Heartworm in California: Where is it and How Much is There?

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If you look at the heartworm map on the CAPC (Companion Animal Parasite Council) website (www.capcvet.org) you will see that nationally out of 3.7 million dogs tested 46,190 tested positive for heartworms. Yes, some of these might be rechecks of positive dogs, and some are perhaps dogs tested at different times in post-adulticide therapy, and some might have been tested because they had clinical signs, and some just as an annual or biannual check. However, there is a good chance that the number is close to what is out there for the nation. Thus, 1 out of every 81 dogs entering a clinic for a heartworm test in the United States will test positive for heartworm antigen. Now California does better than the national average – 0.6% of dogs or only 1 out of 165 dogs tested (237,000 total tested in CA) is positive. Also, this is much better than Alabama where 1 out of every 31 dogs (total of 52,000 tested in AL) is positive. However, the thing to remember is heartworm is a preventable disease. Also, it seems hard to believe that all 1,444 dogs that have been positive in California as of July 2014 traveled outside the state last year. Heartworms are being transmitted from dog to dog in California.

Ten years ago, there were papers describing heartworms in coyotes throughout the state (Sacks et al., 2003, 2004). There have been 3 cases of Dirofilaria immitis in people in California – Shasta, Placer, and Riverside Counties – in adult males who never left the state (Theis et al., 2001). A report on a fourth case from Nevada County was in a 28-year-old, but this person had been out of his county (Theis et al., 2001). However, it had been shown in a survey in this area of the Sierra Nevada range, some 42 to 172 of 1,000 dogs not on preventive was positive for heartworm microfilariae (Theis et al., 1998). Now one can go to the Los Angeles County Veterinary Public Health website and see follow cases of heartworm acquired locally in Los Angeles County (http://publichealth.lacounty.gov/vet/heartworm.htm). The current assumption is that heartworm is now in California.

Using the CAPC maps, one can see that the counties where the humans lived have fairly high levels of heartworm even by national standards. 0.49% of 6000 dogs in Riverside, 1.12% of 9,000 dogs in Placer, 2.14% of 1,250 dogs in Nevada, and 2.77% of 2,500 dogs in Shasta. Basically it seems to run thick and heavy up along the sides of the Sierra Nevada Range and is well entrenched north of Fresno within the state now. It appears that it may be contracting some over the last couple of years, perhaps because of the drought. However, at the same time, the overall infection rate in the state appears to be steady or rising ever so slightly since 2011.

Again, heartworm is a preventable disease. It is likely that the dogs that are getting infected are not on preventive or not on preventive much of the year. However, another way to look at it is just total number of dogs, 1500. This is about the same number of dogs infected in Alabama which is right in the middle of heartworm country. Alabama tested only ¼ as many dogs as were tested in California, but again, the result was the same number of dogs having this horrible disease. Amongst dogs seeing veterinarians, 3% of the dogs that tested heartworm positive are in California and 3% are in Alabama. It would seem that with the lower transmission pressure that everyone argues exists in California that it would be very easy to reduce the number of positive dogs in California with an increased effort in the direction of prevention. In the presentation, the history of heartworm reports in California, and its current status will be presented in detail.

References