

## HEARTWORM DISEASE IN MONTANA

In recent days some conflicting information regarding heartworm disease has been circulating in Helena. I have been tracking the incidence of the disease through yearly communications with the State Diagnostic Laboratory in Bozeman since 2003. Since then, the State Diagnostic Lab has diagnosed between 6 and 12 dogs with heartworm disease in Montana every year. Even though cats, ferrets and in fact humans can become infected with *Dirofilariasis* (heartworm disease) to the best of my knowledge no such cases have been reported in Montana as of this date. Although there has been no appreciable increase in the incidence of this disease, apparently there is evidence of that, thanks to climate change, a new species of mosquito is moving up north from Utah, This species of mosquito is more apt to serve as an intermediate host for the heartworm disease than our resident mosquitoes and thus is much more likely to infect animals. It is true that the heartworm larvae have to mature in the salivary glands of mosquitoes to become infective and that during this maturation period, the ambient temperature must remain above 67 degrees. Although the weather report might indicate that in Helena the temperature has not stayed for one week above 67 degrees, it stands to reason that there can well be microenvironments such as rock formation, garages and other well protected areas where the temperature stays significantly higher than the reported average ambient temperature. Last year a dog that had not traveled outside the Helena area for at least 2 ½ years was diagnosed with heartworm disease at the Companion Animal Hospital. The diagnosis was verified at the IDEXX veterinary laboratory. Colorado is a good example in how heartworm disease can become a problem within a relatively short time. In the 1980's a few heartworm cases were diagnosed in the Grand Junction area and in the south eastern corner of the state near Oklahoma. Then a few cases cropped up in Fort Collins in the 1990's. Today, the whole Front Range is considered endemic for heartworm disease and preventative medication is highly recommended. Especially because of its complicated life cycle, there needs to be certain resident population of undiagnosed heartworm positive animals, mostly dogs, for the disease to become permanently established in an area. Ideally, enough dogs are on medication to prevent heartworm infection that this critical threshold is never reached. Considering that the likelihood for a heartworm infection is still very low, it is difficult to convince people that preventative measures at this time might be appropriate. Heartworm test and annual preventative medication is relatively inexpensive. In addition to preventing heartworm disease, most products will also protect the animal against other parasites and there are few negative side effects from these medications thus making heartworm prevention more palatable.

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