



Zuma's  
Paw Prints

## Do Dogs Have Hearts?

February 14, 2006

Woof, woof, everyone,

Do dogs have hearts? This is a question that is best answered by our chief veterinary technician, Jan Bullock. After all, from early February right up until the days before the start of the Iditarod, she will be doing a test on the dogs called an EKG. She will be doing other tests and procedures as well, but for this time, I am going to concentrate on the EKG and the subject of whether dogs have hearts or not. I have never doubted that I have a heart, but there are humans who are not sure. Jan and her team of technicians will prove once and for all that, YES, dogs do have hearts just like people do.

What is an EKG and what does it do? An EKG also called ECG is both abbreviations for the medical test called an electrocardiogram. It is a test that measures the electrical activity of the heart. The pattern of the heartbeats of the dog or human being tested shows just how the heart is beating. With each beat of the heart, an electrical wave travels through the heart and it is this wave that causes the muscle to squeeze and pump blood from the heart to the body. The tracings of these waves by the technicians will be "read" by a veterinarian specializing in K-9 cardiology. In other words, this vet is a heart specialist for dogs. The tracings will give him or her two important pieces of information. First, the test will show if the heart is beating normally or irregularly or if it is beating too fast or too slow. Secondly, by measuring the amount of electrical activity in the heart muscle, a K-9 cardiologist may be able to find out if parts of the heart are too large or are being overworked, indicating a problem.

Now, sled dogs normally have a heart rate that is slower than house pet dogs because of their routine of daily exercise. Sled dogs exercise for several hours at a time, while house pets may run around the yard a few times or get taken for a walk once or twice a day. Along with the very strict diets that mushers have for their dogs, sled dogs are living very heart healthy lives.



Does the test hurt the dogs in any way? The answer to this question is no. There's absolutely no pain or risk in having an electrocardiogram (EKG). Leads are attached to the dog in several places while the dog is lying quietly on an examining table.

It is important to be still during the test so the musher or handler usually sits at the head of the table to reassure his dog that everything is okay while one of the technicians lightly holds the dog still.

The musher in this picture is rookie, Eric Rogers.

This is a close up of the "leads" attached to a dog for testing. These do not hurt at all. I myself have had the test several times, just to show team dogs that there is nothing to worry about.

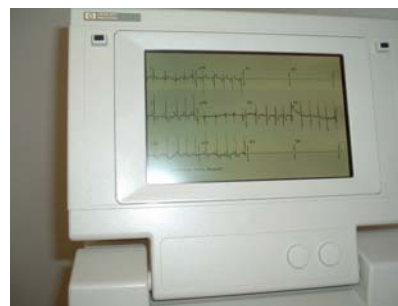


The first time I had the test, I was relieved when the technician pointed out the tracings on the screen of the machine. This proves to everyone that I do have a heart.



An EKG machine (as shown in these pictures) receives the tracings and records them on paper to be read by the heart veterinarian. If the tracings show any problem at all, the musher is notified and the dog will be dropped from the team before the race begins.

You can watch the tracings as they feed out on paper or by looking at the screen. It is just like a computer screen!



It is very important that any heart problems be found before a dog starts on the long trip to Nome.

I think we have proved that dogs do have hearts. Not only do they have hearts, but also they can love their human with all their heart. I hope you will remember that because they can also have their heart broken when you don't love them back. Tell your dog often that you love him or her. Dogs do understand you when you talk to them.

As I said at the beginning of this article on the EKG, it is only one of the tests that are done prior to the race in order to insure that only healthy dogs start the race. I'm very healthy, but I am not going to go to Nome unless it is in a nice comfortable airplane seat! Besides, I didn't see any mushers shipping out pizza for their dogs. I would not be able to survive for two weeks on the trail without pizza! I think that pizza is very healthy for me. There is bread and meat and veggies on pizza. Tomato sauce is made from tomatoes and that is a vegetable, isn't it? So that makes pizza healthy!

I hope that all of my little buddies out there are gearing up for the start of the race on March 4. Have you chosen two or three mushers to follow during the race? I picked one female and one male to follow and then one rookie. I will be comparing them all along the way. I'll tell you more about tracing your musher when we get to the start of the race.

Ask you teacher if you can use her computer to write to me when she isn't busy or perhaps your have computer lab in your school that you can use. Wherever you can get to a computer, I hope you will write to me. I just love to hear from my little buddies all over the world. My address is [zuma@iditarod.com](mailto:zuma@iditarod.com)

More next time,



Lots of Tail Wags,  
Zuma

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