



# Chemical Poisons

## Common Symptoms and Emergency Treatment

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An extract from *The Dog Owners Manual*

### Rapid Acting Poisons

The majority of poisonings which occur around the home tend to fall into the organophosphate group of poisons. Poisons of this sort include **snail and slug killers**, heavy plant poisons such as weed killers, fumigating poisons, strychnine, heavy applications of older flea or other insect poisons. Poisoning can also result from drinking water contaminated by run off from chemicals, for example; following fumigation.

Usually the effects are seen within several hours of ingestion. The larger the amount consumed, the quicker the onset of symptoms and this can be in the space of 15-30 minutes. If you see your dog eating snail bait or a poison, take your dog immediately to your vet or ring the Poison Advice line for advice on treatment, as this can vary according to the type of poison. Take the container or wrapper (if known or suspected), which will contain the exact name and strength of the poison used with you to the vet, as occasionally there are specific instructions that may need to be followed in the case of ingestion.

**\*By far the most common acute poisoning cases seen are as a result of ingestion of snail baits. Snail baits are (despite manufacturers words to the contrary) very attractive to dogs.** Use wood shavings as a safe (and "green") alternative – the snails will not crawl over them as they are too rough.

### Symptoms

Affected dogs present as the typical owners 'idea' of poisonings. The animal is hypersensitive to noise and light, the respiration rate is very rapid and shallow, the muscles are twitching all over and there is usually profuse salivation. The dog may be fitting or unconscious, in the more serious cases. Symptoms can vary from very mild to extremely severe.

### Treatment

If the causative agent is known, the antidote or appropriate treatment is initiated. If not, the animal should be treated symptomatically, that is for the presenting symptoms and the severity of the poisoning. Treatment usually includes Atropine to dry out the excess salivation and anaesthetics or tranquillisers to allow the animal to sleep through the effects of the poison. The animal is usually hospitalised until the effects have entirely gone from the body.



If the poison has only been ingested in the last 15-30 minutes and the animal is not showing any obvious symptoms, they can be made to vomit by using Apomorphine\*. This is extremely rapid acting and very effective if owners have either seen the dog eat the poison or it "vanished" within the time parameters. Longer than an hour and if the animal is very hypersensitive, one cannot use it.

***\*\*It is most important when going to the veterinarian, that these animals should be handled very gently, and, above all, quietly. Excess noise, light, handling or stimuli of any sort will worsen the effect of most of these sorts of poisons.***

### Slow Acting Poisons

These include those poisons that break down a chain of body functions such as the clotting cascade.

**Warfarin Poisoning (mice/rat baits)** causes a breakdown in the clotting of the blood, creating a 'haemophiliac' ie. any small injury will start to bleed and will not stop. This poison can take from 3-7 days to take effect, depending on the amount ingested. Newer potentiated versions of Warfarin are now available which, if ingested, can cause severe bleeding within 48 hours.



Immediate veterinary treatment to make them vomit can remove the bulk of the poison if the rat bait has been ingested within the last 1-2 hours. If the rat bait has been ingested over a longer period, but it is known or thought to have been ingested, a course of Vitamin K1 is given as a precaution. Vitamin K1 is the specific antidote to these types of anticoagulant poisons.

### Symptoms

These include severe anaemia, pale mucous membranes on gums and conjunctiva, tiredness, reduced exercise tolerance, rapid respiration and collapse. There may be occasional bleeding, commonly from the mouth, urine, faeces.



### **Treatment**

Blood transfusions for very anaemic animals are a necessity, with complete rest and confinement for 3-5 days. Large doses of Vitamin K1 are given.

For animals who have only ingested this type of poison in the last 12-24 hours, treatment consists of giving Vitamin K1 tablets for a minimum of 10 days, rest, soft food and a regular check on the colour of the gums. For the potentiated Warfarins, Vitamin K1 tablets need to be given for 3-4 weeks minimum.

**Slow acting poisons can be very hard to identify until it is too late, as there is no fitting or other symptoms as with other poisons. If there are rat baits out, make sure they are out of reach of dogs and cats. If you are worried, precautionary dosing with vitamin K1 is harmless to the animal.**

### **Common Food and Plant Toxins -**

#### **Common Foods that are Toxic to Dogs include:**

**Chocolate** contains theobromine in reasonably high levels. Milk chocolate has the lowest levels. Dark chocolate has high levels of theobromine and it is even more concentrated in cooking chocolate. This can cause vomiting, diarrhoea, restlessness leading to ataxia, muscle tremors and seizures. High levels can result in coma and death if not treated.

**Onions**, if eaten in reasonable quantities, can cause vomiting, diarrhoea, weakness, anaemia and liver damage. Small amounts in normal food (eg. spaghetti bolognese) are usually tolerated.

**Grapes & Raisins** are toxic to dogs if given in any volume.

**Macadamia Nuts/ Nuts** can affect the nervous system, joints and gastrointestinal tract in dogs. Because even a small amount of nuts can cause symptoms, immediate treatment by a veterinarian is recommended.

**Avocados and Persimmons** Avocados cause fluid accumulation in the lungs and are very toxic to dogs. Every part of them, including fruit, pits, jacket and leaves, are dangerous. The same goes for persimmons.

Other foods that are toxic to dogs are tomatoes, potatoes (particularly potato jackets), rhubarb, nutmeg, alcohol, mushrooms, bread dough, salt, garlic, mouldy food and xylitol, which is a sugar substitute used in many foods including gum and hard candies.



#### **Common Plants that are toxic include;**

These plants are Brunfelsia Pauciflora or Brunfelsia Ponodora (commonly known as Yesterday, Today and Tomorrow plants), Lantana, Oleander, Cyclamen, Rhododendron, Autumn Crocus, Kalanchoe, Lilies (in particular Tiger, Day, Asiatic, Easter and Japanese Show), Dieffenbachia, Daffodils, Lily of the Valley, Sago Palm, Tulips and Hyacinths. The list is very extensive, but to read more about the affects of ingestion please go to <http://www.petpoisonhelpline.com/pet-owners/basics/top-10-plants-poisonous-to-pets/>

**Herbal Treatment (human)** are not all suitable for use in dogs. A few are quite toxic and one should check before using any such compound in your dog. A common problem is seen with St John's Wart medication. This product has toxic affects on the liver and can cause photosensitisation of white areas of skin as well as damage to the eyes.

Many other chemical, food and plant toxins exist. If you are concerned, a list of possible toxins and their side effects are often readily available from the net or in veterinary emergency handbooks. These sections can be copied and left where they can be checked readily. This is worthwhile particularly if you have a voracious rubbish or plant eater. Such links are: <http://www.petpoisonhelpline.com/poisons/> <http://poisonousplants.ansci.cornell.edu/dogs/>

**Home Remedy for any poison that may have been ingested within the last 30 minutes** A can of coconut milk (200mls for the average sized dog) is very effective. Give it slowly and the dog will vomit within a few minutes. Any remaining coconut milk will help line the gut. Use this if you have a long way to get to the nearest veterinarian.

