

capsules

THE CURRENT LITERATURE IN BRIEF

Top 10 Toxicoses

Based on calls to the ASPCA Animal Poison Control Center, the 10 most common toxicoses in dogs are ibuprofen, chocolate, ant and roach baits, rodenticides, acetaminophen, pseudoephedrine-containing cold medications, thyroid medications, bleach, fertilizer, and hydrocarbons.

Ibuprofen is a nonsteroidal analgesic that is widely available. Overdoses can cause gastrointestinal (25 mg/kg), renal (175 mg/kg), and central nervous system signs (400 mg/kg). *Chocolate* contains 2 types of methylxanthine: theobromine and caffeine. Overdoses are dependent on the amount ingested, the size of the dog, the type of chocolate, and the dog's sensitivity to the compounds. The types of chocolate vary in the amount of methylxanthine: milk chocolate 60 mg/oz, dark chocolate 150mg/oz, and baker's chocolate 450 mg/oz. Clinical signs of toxicity include agitation and hyperactivity (20 mg/kg), cardiovascular effects (40 mg/kg), and central nervous system signs (60 mg/kg). The sugar and fat in chocolate can cause gastrointestinal upset regardless of the amount consumed. The chemicals in *ant and roach baits* are boric acid, avermectin, fipronil, hydramethylon, propoxur, and sulfuramid but are usually found in such small amounts that they are not toxic. However, the baits themselves are a risk for ingestion. *Rodenticides* contain anticoagulants, bromethalin, and cholecalciferol. Anticoagulant ingestion causes bleeding problems, usually in 3 to 5 days. Ingestion of bromethalin causes central nervous system signs that vary from tremors and seizures to weakness and paralysis. Cholecalciferol causes acute renal failure and tissue mineralization.

Acetaminophen is another widely available pain and fever medication. Ingestion can cause hepatotoxicosis, methemoglobinemia, and face and paw edema. Toxicity can occur with doses of 50 to 100 mg/kg. *Pseudoephedrine*-containing cold medications cause agitation, hyperactivity, panting, hyperthermia, hypertension, tachycardia, head bobbing, and mydriasis. These signs are associated with ingestion of doses as low as 10 to 12 mg/kg. Partly because of the poor absorption of *thyroid medication*, dogs tend not to develop thyrotoxicosis. Hyperactivity and tachycardia are the most common signs and can occur in doses varying from 0.2 mg/kg to 1.0 mg/kg. The most common exposure to *bleach* occurs through accidental dermal exposure, causing a chemical burn. Ingestion can cause eye irritation, mild oral or esophageal burns, or gastrointestinal irritation. *Fertilizer* formulations usually contain several compounds, and most are poorly absorbed. Vomiting, hypersalivation, diarrhea, and lethargy are the most common signs. *Hydrocarbon* exposure occurs when dogs are exposed to paint, varnish, furniture polish, lighter fluid, paint remover, and fuel oil. The most common signs are vomiting and diarrhea. Eye irritation can also occur. Dermal burns are possible if contact is prolonged.

COMMENTARY: The authors have concisely listed the top 10 toxicoses as well as their sources, toxic dose ranges, clinical signs, and treatments. It is rare to get this much user-friendly information in 1 article.—Karen Moriello, DVM, Diplomate ACVD

The 10 most common toxicoses in dogs. Meadows I, Gwaltney-Brant S. **VET MED** 101:142-148, 2006.