

## **COMMON HOUSEHOLD ITEMS AND PLANTS THAT ARE TOXIC TO YOUR PET**

### **1. Acetaminophen (Tylenol and other aspirin free pain medications)**

- a. Dogs and cats are both sensitive to toxicity.
- b. Dogs tend to have more liver necrosis while cats have methemoglobinemia and Heinz body anemia
- c. Cats have deficiencies in enzymes which makes them more susceptible. A toxic dose for a cat is 10mg/kg while for dogs it is 200mg/kg.
- d. Other clinical signs to look for are chocolate colored gums ( mucous membranes) in cats, and puffy face and limbs.
- e. Immediate presentation to a veterinarian for treatment and decontamination will have a favorable outcome.

### **2. Amitraz Tick Collar Ingestion**

- a. Over the counter tick collars often contain anti-parasitic agents that when ingested can be toxic.
- b. Clinical signs can include severe depression, lethargy, inability to walk or walking as if drunk, hypertension leading to hypotension, vomiting, diarrhea, and high blood glucose
- c. The collar needs to be removed from the stomach by vomiting or endoscopy.
- d. Prognosis is good with appropriate medical management and care.

### **3. Anti-freeze:**

- a. Ethylene glycol is the toxic compound found in automobile antifreeze. It is a relatively common intoxicant for both dogs and cats. The sweet taste of this substance is undoubtedly responsible for its ingestion.
- b. It is very potent, with only a few licks (especially in cats) being necessary to reach a fatal dose. The outcome is invariably poor if immediate veterinary attention is not sought and aggressive therapy instituted.
- c. The most common clinical signs include vomiting, nausea, hypersalivation, severe depression, ataxia (stumbling), seizures, increased urination/drinking (PU/PD) and/or decreased or absent urine production.
- d. The more acute/initial signs are generally referable to the GI and central nervous systems from the direct effects of ethylene glycol and acidification of the blood. Later signs ensue as calcium oxalate crystals form in the kidneys, causing severe damage and acute renal/kidney failure.
- e. Aggressive therapy is needed immediately for a favorable outcome
- f. prognosis is very dependent on rapid presentation to the veterinarian, diagnosis and institution of aggressive therapy. Ethylene glycol is very quickly absorbed into the blood stream and broken down into toxic metabolites.
- g. The best chance at a favorable outcome occurs when Fomepizole is administered prior to any EG metabolism.
- h. Once kidney values are elevated, the prognosis is considerably worse. Transfer to a facility where hemodialysis is available gives the most hope for recovery.

4. **Aspirin:**
  - a. Although dogs and cats can tolerate low doses of aspirin they are highly susceptible to gastrointestinal ulceration, bleeding, and perforation of ulcers.
  - b. Do not use this drug without direct order from your veterinarian
  - c. Using this drug can preclude your pet from getting other drugs such as non steroidal anti-inflammatory medications and steroids.
  - d. Consult your veterinarian before self medicating your pet.
  
5. **Azaleas:**
  - a. Read Rhododendron species
6. **Batteries:**
  - a. Ingestion of the whole battery as well as chewing on batteries can lead to clinical signs including pain, hypersalivation, oral inflammation and ulceration, vomiting, anorexia, and gastrointestinal ulceration and or bleeding.
  - b. Animals may ingestion batteries while chewing on other items such as remote controls or battery run toys.
  - c. X-rays should be taken to see if there are battery parts in the GI tract
  - d. May require supportive and medical care.
  - e. Seek veterinary attention.
7. **Bread Dough:**
  - a. Ingestion of bread dough can cause GI obstruction, vomiting, diarrhea, blindness, inability to walk, vocalization, change in behaviors and loss of consciousness.
  - b. Bread dough will rapidly rise in the warm environment of the stomach and produce ethanol
  - c. Ethanol is rapidly absorbed from the GI tract causing the clinical signs.
  - d. Prognosis is good if treated immediately by a veterinarian.
  
