



What your pet would tell you if they could talk

Pet News

University Animal Hospital's Monthly Newsletter
Helping Pets and their People

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May is Heartworm Prevention Awareness Month



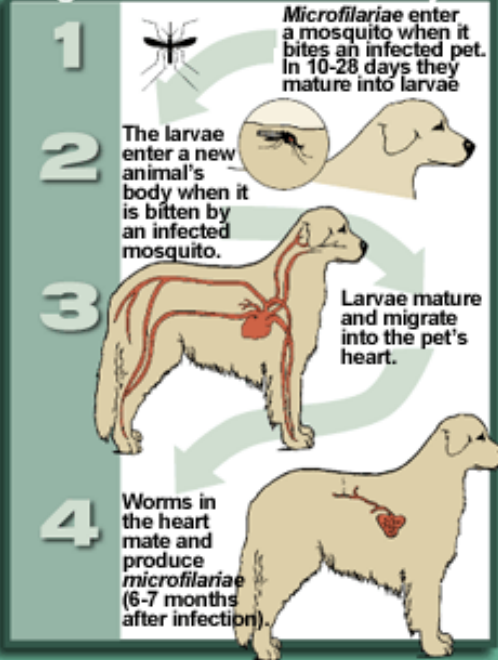
We carry many different kinds of Heartworm Prevention. In this article, we've broken them down to explain what they are and how they work. And we all know how VERY IMPORTANT they are all year round! Scroll down to read the full article.

DID YOU KNOW?

A study performed at North Carolina State University indicated that 25% of cats infected with Heartworms were solely **INDOOR** cats.



dog HEARTWORM lifecycle



A HOT OVEN OR A HOT CAR... IT'S THE SAME THING.

RUNNING INTO THE STORE FOR "JUST A MINUTE" CAN BE FATAL FOR A DOG LEFT IN A CAR.

It's just a quick errand, no big deal, Fido will be fine in the car for just a few minutes...right? Wrong. This common and seemingly harmless practice amongst pet owners can cost you a \$265 fine, or even worse, your pet's life. It only takes a few minutes for a fun outing with your pet to turn into a dangerous situation for your beloved friend.

Scroll down to the read full article

Preventing Heartworm Infection in Dogs

Brands:

Heartgard Plus, an ivermectin based product

Revolution, a selamectin based product

Advantage Multi, a moxidectin based product

Heartworm preventive medications are used to periodically kill larval heartworms that have managed to gain access to the dog's body. At this point, the products available are intended for monthly use. This means that they kill all the heartworm larvae (stage L3 and L4) that have accumulated in the past month each time they are given. There are presently many choices, both topical and oral, plus, while the subject of this page is canine heartworm prevention, all the products discussed have feline formulations.

Ivermectin-based Product:

Heartgard Plus® made by Merial



The approval of ivermectin in 1987 represented a huge breakthrough in heartworm prevention. Preventive medication for the first time could be given once a month instead of every day. These monthly medications utilize an extremely low dose of ivermectin that is adequate to kill any L3 and L4 larval stages inhabiting the pet's skin tissues at the time the medication is given. In other words, infection takes place but is halted every month when the medication is administered.

Other Parasites Covered

Ivermectin at the heartworm preventive dose is not strong enough to kill common intestinal parasites. Because of this fact, the dewormer [pyrantel pamoate](#) was added to cover [hookworms](#) and [roundworms](#) in the original **Heartgard®** product, creating **Heartgard Plus®**. As other ivermectin-based products have entered the market, these have also added pyrantel pamoate to extend the spectrum of protection.

[Whipworms](#) are not covered by any of the ivermectin-containing products at this time, but in order to remain competitive in the market, manufacturers may pay for treatment for whipworm infections acquired while their product is administered.

Breed Sensitivity

There are breed-related sensitivities with ivermectin (i.e. collie-related breeds have some difficulties) though at the low doses used in the prevention of heartworm disease are not a problem for any breed.

See more information on [Heartgard](#) from the manufacturer.

