Why Roundup Is So Dangerous for Your Pet

by Dr. Karen Shaw Becker

When it comes to companion animal vs. human health studies, the former lags far behind the latter, and this reality holds true for the dangers of glyphosate to dogs and cats. Coupled with Monsanto's unprecedented efforts to silence critics of its herbicide glyphosate Roundup, it's difficult to find scientific evidence of pet exposure to this pollutant.

According to my fellow veterinarian and friend Dr. Jean Dodds, in Europe, where poison control centers keep track of such things, there have been incidents of acute glyphosate poisoning in companion dogs and cats that led to fatal outcomes in some instances. The exposure in those cases was most often from grass-eating or walking on ground that had been recently sprayed with a glyphosate-containing product.

In terms of chronic exposure, however, there is so little research on companion animals and glyphosate that when studies are done, researchers must apply the acceptable daily intake for humans to pets.

Dogs and Cats Are Exposed to Glyphosate in Pet Food

In a study published a year ago in the journal Science of The Total Environment, a pair of researchers in New York State looked at concentrations of glyphosate and its derivatives in urine samples from 30 cats and 30 dogs. They found the mean urinary concentration in cats to be 2-fold higher than in dogs. In addition, exposure doses were 2 to 4 orders of magnitude below the current acceptable daily intake for humans.

A December 2018 study conducted by a team of Cornell University researchers analyzed glyphosate residues in 18 commercial pet foods from 8 manufacturers. According to Dr. Dodds' summary, the study results reveal that:

- Glyphosate was detected in every product (including the one GMO-free product in the group, which had higher levels than several of the other 17)
- The concentration of glyphosate was correlated with crude fiber content, meaning it likely came from a plant product
- The average daily intake of glyphosate from all products combined was estimated at exposure levels 0.68% to 2.5% of that for humans in the U.S. and European Union
- However, the most contaminated products were estimated at exposure levels of 7.3% and 25% above the average daily intake for humans
- Overall, commercial companion pet foods have so much glyphosate, that pet exposure is 4–12 times higher than of humans on a per kilogram basis

Finally, an ongoing study of glyphosate levels in dogs and cats is being conducted by the Health Research Institute Laboratories (HRI). Dr. Dodds' summarized the data the HRI team has collected so far:

Cats are averaging 8 ppb which is 16 times more than that found in the average of human urine

Dogs are averaging 15.8 ppb which is 32 times the human average

Dogs eating <u>raw food</u> have virtually no detectable glyphosate

Dogs eating canned food have the lowest levels

Dogs fed dry kibble have higher levels than dogs on canned diets

Dogs eating <u>grain-free kibble</u> have the highest levels of all, likely thanks to ingredients such as oats, pea protein, chickpeas and lentils may be a cause.

The researchers have tested crops like oats and legumes, and they deliver the highest glyphosate levels to human consumers

How to Find Out Your Own Pet's Glyphosate Exposure

Dr. Dodds is familiar with HRI and considers it a reputable organization. I have also compared test results from this lab with paired samples sent to state veterinary labs and found identical results. Their glyphosate study is ongoing, so if you're interested in finding out your pet's exposure, you can order a test kit for \$99 including shipping here.

It's important to note that HRI Labs is an independent, non-profit laboratory and research organization that doesn't receive large government or corporate grants. They crowdfund to cover the costs of many studies, including this one.

Why Glyphosate Is So Dangerous

Glyphosate is the most widely used weed killer in the world, and usage has only increased with the rise in <u>genetically modified crops</u>. The greatest use of this toxin is in agriculture, but it's also used in forestry, urban, and home applications, on farms, lawns, schoolyards, golf courses and other public spaces.

Independent labs have revealed alarming levels of glyphosate and its residues in many popular foods, as well as beverages, drugs, water sources, and soil. There are

indications that products containing glyphosate also contain other ingredients called adjuvants, which may actually enhance the toxicity of the product, so this problem may be even more serious.

There is evidence of carcinogenicity in humans based on several years of studies of agricultural exposure to glyphosate in the U.S., Canada, and Sweden. Studies show glyphosate causes DNA and chromosomal damage in human cells, and there is also convincing evidence that glyphosate can cause cancer in animals.