8. **Cleaning agents and liquid Potpourri:**
  - a. There are many categories of cleaning agents including caustic agents ( alkaline or acidic), irritants, Alkalis and acids.
  - b. Clinical signs can include skin irritation, oral ulcerations ( from grooming or ingestion), corneal erosions and ulcer, irritation of the eye, excessive salivation, vomiting, bloody vomit and diarrhea, and difficult breathing due to inflammation of the upper airway.
  - c. There may be long term damage to the esophagus if the materials were ingested causing strictures or perforations.
  - d. If inhaled long term damage to the lungs is also possible.
  - e. Prognosis depends on what organs and what quantity of agents the pet was exposed to.

- f. Decontamination and supportive care is often needed.
9. **Chocolate:**
- a. Theobromine and caffeine are the main toxic components in chocolate (also coffee beans and cocoa beans).
  - b. The amounts of each vary depending on the type of chocolate (i.e. milk, unsweetened baking, semisweet chocolates).
  - c. The lethal dose ranges between 100-200mg/kg; although, moderate signs can be seen with ingestion of as little as 20mg/kg.
  - d. Treatment may be indicated when ingestion approaches 20mg/kg. Both dogs and cats are susceptible.
  - e. The main signs referable to the heart and central nervous system,
  - f. Nervousness/anxiety, excitable behavior, tremors, seizures and coma due to CNS stimulation. High blood pressure, a slowed or increased heart rate and heart arrhythmias (which may be manifested as disorientation, weakness, collapse and loss of consciousness) result from the cardiac/heart effects.
  - g. Caffeine causes increased respiratory/breathing rate and increased body temperature (hyperthermia).
  - h. The most important things for owners to do when a pet ingests chocolate (coffee beans or cocoa beans) are: to estimate how much was ingested, to bring packaging to the hospital so the type(s) of chocolate and relative doses of the toxic ingredients can be identified/estimated and to not delay the trip to the hospital. It can not be overemphasized that early identification and presentation to the hospital yield the best outcomes.
  - i. Prognosis is good if the patient presents immediately to a veterinarian.
10. **Cigarette Ingestion:**
- a. Tobacco products contain nicotine. Cigarettes and cigars have varying degrees of nicotine in them. The butts themselves contain 25% of the total nicotine.
  - b. Clinical signs develop quickly ( 15 minutes to 30 minutes) and include hyperexcitability, hypersalivation, fast breathing, diarrhea, and vomiting. Muscle weakness, twitching, collapse, coma, and death can occur at high enough doses.
  - c. Animals seen ingesting any tobacco products or even several cigarette or cigar butts should present to a veterinarian for medical care and decontamination.
11. **Grapes and raisins**
- a. Very little is known regarding grape toxicity in dogs.
  - b. It causes acute renal failure in dogs and the pathophysiology is unclear.
  - c. Toxic dose range is 14 to 57g/kg but each dog can have a different level of sensitivity to the toxin.
  - d. Clinical signs include vomiting, diarrhea, anorexia, lethargy, and abdominal pain. Can come on in 3 days to several weeks.

- e. Blood work changes include azotemia, hypercalcemia, and hyperphosphatemia. Can lead to oliguria and anuria. On histopathology can see acute renal tubular necrosis.
- f. Negative prognostic indicators include decreased urine output, ataxia (trouble walking), weakness, increased initial total calcium, increase in total calcium, increased calcium phosphorous ratio at time of presentation or increase in calcium phosphorous ratio.

Prognosis varies on when the patient presents to a veterinarian and the degree of sensitivity to grapes and raisins per patient.

#### **12. Ibuprofen Ingestion: ( Advil):**

- a. Ibuprofen is an over the counter non steroidal anti-inflammatory that is commonly used for aches and pains in people.
- b. Ingestion of even small amounts of ibuprofen can lead to vomiting and diarrhea as well as gastric ulceration, bleeding and perforation. At high enough concentrations it can cause permanent kidney damage and affect the central nervous system leading to seizures, inability to walk, coma and death.
- c. Cats are twice as sensitive as dogs are due to a lack of an enzyme to help digest the medication.
- d. Treatment of the patient includes decontamination through emesis, prevention and treatment of gastric ulceration, renal failure and CNS effects. Common therapies will include inducing vomiting, giving activated charcoal, GI protectants such as omeprazole, carafate, misoprostol, and IV fluid therapy. Blood will also be monitored to check kidney function as well.
- e. The prognosis is good if the patient is treated immediately after ingestion.

