



## Clarion Poodles

(209) 368-9069 ~ FAX (209) 369-3933

[info@clarionpoodles.com](mailto:info@clarionpoodles.com)

### Article — Heatstroke in Pets

## Heatstroke in Pets

by Franklin Utchen, DVM

A dog with heatstroke? Sounds like all you need to do is let them cool down for a while. Actually, it's a lot more serious than that and can be fatal. And by the time it's detected it could be too late.

Every summer we see dogs presented in different stages of heatstroke. The sooner it is detected and corrective efforts are begun, the better chance a dog has of recovering.

What is heatstroke? Heatstroke is the syndrome of decline in mental status and damage to internal organs that happens when the body temperature rises too high. A dog suffering from heatstroke will often pant rapidly, drool, vomit, and become weak or mentally un-responsive. Body temperatures of 105-106, if sustained, have been reported to cause permanent organ damage, and if body temperature rises to 109 direct thermal damage to internal organs occurs quickly. This can begin a cascade of organ malfunctions that is fatal.

You are probably aware that dogs have a different method of cooling themselves than we do. They do not perspire, which is otherwise a very efficient mechanism by which an animal can cool itself. In humans, when our body temperature rises a mere 1/10 of a degree, we begin to perspire to cool ourselves. Our canine friends only perspire minimally from the pads of their feet and from the tip of their nose. The only meaningful way they actively cool themselves is by evaporating water from the inside of their noses and mouths by panting. While this is adequate under most circumstances, it is not as efficient as perspiring, and therefore puts dogs at risk during prolonged exposure to hot weather.

Dogs with shorter noses and mouths such as bulldogs and pugs are at the greatest risk because, in part, of the smaller surface area inside their noses and mouths from which to evaporate water when panting.

One of the tragic aspects of this condition is that dogs that are active and healthy, and even acclimated to exercising in hot weather, can still become stricken unexpectedly when exposed to hot temperatures. Veterinarians can only speculate that the reason this occurs unpredictably is due to a dangerous combination of high ambient temperature, sufficient humidity, and a dog's state of hydration which can vary from day to day. It may be that the active, healthy dog that succumbs one day to heat stroke while on a routine hike has simply been the victim of a 'perfect storm' of temperature, humidity, and dehydration. Please do not be lulled into a sense of security about your dog's ability to handle hot weather based on their past successful outings on hot days. There is no precise outdoor temperature above which heatstroke can be predicted to occur. Your best guide is common sense: if it's a hot day for you, then it's an even hotter day for your furry friend who can't sweat. Always exercise caution in warm weather.

The most tragic example of heatstroke is when a dog is inadvertently left outdoors on a hot day without adequate shade and water, or is left in an enclosed area (a garage, or a car) without adequate ventilation. Temperatures inside a parked car rise quickly to over 100 degrees in the sun. Even with the windows partly down. And that car that is parked in the shade right now may not be in the shade soon. There is only one intelligent piece of advice here: never, ever, ever, leave your dog in a parked car.

What can happen to a dog suffering from heatstroke? Just for starters, how about: liver failure, kidney failure, brain damage, muscle damage, damage to blood vessels throughout the body, massive intestinal hemorrhaging, blood clotting crises, and death. It is a very, very serious condition and is complicated and difficult to treat if severe.

On the one hand, I don't want to scare everyone into locking your dog indoors all summer, but on the other hand I really DO want to scare you enough to be conscious of this serious, sometimes fatal condition any time you take your dog outdoors for any extended period of time in the next few months.

What should you do to avoid heatstroke? If you must take your dog out during the heat of the day, be sure they are well hydrated before hand! . Be sure they have had plenty of opportunity to drink before going out, and be certain you have water supplies for them while you are out. I also recommend carrying a spray bottle so you can 'mist' them in the face frequently.

What if you think your dog may be suffering from heatstroke? Immediately get them out of the sun and to a veterinary office adept at handling emergencies. If possible, douse them with cool (not cold) water. Place a fan in front of them. Applying cold packs in a dog's groin area and under the arms will help cool the blood that is returning from the limbs on its way back to the interior of a dog's body.

However, soaking them COMPLETELY in very cold water is not recommended for fear that this would cause the blood vessels throughout a dog's skin to constrict (in a natural reaction to try to prevent further loss of heat through the skin) and thereby trap the heat inside the body & raise the core, which is exactly what we don't want to have happen.

Keep safe and cool this summer. Walk your dog in the early morning or evening, be sure they have plenty of shade, water, and ventilation if they are outside during the day, and never ever leave them in a parked car. And remember: don't be fooled into thinking that your dogs are fine simply because they have handled hot weather well in the past. Heatstroke is an unpredictable occurrence, and one that can have tragic consequences if not detected and corrected immediately.