

Canine Heartworm Survivors

Meet four heartworm disease survivors, and learn why prevention is more important than ever.

By Marcia King

You probably already know about heartworm disease. You follow your veterinarian's recommendations for your area and have your dog tested each year. Perhaps you do so despite living in an area where mosquitoes (and heartworm) don't. But mishaps, unexpected surprises, and even environmental changes can result in heartworm disease in well-cared-for dogs — maybe even yours.

Not here!

Take Dickens. A big bear of a dog, the 7-year-old Labrador Retriever-shepherd mix lived in the Los Angeles area, a non-endemic region for mosquitoes and heartworm infection, and he never traveled. By all reasoning, Dickens should have been safe. So it was particularly shocking for his owner, Wendy C. Brooks, DVM, and diplomate of the American Board of Veterinary Practitioners, to learn that Dickens had the disease.

Brooks, who practices at the Mar Vista Animal Medical Center in Los Angeles and is the education director for VeterinaryPartners.com, had no clue anything was amiss. "We participated in a University of California-Davis study looking into the incidence of heartworm in the L.A. area, an area long considered non-endemic for heartworm," she recalls. "I included my own dogs in the studies, and a week after they were tested, UC Davis called to say Dickens was positive."

Most experts agree that heartworm is on the increase in all areas, including places where mosquitoes have never been found before, says Tom Nelson, DVM, president of the American Heartworm Society and practitioner at the Animal Medical Center in Anniston, Ala. Even in dry regions, mosquitoes can breed

anywhere water collects: flower pots, irrigation systems, swimming pools, and knotholes in trees. Additionally, infected dogs bring heartworm disease into non-endemic areas after traveling through or moving from infected regions. This happens when mosquitoes bite infected dogs, then bite other pets, infecting them too.

Fortunately, Dickens had a very mild infection: Only heartworm larvae and a few dead worms were present, requiring treatment with the same anti-larval drugs used in popular heartworm preventives — a protocol recommended only for dogs with a very low worm burden and no

clinical symptoms such as coughing or exercise intolerance. "Dickens likely cleared his microfilaria [heartworm larvae] with the first or second dose of [an ivermectin-based oral heartworm preventive]," Brooks reports, "and suffered no ill effects."

Since then, Brooks encourages owners to consider heartworm prevention for all dogs, no matter where they live. "It's like vaccinating for diseases that aren't that common," she says. "It's peace of mind."

Infection despite prevention

Abbey, too, was unlikely to harbor heartworm disease. Although the 14-month-old Border Collie from Webster Groves, Mo., lived in a heartworm hot spot, she'd been on monthly prevention ever since her owners acquired her eight months earlier. Her infection was found during a routine checkup. "We felt awful," says owner Ann Smith.

But dogs on prevention can get heartworm. Common reasons, Nelson says, include contracting the disease prior to going on heartworm preventives, a missed or late dose, spitting out or vomiting up the medication, receiving counterfeit or expired drugs, or drug failure (which occurs in a very small percentage of cases). That's why routine testing is so important.

After chest X-rays found Abbey had very early-stage disease, she was given an injection of Immiticide followed by a second injection of Immiticide 24 hours later to kill the worms, Smith says. "We had to keep Abbey indoors for four weeks following the injections in order to restrain her activity level and keep her heart rate down while the worms were dying and breaking apart."

Dead worm particles travel through, and can cause small blockages of, pulmonary capillaries, Nelson says. "With activity and exercise, blood flow through the capillaries increases. This increased blood flow can cause blocked capillaries to rupture, leading to lung damage. Rest is critical to minimize complications."

Rest was the toughest part — energetic Abbey loves swimming, playing fetch, and chasing squirrels. Fortunately, because her veterinarian caught the disease so early, Abbey made an easy and speedy recovery.

Unknown background

When Yvonne Dagger of Massapequa, N.Y., adopted Maggie, a young adult Beagle of unknown age and background from a local rescue group, she immediately took Maggie for a veterinary exam. Later that week, the test results came in: Maggie was infected with fleas and a variety of worms — including heartworm. “We were devastated,” Dagger says. “But the veterinarians assured us that even though there were risks, the treatments had improved from a few years before.”

Maggie was given an injection of Immiticide, then prescribed rest. Because it can take some time for dead worms to clear the lungfield after the injection, Maggie wasn’t allowed to resume full activities for four months. Although Maggie did later develop a heart murmur attributed to her heartworm disease, she otherwise made a full recovery, and now happily chases around with the other Beagle rescues in her new family.

One unfortunate mistake

Hatcher, a beloved 4-year-old Great Dane mix, resided in Dallas, a common area for heartworm disease. He and the other family dogs always received their heartworm prevention each month — until his owners ran out and delayed renewing the prescriptions. That window was all it took for Hatcher to become infected. “Hatcher is a very active dog, but all of a sudden when we were on walks, he would just put on the brakes and sit and not go forward anymore,” recalls owner Kirk Thompson.

A heartworm test and chest X-ray revealed a serious enough infection and worm burden that Hatcher needed a split-dose treatment of Immiticide one month apart plus two months of strict rest. “This is the safest protocol,” Nelson explains. “When a number of worms are present, killing them all at once can cause serious side effects. So we recommend one injection to kill about 30 to 50 percent of the worms, allow the body a month to clear those worms out, then a second, stronger injection one or two months later to kill the remaining worms.”

Hatcher had a little coughing after the first injection, Thompson says, as the worms broke up and moved through the lungfield. “After that, he was just fine.” And today, no more brakes on Hatcher’s walks — or breaks in his medication schedule.

“It’s important to keep your pets current on their heartworm prevention,” Thompson adds. “Some companies will even e-mail you a reminder when it’s time to give them their monthly dose. And health factors aside, prevention is a whole lot cheaper than the cure!”

Play it safe

Keep up with your heartworm prevention and testing as recommended by your veterinarian for your area, Brooks suggests. If you don’t use prevention, or you give it seasonally, be sure to inform your veterinarian prior to traveling with your dog to see if additional prevention is warranted.

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