Selamectin-based Products:

Revolution® made by Pfizer

Ivermectin's entrance onto the anti-parasite warfront represented a in the trend for broader and broader spectrum parasite control. Selamectin is a closely related cousin of ivermectin. It is designed for broad coverage of small animal parasites and will protect dogs not only against heartworm but also against ear mites, sarcoptic mange mites, ticks, and fleas. Cats are protected against heartworm, fleas, ear mites, roundworms, and hookworms. The product is topical and applied monthly.

See more information on [Revolution](#) from the manufacturer.



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Moxidectin-based Products: *Advantage Multi® made by Bayer*

Moxidectin is another relative of ivermectin. In 2007 it was combined with imidacloprid, the active ingredient in **Advantage®**, to create a broad spectrum topical for dogs and cats, called **Advantage Multi®**. The product prevents heartworm infection, kills roundworms, hookworms, and whipworms. The imidacloprid will kill the pet's fleas.

See more information on [Advantage Multi](#).



Use of Large Animal Products:

It is neither safe nor legal to obtain large animal ivermectin products for use in dogs for heartworm prevention. Discussions of doses have circulated around the Internet and in other sources advocating the use of highly concentrated ivermectin formulas for heartworm prevention in dogs. These doses are not comparable to the miniscule doses in licensed heartworm preventive products and using them represents an element of gambling. Large animal ivermectin products are vastly more concentrated than those meant for dogs and it becomes problematic to dilute them properly. **Even small doses of these products are unnecessarily high and if they are inadvertently given to a sensitive individual death can result.**



During the day, sidewalk pavement can reach temperatures exceeding 150° F (66° C). So please remember to exercise with your pet at cooler times of the day; before 10a.m. and after 4 p.m. tend to be the best time for those bare paws!



With temperatures reaching the high 90's, Orange County Animal Services is aggressively cracking down on pets left unattended in cars. **Pet owners can face a civil citation for neglect in the amount of \$265.00 and additional criminal charges by law enforcement.**

Dangers

Animal Services warns that days where the temperature is in the high 70's, **even with the windows cracked, the inside of a car can reach over 120 degrees in just minutes.** Animals can quickly overheat resulting in heatstroke, leading to collapse, brain damage, and possible death.

It takes only minutes for a pet left in a vehicle on a warm day to succumb to heatstroke and suffocation.

Even when the outside air temperature is in the 60s, temperatures inside vehicles can reach dangerous temperatures on bright, sunny days. So many experts recommend not leaving pets in parked cars even for short periods if the temperature is in the 60s or higher.

Rolling down a window or parking in the shade does not guarantee protection either, since temperatures can still climb. And if the window is rolled down sufficiently, the pet can escape. Plus if a passer-by claims he or she was bitten through the car window, the pet owner may be liable.

Animals are not able to sweat like humans. Dogs cool themselves by panting and by sweating through their paws. If they have only overheated air to breathe, animals can collapse, suffer brain damage and possibly die of heatstroke. **Less than 15 minutes can be enough for an animal's body temperature to climb from a normal 102.5 to deadly levels** that will damage the nervous and cardiovascular systems, often leaving the animal comatose, dehydrated and at risk of permanent impairment or death.



Precautions

Leave your dog at home during warm days.

Do not run errands with your pet. **If an unexpected stop occurs, do not leave your pet unattended in the car.** It is best to take your pet home or to a safe location before making any stops.

On trips with your pet, bring plenty of fresh drinking water and a bowl.

If you see signs of heat exhaustion take the dog into the shade, an air conditioned area, or to your veterinarian. **Signs of heatstroke include: restlessness, excessive thirst, heavy panting, lethargy, dark tongue, rapid pulse, fever, vomiting, glazed eyes, dizziness, or lack of coordination.** To lower body temperature, gradually give the animal water to drink, place a cold towel or ice pack on the head, neck and chest, and/or immerse the dog in cool (not cold) water.



Taking Action

Orange County Code Sec 5-43 states **it is against the law to leave a dog, cat, or other animal unattended in a parked vehicle** with inadequate or no ventilation. The owner or keeper can face a civil citation for neglect in the amount of \$265.00 and additional criminal charges by law enforcement.

If you see a pet in a vehicle on a hot day, **take immediate action:**

Note the car make, model, color and tag number, then go to the nearest store and ask the managers to page the vehicle owner.

Call the police, they will alert Animal Services. The police have the capability to enter the vehicle and rescue the pet.