



## TOAD POISONING



### **You Mean Toads are Poisonous?**

Yes, some of the toads found in Arizona produce a poison in their neck glands or skin that is harmful to man and other mammals (primarily dogs; rarely, ferrets and cats). The species of primary concern in Arizona is the Colorado River toad (*Bufo alvarius*). Toads are most active during periods of high humidity and warm nighttime temperatures as during the “monsoon” season of late summer in the desert southwest. Most encounters occur during the evening, night, or early morning hours when the toads are active.

Toads produce a toxin from the parotid glands that is a defensive toxin that is rapidly absorbed across the victim's mouth membranes. The toxin contains several major components including catecholamines: indole alkyl amines, cardiac glycosides, and noncardiac sterols. The indole alkyl amines are similar to the street drug “LSD.”

If handled by humans the poison is not normally harmful, but it does have an effect. Children should be cautioned not to handle toads. If the poison is ingested, it can cause numbness of the mouth and gums, nausea, weak respiration and muscle paralysis. If the poison is rubbed into the eyes, a severe inflammation may result.

### **What are the Symptoms of Toad Poisoning?**

The symptoms are the same for the dog and man. If a dog grabs a toad in its mouth, it may suffer immediate, severe, burning discomfort. Heart irregularities are common. Paralysis and death are possible. If a toad sits in a pet's water dish for a period of time and then an animal drinks that

water, the animal may become very ill and perhaps die. It is usually seen when the weather is moist and warm and the animal is outside where it could catch a toad.

Specific symptoms may include: profuse salivation; hyperexcitation with crying or barking; often, brick red or blue mouth membranes; fever; collapse; marked cardiac arrhythmia; crying and pawing at the mouth; wobbly walking or stiff gaited; seizures; and trouble breathing.

A person should not handle food or touch their own eyes after handling a toad. Be aware of the danger to puppies and inexperienced dogs (it is thought that an experienced dog will not touch a toad though some dogs never seem to learn!). Do not leave water in shallow dishes that toads can climb into during the summer months, but be sure to leave plenty of water for the dog to drink. Use a water dish tall enough to discourage the toad but not too tall to prevent the dog from drinking. It is important to provide pets with free access to water at all times.

### **How is It Treated?**

If your dog has mouthed a toad, flush the dog's mouth with large amounts of water immediately. A garden hose works very well, just make sure the water is not hot and do not cause the dog to choke or gag on the water. Decontamination is best done by flushing the mouth with copious quantities of water for 5 to 10 minutes. Once the mouth has been rinsed, seek veterinary medical care. Hospital care may be needed in severely affected pets. The treatments are aimed at reversing the toxic effects of the toad poison. Animals with Colorado River toad intoxication are sometimes normal within 30 minutes of onset of treatment and, with treatment, fatalities are relatively uncommon.

However, the risk of secondary heatstroke or of toxicity-induced heart arrhythmias must be considered in these patients. Often critical treatments must be utilized including intravenous fluids, sedatives, heart stabilizers, and other medicines that counter the effect of the toxins. Recovered animals are often weak for days afterward.

*Thank you for this opportunity to serve you!*