

Chemicals

Wildlife and Pets

One reason that many chemical herbicides and pesticides are so dangerous to both wildlife and pets is because, in many cases, their toxic effects are cumulative. In other words, once ingested, such chemicals essentially never break down in the body. Repeated ingestion of even small amounts can eventually lead to toxicity levels that are high enough to cause death.

They are also dangerous to wildlife and pets because they can and often do move upward in the food chain before becoming diluted enough to not have an immediately deadly effect. For example: ants eat from herbicide-treated plants or travel through pesticide; they are eaten by a horned lizard, which is, in turn, eaten by an owl; the owl eventually dies from the cumulative effects of such toxins in his prey; his remains are eaten by a coyote and/or vultures and they, in turn, ingest the toxins, adding to their cumulative levels.

Warfarin and Your Pets

As a veterinary emergency clinician in the valley, I see pets exposed to many types of toxins. The pets at highest risk are those that roam free on acreage, although there are dogs and cats that are exposed to poisons in and around their own homes.

Warfarin toxicity is a general term for a family of anticoagulants that can cause bleeding disorders. The poisons are used to control rodent populations by causing internal bleeding. Unfortunately, the same thing can happen to pets exposed to the baited poison.

The toxic effects of this particular family of anticoagulants are not generally cumulative over the long term. They will, over a period of several weeks after ingestion, break down and exit the body. Until that time, however, these toxins can travel up the food chain, often with deadly consequences. I have had one case of an exclusively indoor cat that likely ate a mouse exposed to an anticoagulant toxin. There was no rodenticide in or around her home, so it was likely that the mouse was exposed in the neighborhood.

The most common presentation of pets that come into the ER is immediately after ingestion of a Warfarin-type toxin. Often, controlled, and careful removal of the toxin from the system by vomiting and activated charcoal administration reduces the risk of problems. After that, oral vitamin K for 4-6 weeks is administered. This can be very expensive, especially for larger dogs. Such treatments usually result in an excellent prognosis for survival.

When ingestion is not identified immediately or treated in time, the toxin causes severe bleeding. Signs can vary depending on where bleeding occurs—bloody noses, bleeding gums, or black tarry stools may occur. When

bleeding occurs into the chest cavity, pets start having trouble breathing. When they bleed into their abdomens, dogs and cats may show weakness, collapse, and pale gums. I have seen dogs, cats, and wildlife such as coyotes present collapsed for no known reason, only to find that they are bleeding internally.

Treatment for animals with severe bleeding includes blood transfusions, oxygen administration, and vitamin K administration if they survive long enough. They are usually hospitalized for days and cost can be significant, often over two thousand dollars. Prognosis and chance of survival at this point is often very poor.

My recommendation is to keep pets indoors or supervised, keep such poisons off of your property, and if you suspect exposure or see any signs that cause you concern, have your pet examined and treated immediately. Treating early can prevent illness and can virtually guarantee survival of your pet.