure, heart rate, and respiratory rate, are checked to determine heart health. These signs may be checked by a veterinary technician, who reports the findings to your veterinarian. Your veterinarian will also check your pet's capillary refill time by gently pressing on the gums with a fingertip and then removing the finger while counting the number of seconds it takes for the color of the gums to return to normal. This test can help determine how well your pet's blood is circulating and whether your pet is dehydrated. Pale gums may indicate a heart

problem, circulation problem, or anemia (low number of red blood cells). Dark or blue gums can also signal a problem.

Your pet's pulse rate and quality are generally checked during a cardiac exam. If pulses are weak, irregular, or otherwise abnormal, your veterinarian will try to determine the cause.

What Tests Are Performed During a Cardiac Exam?

- **Auscultation:** Your veterinarian will listen to your pet's heart and lungs using a stethoscope, which magnifies the sounds of the heart and lungs. The scientific term for this process is *auscultation*. As your veterinarian listens, he or she may detect irregular heartbeats or sounds, an abnormal rhythm, or a heart murmur, all of which can be associated with heart disease. Your veterinarian will use the stethoscope to listen to the lungs for abnormal sounds, such as sounds produced by fluid buildup, which can occur in certain types of heart disease.

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- **Blood testing:** Results of blood tests can provide your veterinarian with a large amount of information about your pet's heart. For example, heartworm disease can damage your pet's heart and lungs, so your veterinarian may recommend blood testing to check for this infection. Other useful blood tests may include a chemistry profile and a complete blood count (or CBC). Many irregularities, such as dehydration, abnormal

Tests and Procedures

sodium or potassium levels in the blood, or anemia (a low number of red blood cells), can make it more difficult for your pet's heart to perform efficiently.

- **Electrocardiography:** Electrocardiography (also called an *ECG* or *EKG*) is used to check for abnormalities in the heart's rhythm. An ECG can determine whether the heart is beating too slow or too fast or whether there are irregular beats. An ECG detects electrical changes associated with the beating of the heart. The electrical changes are recorded by the ECG machine and then interpreted by a veterinarian.
- **X-rays:** Chest x-rays are used to determine the size, shape, and position of the heart. Because heart disease causes the heart to work too hard, the heart muscle can become thickened, and the heart can become enlarged. X-rays also show your veterinarian your pet's lungs. Certain types of heart disease cause fluid to accumulate in the lungs. Other lung problems, such as asthma, can also be evaluated when your veterinarian looks at x-rays. The large vessels associated with your pet's heart and lungs can also be examined using x-rays.

- **Blood pressure:** Your veterinarian may have equipment that can measure your pet's blood pressure during a cardiac exam. Blood pressure that is too low or too high may need to be treated with medication.
- **Cardiac ultrasound:** Your veterinarian may have equipment that can perform a cardiac ultrasound examination (or echocardiogram). The ultrasound machine is connected to a small handheld probe that is held against your pet's chest. The probe sends out painless sound waves that bounce off of structures in your pet's chest (such as the heart and blood vessels) and return to a sensor inside the ultrasound machine. This creates an image on a screen that can tell your veterinarian a great deal of information about your pet's heart.

What Are the Benefits of a Cardiac Exam?

A cardiac exam is important to assess the overall health of the heart and circulatory system. Your pet may have underlying heart issues that may not be obvious, and catching them early is important. Many heart conditions can be managed successfully, if caught early.