

## Thermal Burns in Reptiles

As reptiles are ectothermic, meaning that they depend on the environment to regulate their body temperatures, they often require additional heat sources in their enclosures. Unfortunately, however, some of these heat sources lead to horrendous burns. These burns, caused by direct access to heat sources, are some of the most common causes of illness in reptiles. The heat sources include electrical heat rocks and mats, which often malfunction and overheat. For this reason, we usually do not recommend placing them in the enclosure. Moreover, if heat lamps are utilized, they should be out of reach, with a mesh covering preventing the reptiles from curling around the bulb. There are many theories as to why reptiles do not have the same heat response as to humans and why they do not remove themselves from the heat before getting burned. Some of these theories include reptiles having different heat and pain receptors as well as reptiles not associating the pain sensation with the objects they are touching. Regardless of the reason, however, burns are painful, and attempts should be made to prevent them.

### What are the symptoms to watch out for?

Burns in reptiles present differently from burns in mammalian species. They may appear as reddening of the scales to scabs and swelling of the skin to loss of scales with a white, red, or black appearance. The reptile may also be quieter than usual, have trouble shedding, refuse to eat, and/or spend most of his or her time hiding. Below are some examples of how thermal burns may appear.



### How serious are burns in reptiles?

There are many different stages of burns in reptiles, so it is important to seek veterinary care if you notice any of the signs listed above. If the skin barrier is broken, the reptile may begin losing fluids through the burn and may become dehydrated. Moreover, the skin protects the body from infection, so if the skin is destroyed, infectious agents, such as bacteria, fungus, and parasites, may enter the body. This can lead to systemic infection.

### Is there a treatment?

Depending on the severity of the burns, the reptile may require fluids, pain relief, antibiotics, topical creams, soaks, debriding (cleaning) of the burns, and bandages. The cause of the burns must also be identified to prevent future burns. Each reptile is different and requires a different amount of heat. Be sure to ask your veterinarian about heating options and temperature ranges for your reptile.