#### **13. Lily ingestion (Cats)**

- a. Liliaceae species of plants include the Asian lily, Easter lily, Japanese show lily, rubrum lily and tiger lily, as reported by the Handbook of Small Animal Toxicology and Poisonings.
- b. Every part of the lily plant (flower, stem, leaf, and root) is reportedly toxic to cats with ingestion. The toxin within the plant is unknown. Cats of any age can be affected. Whether or not lilies are toxic to dogs is unknown.
- c. The main organs affected are the kidneys, resulting in acute renal failure within 1-2 days of ingestion.
- d. Many of the clinical signs of acute renal failure are non-specific, including lethargy, decreased appetite, nausea and vomiting. One very suggestive sign is oliguria/anuria (decreased/absent urine production).
- e. The diagnosis is based on known exposure to/ingestion of a lily, appropriate clinical signs and physical exam findings and laboratory data
- f. Prognosis is variable, depending especially on how early the ingestion was caught and whether or not gastric clearance was possible.

- g. Once acute renal failure develops, the prognosis is poor with high mortality rates. This is particularly true of patients that develop anuria. Dialysis is likely the only hope of saving anuric patients.
- h. Prevention is stressed to avoid ingestion of this toxin

**14. Liquid Potpourri:**

- a. Clinical signs can include skin irritation, oral ulcerations ( from grooming or ingestion), corneal erosions and ulcer, irritation of the eye, excessive salivation, vomiting, bloody vomit and diarrhea, and difficult breathing due to inflammation of the upper airway.
- b. There may be long term damage to the esophagus if the materials were ingested causing strictures or perforations.
- c. If inhaled long term damage to the lungs is also possible.
- d. Prognosis depends on what organs and what quantity of agents the pet was exposed to.
- e. Decontamination and supportive care is often needed.

**15. Lead :**

- a. can be found in old paint in the home
- b. Clinical signs include vomiting, constipation or diarrhea, anorexia, abdominal pain, seizures, dementia and/or blindness. Other more subtle signs are possible.
- c. Prognosis good if caught early and with medical attention.

**16. Molds/tremorgenic**

- a. Sources of mycotoxins include moldy food especially dairy products, nuts ( walnuts, pecans, almonds and peanuts) stored grains and past and blue cheese. Eating moldy leaves or plant materials can also be a source of the toxins
- b. Clinical signs include vomiting, increase irritability, weakness, muscle tremors, twitching, to seizures
- c. Prognosis is good if decontamination occurs soon after exposure.
- d. Majorities of patients will recover in 24 to 48 hours with decontamination.
- e. Guarded prognosis with no decontamination.
- f.

**17. Moth Balls:**

- a. Naphthalene is the most dangerous type
- b. Toxicity has been reported after just one moth ball ingestion
- c. Clinical signs include vomiting, anemia, changes in urine color, lethargy and seizures
- d. Hepatitis can occur 3 to 5 days after exposure as well as kidney failure. Seizures and coma can result as well

- e. Immediate presentation is recommended for decontamination.

**18. Mushrooms:**

- a. Commonly found mushrooms in the back yard, parks, nature trails can be toxic and lethal to dogs.
- b. The most toxic poisonous mushroom family is the Amanita phalloides or death cap mushrooms.
- c. Other toxins include hallucinogenic mushrooms
- d. Clinical signs can include vomiting, diarrhea, seizures, bleeding disorders, excessive drooling, slow heart rate to high heart rate, liver failure and death.
- e. Clinical signs can occur as soon as 20minutes after ingestion.
- f. Prognosis is variable depending on the type of mushroom ingested and quantity
- g. Immediate presentation to a veterinarian for decontamination and supportive care is vital to recovery.

**19. Nicotine ingestion:**

- a. Refer to cigarette ingestion.

