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November 2020 Newsletter

Honouring the Sacrifice they made for others

**Manitoba Tick & Heartworm Report, Oct 22, 2020:**

- 559 dogs positive for Lyme disease
- 53 dogs positive for heartworm disease
- 238 dogs positive for Anaplasma
- 31 dogs tested positive for Ehrlichia

*Reporting of these diseases is not mandatory, so many unreported tests are also done.*

**Don't forget the last dose of tick and heartworm prevention: Nov. 1st. Remember, heartworm prevention works in reverse: so the Nov. dose kills any little heartworms that might have been picked up by straggler mosquitoes in October.**

## Cool Weather Tip #2: Antifreeze!

The concerning (to our pets at least!) ingredient in antifreeze is a compound called **ETHYLENE GLYCOL,** which is found in brake fluids and other automotive compounds, and unfortunately, being sweet, animals will readily consume it if given a chance. Unlike many toxins, Antifreeze is fatal in VERY small amounts. Mere teaspoons are fatal for a cat, and a tablespoon or two can kill a dog; so even Antifreeze dripping from a vehicle onto a concrete floor can be enough to cause severe illness or death if it is licked up.

**HOW DOES ANTIFREEZE CAUSE DISEASE?**

Antifreeze is absorbed out of the gut into the blood stream, and carried to the liver where it is rapidly metabolized to a number of different compounds (STAGE 1). Some of these intermediate compounds act like alcohol, and so at this stage, your pet will show signs of being intoxicated. It is during **STAGE 1** that we are able to attempt treatment and can be successful.

Within hours, we enter **STAGE 2**: During this time, your pet may start to act like they are actually feeling better! However, this is a much more deadly stage: The compounds the liver has created are being processed by the kidneys, and one of these acts like a tiny knife, shredding the kidneys as it passes through them. This compound is **CALCIUM OXALATE CRYSTALS.** Once Calcium Oxalate crystals are formed and pass through the kidney, there is irreversible damage done. That is why by **STAGE 3**, the prognosis is incredibly grave: At this point the pet has started to show signs of severe kidney failure, and there is almost nothing that can be done to prevent the inevitable.

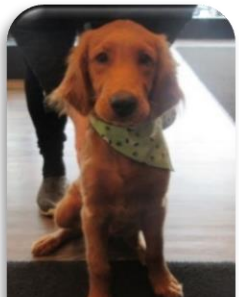
**HOW IS IT DIAGNOSED and TREATED?**

Because waiting on a test can mean we lose valuable time, we usually have to act rapidly based on THE history from the owner, as well as the symptoms the pet has been showing and the likelihood of exposure to antifreeze. Treatment is started immediately (IV fluids to support the kidneys, and products to block the development of Calcium Oxalate crystals) if there is any chance the pet has consumed antifreeze. A urinalysis will show the calcium oxalate crystals in the urine, confirming the diagnosis, but again, once they are seen in the urine, we know they have severely and irreparably damaged the kidneys getting there.

**WHAT CAN YOU DO?**

Keep an eye out for any dripping under your vehicle, and keep pets away from the garage when you are doing vehicle maintenance. And if there is ANY chance that your pet might have consumed even a tiny amount of antifreeze, contact your veterinary clinic immediately, or go straight to an emergency facility.

**For this product, acting fast is the only way to treat antifreeze poisoning!**

Chili Pepper looking dapper for his winner's photo from last month's trivia corner!

## TRIVIA CORNER

*To be eligible, you must be a client and cannot have won within the previous 6 months.*

1. What type of crystals form when a pet consumes Ethylene Glycol?
2. What stage can we treat antifreeze poisoning at?
3. What are the names of Meg's 6 pets?

*First person to call with the correct answers wins a prize!*

## A Warm Welcome to Meg!

Meg was born and raised in Western Australia where she spent her childhood in rural and farming towns. Meg has almost always had animals in her life and is looking forward to getting to know you and your furry family members!

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