How to Reduce Your Pet's Environmental Glyphosate Exposure

The following are some common sense steps you can take to help reduce your pet's risk of glyphosate exposure:

- Don't apply chemicals to your yard or your garden. Switch to more natural or my recommendation — all-organic yard sprays. And be aware that even though you go green, your neighbor may be spraying chemicals that can potentially contaminate your property and pose a risk to both you and your pet.
- 2. Try to avoid allowing your pet access to any outdoor area unless you can confirm no chemicals have been sprayed there. If you do cross through areas you know or assume have been treated, make sure to rinse your pet's paws and lower legs off as soon as you get home. Foot soaks are a great way to instantly remove chemicals your pet has walked through. If he's been in tall brushy grass, rinse from the shoulders down.
- 3. If you live in a townhouse or other community environment that applies chemicals to common areas, I recommend reserving a little spot close by that you can detoxify after each application. Water the chemicals applied to the grass down into the soil. Keep your pet on a leash and next to you on the sidewalk until you reach your chemical-free destination. It's a great way to prevent your pet (and yourself) from walking through those toxic chemicals.
- 4. Develop the habit of removing your shoes outside your door to prevent tracking residual chemicals inside your home.

Removing Glyphosate from Your Pet's Diet

When it comes to your pet's diet, look for USDA organic certification. If you prepare your pet's food at home — which is a great way to pick and choose the ingredients you want to use — avoid cooking oils that contain corn or <u>soy products</u>, even if they're organic.

When *Know Your Pet Food* compared contaminants in some top-selling brands of U.S pet foods last year they found similar results, in terms of broad spectrum contamination. The worst offender was vegan dog food, which makes sense: it's an all-grain diet. In this day and age, an all-grain diet means an all-contaminated diet unless it's 100% organic.

I don't believe it's healthy or fair to think we can make dogs and cats vegan, but if you insist that your pet conforms to your personal dietary choices, at least do an organic homemade diet and follow a well-formulated recipe. You'll obviously have to use lots of synthetic nutrients, since you'll never meet minimum nutrient requirements for a dog or cat without them.

The standard high-heat extrusion process is used to make vegan kibble, so these ultraprocessed diets are loaded with acrylamides and carcinogens, too. Vegan kibble is just vegan "fast food." It may be convenient for vegan owners but it's not healthy.

Thankfully, consumers are demanding corporate transparency and pet food companies with nothing to hide are stepping up. Several human grade pet food companies are voluntarily participating in the *Check Your Pet Food* initiative offering third party contaminant testing (including glyphosate) results to consumers.

If you want to help change the deceptive practices occurring in the pet food industry, I recommend becoming a member of the *Association for Truth in Pet Food*, which is the only organization out there committed to holding the regulatory agencies and AAFCO accountable.

Detoxifying Your Pet

I recommend considering periodic detoxification for your pet. The level of environmental exposure to chemicals will dictate the appropriate frequency and type of detox that is most suitable. For example, if he has constant exposure to toxic fertilizers, herbicides and pesticides all summer, supplying a daily detox protocol is a very wise idea.

But if his only source of chemical exposure is, say, a once-a-month heartworm pesticide application, or if you're applying flea and tick chemicals directly on your pet, then provide a detox the week after each pill or topical treatment. I also recommend switching to an all-natural, chemical-free flea and tick protocol if at all possible.

If you haven't been feeding organic food or if you've discovered your brand is one of the vast majority of popular pet foods contaminated with glyphosate, switch to an organic brand and focus on repairing your pet's microbiome.

Glyphosate is toxic to the trillions of beneficial micro-organisms that keep your entire family's gut defenses strong and your immune systems balanced.

Your integrative veterinarian will prescribe a dysbiosis protocol that includes fermented foods with a specific probiotic species, acetobacter (which is capable of assisting in glyphosate metabolism and excretion) as well as humic acid or activated charcoal. This combination helps remove glyphosate from animals' bodies.

There are many detoxifying plant extracts and supplements on the market that assist the liver with glyphosate detoxification. Your functional medicine veterinarian will know

about these, and I've written several detailed articles here at Mercola Healthy Pets that cover the why's and how's of detoxing your pet, as well.

The rule of thumb for a detox protocol is that it should not cause any visible changes in your pet — no vomiting, diarrhea, or change in behavior.