**20. Pennies:**

- a. Up until 1983, pennies were minted from 96% copper and 4% zinc. Due to economic considerations pennies after 1983 are composed of 96% zinc and 2.5% copper.
- b. As few as two of the "new" pennies have been reported to cause problems in dogs under 10 kg.
- c. The normal stomach acids liberate zinc gradually from pennies and other zinc containing metal objects.
- d. Clinical signs include vomiting, diarrhea, anorexia, apothecia and depression. Hemolytic anemia is a consistent finding.
- e. Diagnosis depends on a history and abdominal films to find a metallic foreign body.
- f. Treatment of zinc poisoned animals consists of removing the object through an emetic, surgery or endoscopy and associated supportive therapy.
- g. Zinc poisoning cases should be treated as serious intoxications

**21. Prescription Medication:**

- a. If your pet ingests more than the prescribed dose of it's own prescription medications or your personal or family member's prescription medications please seek medical attention
- b. Contact your primary veterinarian, if after hours contact an emergency facility and call animal poison control.

**22. Rhododendron species:**

- a. A common backyard plant found in the northeast ingestion of this plant can cause vomiting, depression, diarrhea, and decreased appetite
- b. At high enough doses cardiotoxic changes can be seen which will manifest as rapid breathing, hypotension, changes in heart rate, collapse and convulsions.

- c. Please contact your veterinarian if you pet ingest a large amount of this plant for decontamination and supportive

### **23. Rodenticide ( rat poison)**

- a. Intoxication with various substances intended for killing rodents is a common problem in dogs and sometimes cats. There are many products available, but most fall into one of three categories, based on the mechanism of action.
- b. Those that inhibit the function of vitamin K (vitamin K antagonists) are the most common culprits, causing dogs to present to the Emergency Service. The other two categories are calcifying substances and uncouplers of oxidative phosphorylation.
- c. There is a 2-7 day lag period between ingestion and the onset of bleeding, varying between compounds (warfarin, diphacinone, brodifacoum and bromadiolone).
- d. But immediate veterinary attention should always be sought as soon as possible, even if ingestion is only partially suspected.
- e. If caught early enough, vomiting can be induced and prevent systemic absorption. Typically vomitus from dogs that have ingested one of these compounds is bright blue-green in color.
- f. Cholecalciferol or Vitamin D3 products increase blood calcium concentrations much higher than normal. The calcium then deposits in various tissues, disrupting normal function. The major organs damaged are the kidneys, intestines and liver. Signs of renal and liver failure and GI signs begin to be seen 24-48 hours after ingestion.
- g. The uncouplers of oxidative phosphorylation (active ingredient Bromethalin) inhibit cellular respiration. At higher doses, the body system usually affected first is the central nervous system. Thus, the first clinical signs seen include: severe excitation, tremoring and/or seizuring. At lower doses, lethargy, depression, gastrointestinal signs and anorexia predominate.
- h. Death occurs with low doses as well as high, especially if low dose exposure occurs repeatedly. Cats are reportedly more sensitive than dogs. Either species however must be treated as an emergency. Death ensues from respiratory muscle failure.
- i. There are no known antidotes for Bromethalin.
- j. Treatment is primarily supportive- control of swelling in the brain, oxygen supplementation or ventilation if complete respiratory failure and control of seizures. The overall prognosis is poor with out prolonged intensive care

### **24. Toilet Tank Drop Ins/Toilet water**

- a. The drop in products often are made of a corrosive cleaning agent
- b. Due to the dilution of the toxin in the toilet tank and bowl the concentration is usually not very high
- c. Typical clinical sign include gastrointestinal irritation which could include vomiting and diarrhea

d.

25. **Xylitol**

- a. Xylitol is a 5-carbon sugar alcohol found in many sugar free gum baked goods, desserts and toothpaste
- b. Clinical signs include vomiting, lethargy, hypoglycemic or low blood sugar episode and fulminant liver failure.
- c. Due to the idiosyncratic nature of xylitol ingestion immediate presentation to the veterinarian for decontamination and observation is recommended for favorable outcome.