# Zinc Toxicity in Dogs and Cats

*Drs. Foster & Smith Educational Staff*

Toxin
Zinc

Source
Pennies made since 1982, zinc oxide skin preparations such as Desitin, and galvanized metal such as nails and staples. Other sources include calamine lotion, suppositories, shampoos, zinc undecylenate (Desenex), sunblock containing zinc oxide, fertilizers, and paint.

General Information
Zinc oxide is an irritant to the stomach. Systemic signs depend on the rate of absorption. Zinc is believed to interfere with certain enzymes and may cause direct damage to cell membranes. Chronic zinc toxicosis interferes with the absorption and utilization of copper and iron.

Toxic Dose
Varies depending on form of zinc and time period of exposure.

Signs
In cases of short-term exposure or when smaller amounts are ingested, signs include vomiting, diarrhea, lack of appetite, abdominal pain, and generalized depression. With long-term exposure or when large quantities are ingested, signs also include severe intravascular hemolytic anemia, blood in the urine, jaundice, weakness, multiple organ failure, and death.

Immediate Action
Seek veterinary attention.

Veterinary Care
General treatment: The zinc is removed from the GI tract through induction of vomiting and gastric lavage, endoscopy, or surgery depending on what the pet ingested.

Supportive treatment: Oxygen and blood transfusions are administered if the patient is anemic. IV fluids are given to prevent dehydration due to the vomiting and diarrhea. The pet is monitored for early signs of kidney failure and treated as necessary. Glucocorticoids may help to stabilize the cells.

Specific treatment: Calcium EDTA is administered to chelate the zinc.

Prognosis
Variable. Response to treatment is generally poor, if the patient is experiencing a severe hemolytic crisis.



Keep this and all other medications out of the reach of children and pets.

If you think your pet has been poisoned...
Contact your veterinarian or one of the Animal Poison Hotlines (listed below) if you think your pet may have accidentally received or been given an overdose of the medication.
**ASPCA National Animal Poison Control Center
1-888-4ANI-HELP (1-888-426-4435). $65.00 per case, billed to caller's credit card.
Follow-up calls can be made for no additional charge by dialing 888-299-2973.
There is no charge when the call involves a product covered by the Animal Product Safety Service.
**Pet Poison Helpline - 24-hour service available throughout North America for pet owners and veterinary professionals who require assistance with treating a potentially poisoned pet.
1-800-213-6680 ($35.00 per incident). Staffed 24-hours a day.

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