**What is Hyperthermia?**

Hyperthermia, or overheating, according to Dr. Dana A. Vamvakias, DVM, CCRT, cVMA, of K2 Solutions, is when the body temperature significantly exceeds the accepted normal temperature range of a healthy dog. Normal range for a dog is typically between 99.5°F-102.5°F.

**How can dogs get Hyperthermia?**

There are two main types of hyperthermia that can be seen in healthy dogs:

- Classical hyperthermia (nonexertional) usually occurs in the summer when a dog is locked in a car, or placed in the sun with no shade and their attempts at cooling themselves are unsuccessful due to the environmental conditions.

- Exertional hyperthermia is where a dog’s activities generate excessive physiological heat and their body fails to maintain adequate cooling. Exertion based hyperthermia can happen in any season; for example, Iditarod sled dogs can suffer from exertion-based hyperthermia.

**Symptoms of Hyperthermia**

According to Dr. Vamvakias, an elevated temperature alone does not mean a heat injury. There is no magic number that translates to heat injury. A dog may have an elevated temperature but may not be in a heat crisis. With working dogs, it is not uncommon for dogs to reach temperatures above 106°F with no evidence of physiological injury or distress.

- **Heat Stress**: Excessive panting, tongue excessively protruding out with a flattened end, cheeks pulled back revealing the full arcade of the teeth including the molars, brick red mucous membranes, and early changes in the dog’s focus or readiness.

- **Heat Exhaustion**: The excessive panting becomes uncontrollable, the other clinical signs are still present, but now there is possible vomiting, diarrhea, and weakness or stumbling.

- **Heat Stroke**: The dogs have the signs of heat exhaustion with the addition of mentation and consciousness changes. The dog can be in a stupor, seizures, head tremors and depressed, or in a coma.

**Treatment**

The treatment starts with the obvious: stop the activity of the dog and cool her immediately.

- What is important is not how high the temperature goes, but how long the temperature stays at the excessive level.

- The best and cheapest way to start the cooling is to use cool water from a hose, or partially submerge the dog’s body in a cool swimming pool.

- Focus on cooling the main arterial and venous regions by applying hose water to the groin, armpits and jugular regions.

- Towels submerged in icy water can be applied over the back and head while the underside is being sprayed.

- Place the dog in the shade, by a fan, or in air conditioning.

- Stop cooling a dog when his temperature reaches 103°F to avoid rebound hypothermia.

**When Can Hyperthermia Occur?**

Hyperthermia can occur any time of year, but dogs may be especially prone to hyperthermia in the spring when temperatures can fluctuate drastically from day-to-day and from night-to-night. Dogs need time to become acclimated to the temperature changes as the weather begins to warm. High humidity can exacerbate or accelerate hyperthermia.

**More Info**

Learn more about hyperthermia in dogs, which includes a free daily temperature chart, by downloading our interview with Dr. Dana A. Vamvakias, DVM, CCRT, cVMA, Chief Veterinarian at K2 Solutions.

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**Hyperthermia in Dogs**

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