

“Dangers in the Garden”

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- Focused on Dogs and Cats
- Focused on Wisconsin yards and gardens
- Lots of toxins for dogs and cats-major ones listed here
- Numerous toxins for large animals (Cow, Horses, etc.)

A. Naturally growing in Wisconsin:

1) **Mushroom toxicity**

- a. Toxic species-Amanita species
- b. Common in WI and Midwest
- c. Toxin- Amatoxin; prevents DNA transcription
- d. Emergency-get to Veterinarian asap!
 - i. Always bring some mushrooms your animal ate with you to your vet!

2) **Lakes and ponds-Blue Green Algae**

- a. Common in WI and Midwest
- b. Toxic blooms of blue green algae
- c. Toxin-cyclic peptides
- d. Kills cells of liver
- e. Emergency-get to Veterinarian asap!

3) **Toxic doses of Metals and Minerals**

- a. Too many to list that could be in soil
- b. Dose dependent toxicity
- c. Test soil?
- d. Mostly a large animal issue

B. Toxins that can be found in the garden:

1) **Flowers: Lilies-Cats**

- a. ALL LILIES ARE TOXIC!
 - i. Easter Lily-most toxic of all
- b. Leaves and flowers are toxic
- c. One bite of one leaf or flower is deadly
- d. Kills cells of kidneys
- e. Emergency-get to veterinarian asap!
 - i. Bring in plant/flower to your vet with you

2) **Vegetables: Onions-Onion toxicity-Dogs and Cats**

- a. Toxic component is n-propyl disulfide
- b. Toxic dose is variable
- c. Destroys red blood cells
- d. Emergency-get to veterinarian asap!

3) Other: Grapes and Raisins

- a. Toxin-has not been identified yet
- b. Kills cells of the kidneys
- c. Dose dependent toxicity
- d. Get to Veterinarian immediately

C. Placed in gardens and yards:

1) Snail and Slug bait-

- a. Molluscicide
- b. Forms-comes in liquid, granules, sprays, dusts or pellets or on grains
 - i. Dogs love to eat the grains that have been sprayed with toxin so beware of bright blue or bright green cereal grain in vomit
- c. A very small amount can cause poisoning and death
- d. *Most pet owners don't know this is a toxin!*
- e. Toxin-Metaldehyde
- f. Emergency-get to Veterinarian asap!
 - i. Bring in bait (or vomit) with you to your vet

4) Pesticides-

- a. Types: Strychnine, Zinc phosphide, etc.
- b. Typically causes seizures and other CNS signs
- c. Dose dependent toxicity
- d. Get to Veterinarian immediately

5) Insecticides-

- a. Types: Organophosphates, Pyrethrins, etc.
- b. Neuromuscular toxicity
- c. Emergency-get to Veterinarian asap!

6) Rodenticides- Anticoagulant rodenticide-

- a. Usually accidental ingestion
 - i. "We had an old box in the garage"
- b. First and Second generation anticoagulant types
 - i. First generation: Warfarin
 - ii. Second generation: Brodifacoum, Bromadiolone, and Difenacoum
 - 1. Most common now
- c. Mode of action
 - i. Block Vitamin K-> can't clot your blood-> bleed out
- d. Emergency-get to Veterinarian asap!
 - i. Bring in rodenticide box

7) Paraquat-

- a. Dogs mostly
- b. A widely used broad spectrum herbicide
- c. Kills cells of the lungs
- d. Get to Veterinarian immediately