

Chemicals and Animal Safety

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Pesticides are part of a routine pest management strategy for most pet owners. Animal safety on your property and the surrounding area should be integrated into any management decisions you make. Accidental animal poisonings can be prevented by following these guidelines.



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AN ANIMAL THAT HAS CHEMICAL POISONING MAY exhibit mild or severe symptoms. Mild symptoms often go unnoticed. A small amount of poison in an animal's system may cause lethargy and reduced food consumption for several days until the animal recovers.

More severe symptoms include:

- increased salivation or drooling
- lack of coordination
- muscle tremors

Overexposure to highly-toxic pesticides leads to more serious complications, including convulsions and death. If an animal demonstrates any of these symptoms contact a veterinarian or the ASPCA Animal Poison Control Center immediately (1-800-548-2423). Have the pesticide label with you when you call.

Read the Product Label

The pesticide label contains valuable information that you can use to reduce risk to animals. Look for: signal words, restricted entry interval, harvest intervals and grazing intervals.

Signal Words. A pesticide product's signal word is based on acute mammalian toxicity. For instance, a pesticide labeled as Danger/Poison is lethal from a few drops to one teaspoon for the average human (Table 1). This type of chemical is highly toxic to any mammal including humans, goats, sheep, cats, dogs, horses and cattle.

Restricted Entry Interval (REI). The restricted entry interval is the amount of time an individual or animal must stay out of the field following an application unless wearing personal protective equipment (PPE). This restriction is written under the 'Agricultural Use Requirements' section of the pesticide product label. It is a good practice to keep your animals isolated from spray situations until after the REI has passed:

- Place family pets in the house, along with their toys and chew bones.
- Grazing animals should be placed in a separate barn, sub-pasture or holding pen.
- Poultry need to be placed in an enclosure like a coop.
- Cover or remove all feed and water containers including bird baths and feeders.

When applying pesticides, don't allow your pet's loyalty to you be the factor that places the animal at high risk.

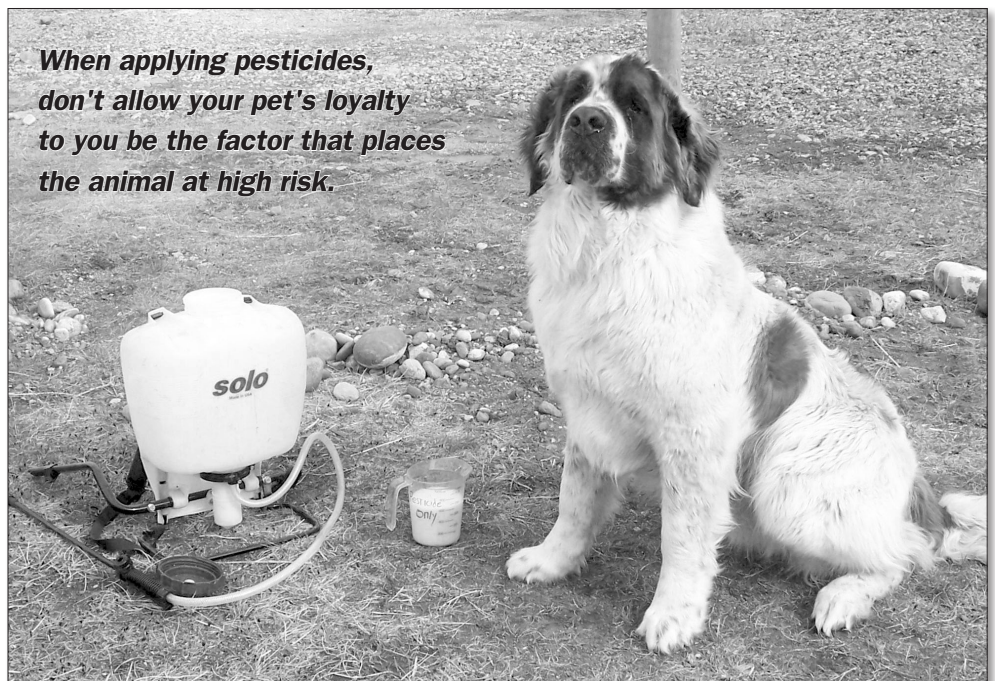


TABLE 1. Signal words found on a pesticide label.

Signal	Toxicity Rating	Lethal Dose 160 lb. human ²
Danger ¹	Highly toxic OR Highly corrosive	Few drops to 1 teaspoon
Warning	Moderately toxic	1 teaspoon to 1 tablespoon
Caution	Least toxic	1 tablespoon to a pint or greater

¹ Sometimes the word 'Danger' appears with the word 'Poison' and the skull and crossbones symbol for extremely toxic pesticides. 'Danger' by itself usually relates to the pesticide's capacity to cause serious skin or eye damage.

² Remember that a 40 lb. child could be poisoned by one-fourth the amount required for an adult. Always store pesticides in their original containers and keep away from children, livestock, pets and anyone not trained in pesticide use.



Harvest or Grazing Intervals. A pesticide residual is often present in a field for days or weeks following pesticide applications (Table 2). Following grazing and cutting intervals will protect your animals from the ingestion of pesticide residuals. These restrictions are written under the 'Crop Use Recommendations' section of the product label. A grazing interval is the duration of time that must pass before an animal may graze a pasture that was sprayed with pesticides. A pre-cutting interval is the amount of time that must pass prior to cutting and bailing your grass or hay.

