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### How Much Is Too Much?

The following information was provided to us by **Advanced Critical Care and Internal Medicine**. We hope this information will allow you and your pets to have a safer holiday season.

The holiday season is a time for family and friends to celebrate together. With holiday decorations, treats, and parties our pets are more likely to be exposed to common household toxins.

#### Chocolate

Chocolate is in many holiday candies and other sweets. Chocolate contains caffeine, theophylline, and theobromine. Caffeine and theobromine are both stimulants. Clinical signs range from vomiting and diarrhea to restlessness, hyperactivity, stiffness, muscle twitching, seizures, ventricular arrhythmias, and hyperthermia.

The following table lists the toxic dose in ounces of chocolate ingested for pets of varying body weight:

Weight	5#	10#	15#	20#	25#	30#	40#	50#	60#	70#	80#	90#	100#
Milk chocolate - ounces	5	10	15	18	22	27	36	45	54	63	72	81	90
Dark chocolate - ounces	1.5	3	4.5	6	7.5	9	12	15	18	21	24	27	30
Baking chocolate - ounces	0.6	1.2	1.7	2.2	2.8	3.4	4.5	5.6	6.8	7.9	9	10.2	11.4

#### Mistletoe

American Mistletoe is a common decorative plant displayed during the holiday season. Mistletoe can be deadly to dogs and cats and contains a toxin called phytotoxin or toxalbumin. This toxin is contained in the leaves and berries of the plant. Clinical signs include gastroenteritis with severe vomiting that can occur after ingesting just a couple of berries. Shock, polyuria, dyspnea, and bradycardia are clinical signs that occur with more severe intoxication. Decontamination with activated charcoal and supportive care are the treatments of choice.

**Holly**

Berries of the Holly plant contain a toxin called Saponins. Prolonged clinical signs include vomiting, nausea, and diarrhea. These animals require supportive care with fluids and gastrointestinal decontamination.

**Alcohol**

Social gatherings during the holidays may expose pets to alcoholic beverages. Alcohol can be very dangerous when ingested by dogs and cats. Common signs of ingestion include vomiting, diarrhea, ataxia, incoordination, and severe sedation that can progress to coma, seizures, and death. Signs are based on the size of the pet and the type of alcohol consumed. Animals suspected of ingesting alcohol should be watched for these symptoms and possibly hospitalized for observation.

**Mothballs**

Naphthalene based mothballs are two times as toxic as paradichlorobenzene based mothballs. Clinical signs include vomiting, weakness, lethargy, brown colored mucous membranes, and even collapse. Cats appear to be much more sensitive to the naphthalene based products than dogs. All animals ingesting mothballs need to be hospitalized for monitoring and supportive care.

**Nontoxic materials:**

Poinsettias are a common holiday plant with flowers of varying color. This plant is not toxic; however it contains an irritant that can cause gastrointestinal signs such as vomiting, diarrhea, anorexia, and hypersalivation.

Silica Gel packets found in toys and clothes are not toxic.  
Pennies prior to 1982 don't contain zinc and are not toxic.

**Miscellaneous concerns**

Be careful to keep Christmas tree water that has been supplemented with fertilizers away from pets.

Any pet that ingests stringer ribbon should be seen by the veterinarian.