

# Firefly (Lightning Bug) Toxicity: Not a Safe Food

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Summer is a good time to remember that all that glitters is not gold, especially when it comes to fireflies. Beautiful as they are, fireflies of the genus *Photinus* pose a potential threat to pets. For years, there have been anecdotal reports, and now research into the toxicity of fireflies for certain animals, especially lizards. Most reports of poisonings have involved bearded dragons, but tree frogs have also been affected.



The light given off by male fireflies has a dual purpose. First, it helps the male firefly find a mate. Secondly, it serves as a warning light to potential predators that this is a beetle they should avoid. Fireflies contain toxins that can be poisonous to lizards, amphibians, and potentially other animals, including birds. The toxins, called "lucibufagins," are chemically related to cardiotoxins found in toads and plants.

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Signs of firefly poisoning commonly occur within 30 minutes of ingestion and, in lizards, can include head shaking, gaping, repeated attempts to regurgitate, difficulty breathing, and a darkening of the skin. Death can occur within an hour of ingestion and is due to the effect of the toxin on the heart. For many lizards, eating just one firefly can be lethal.

Just one firefly, contains  
enough poison to kill a  
lizard.

If your lizard, amphibian, or bird does eat a firefly, contact an exotics veterinarian immediately. Emergency supportive treatment needs to be started as soon as possible.

To prevent potential poisonings, make sure your pet does not have access to fireflies. Keep insect proof covers on cages and prevent flying insects from entering the pet's environment. Above all, do not feed fireflies to your pet.