Preventing Food and Water Contamination

When pesticides are being mixed and applied, or when application equipment is cleaned, precautions should be taken to ensure the safety of livestock and pets. Drift of the pesticide may occur, causing accidental contamination of food and water. If you are spraying a pesticide, all feed and water containers need to be covered or moved to prevent contamination. Designate a specific area for cleaning sprayers so excess pesticide and wash water do not contaminate animals, food and water. Keep drainage from cleaning sprayers out of water supplies and streams and do not let animals into areas where sprayers are cleaned. For example, a dog or another animal could drink from a puddle that has been contaminated with drainage from cleaning pesticide application equipment.

TABLE 2. Restricted entry intervals (REI) and grazing intervals for common pesticides in Montana.

	Rate	REI (hr)	Grazing Interval	Crop
Furadan 4F	2 pt/A	48	48 days	Alfalfa
Sevin XLR+	1 qt/A	12	14 days	Grass Pasture
Tordon 22K	1 qt/A	12	14 days (Lactating Dairy Cattle)	Grass Pasture
Roundup PRO	1 qt/A	4	None	Grass Pasture

Applying Chemicals to Animals

Make sure to follow the product label when applying chemicals to animals. The label states what protective clothing should be worn by an applicator when applying pesticides to minimize the applicator's exposure. Use the correct amount of product for the animal being treated. Never use more pesticide than is stated on the label. Over-treating can potentially cause fatality and can weaken the animal's immune system, making it more susceptible to disease. Some products designed for adult animals should not be used on younger animals. Young animals, because of their low body weight, are particularly susceptible to overdoses of some pesticides. Do not use a product on an animal that is not listed on the label.

Once the pesticide has been applied, allow the prescribed number of days to elapse before slaughtering the animal or using its edible products such as milk or eggs. The interval is required for proper elimination of the pesticide from the animal's tissue prior to processing. Do not let children come into contact with animals treated with pesticides until after the time listed on the label.

Pesticide Storage and Spills

Pesticides should be mixed and loaded in an area where animals do not have access to any potential spills. Sprayers with leaking tanks, hoses or connections should not be used. Extra pesticide solution should be disposed of properly and in a designated animal-free area. Store all pesticides in their original containers. A leaking pesticide container increases the chances for contamination of humans and animals. If a new container is required, make sure to attach the pesticide's label to the container.

Rodenticide/Predator Chemicals

Animal baits containing chemical poisons can attract non-target animals such as pets. Place baits in a location that is not accessible to non-target animals or keep your pet isolated from the baits.

Rodenticides may contain anticoagulants which may cause an animal to bleed internally if the dose is high enough. Others contain neurotoxins and can cause an accumulation of fluid in the brain and spinal

cord. Signs of neurotoxin exposure can include: lack of coordination, tremors, hyperexcitability, depression and death. Rodenticides containing cholecalciferol can raise blood calcium to dangerously high levels, causing muscle weakness and cardiac problems.

Fertilizers

Fertilizers that do not contain herbicides or pesticides will usually not harm pets.

However, some fertilizers contain ammonium nitrate, which can be toxic to animals if ingested and irritate their skin and lungs. Pets may walk in an area after fertilizer application and then groom the fertilizer residues off their paws or they may ingest grass tainted with fertilizer residue. It's always a good idea to water thoroughly after applying fertilizer to help wash granules into the soil and off the grass blades. Keep pets away from areas of fertilizer application until the area is completely dry.

If using a fertilizer with herbicides or pesticides do not let pets into the area until after the REI. These chemicals cannot be watered into the soil but need to sit on the vegetation for at least 48 hours after application. Read the label carefully and follow precautions to keep pets safe.

Manage Grazing to Reduce Pesticide Use

Pesticides are very effective tools for controlling pests, which has resulted in some overuse. Overuse may lead to resistance problems, destruction of natural enemies of the pest, and excessive pesticide residuals that may harm domestic animals.

Using a good grazing management plan can eliminate over-reliance on pesticides. By minimizing the number of grazing animals and grazing duration (using sub-pastures and holding pens) desirable grasses will quickly recover and displace weeds. Grazing animals may also be used to control weeds directly. A few sheep or goats can minimize noxious weeds on your property as they prefer certain weeds to grasses. A sound grazing management plan can reduce pesticide applications and risks to pets and livestock.

Please read more about pesticide labels, PPE, and safe handling at the Montana Pesticide Safety Education Program reference materials Web page:
<http://pesticides.montana.edu/reference/>

Pesticide Labels and Material Safety Data Sheets can be found at Crop Data Management Systems, Inc.
<http://www.cdms.net/>

IMPORTANT TELEPHONE NUMBERS

EMERGENCY

Poisoning

Rocky Mountain Poison and Drug Center
(800) 525-5042 (Montana only)

Animal Poison Control Center

(800) 548-2423

For help involving spills, leaks, and fires:

Urgent: Pesticide Accident Hotline (CHEMTREC)

(800) 424-9300

Montana Department of Agriculture

(406) 444-5400

Non-emergency (medical and consumer information):

National Pesticide Telecommunications Network

(800) 858-7378



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