

# Overheating and Heat Stroke in Dogs

*Online Resources: [pet.webmd.com](http://pet.webmd.com); [dog.about.com](http://dog.about.com);*

Every summer there are tragic stories about dogs suffering heat stroke, extreme dehydration or sometimes death from unnecessary overexposure to hot temperatures. Often, what seems like a tolerable temperature to us is far too warm for our dogs and puppies. Dogs are much more susceptible to heatstroke than humans.

Hyperthermia is a term describing an elevation in body temperature. This increase typically occurs as a response to a trigger, such as inflammation in the body or a hot environment. When a dog is exposed to high temperatures, heat stroke or heat exhaustion can result. Heat stroke is a very serious condition that requires immediate medical attention. Once the signs of heat stroke are detected, there is precious little time before serious damage or even death can occur.

Dogs do not sweat through their skin like humans. They primarily release heat through panting and they sweat through the foot pads and nose. If a dog cannot effectively expel heat, the internal body temperature begins to rise. Once the dog's temperature reaches 106°, damage to the body's cellular system and organs may become irreversible. Learning how to recognize the signs of heat stroke and dehydration can prevent it from happening to your dog.

Heat stroke doesn't only occur on the hottest days of the summer. Often problems can be seen during the first moderately hot days of the summer in active dogs that just go on being really active before they have a chance to get used to the heat. People also assume that if a dog is playing in and out of a body of water that the dog won't overheat. This isn't true when the water temperature gets near 75 degrees or if the dog is working hard in the water.

## Preventing Heat Stroke

There are ways you can prevent heat stroke from happening.

1. **NEVER** leave your dog in the car on a warm day, regardless of whether the windows are open. Even if the weather outside is not extremely hot, the inside of the car acts like an oven and temperatures can rise to dangerously high levels in a matter of minutes. Even parking in the shade doesn't keep the temperature inside a vehicle cool enough.
2. Avoid vigorous exercise on warm days.
3. Keep fresh cool water available at all times.

4. Always provide shade for your dog when outside. Dogs should always have a shady spot to get out of the sun. Remember as the sun shifts, so does the shade. Trees may not provide the proper shade all day.

5. If possible, provide a small pool of water for your dog to cool off in when needed. Kiddie pools are just the right size and are easy to change the water and keep it cool.

6. Carry water with you when walking your dog.

7. Carry a spray bottle of water wherever you go and spray your dog down when needed. Be sure to never use this as a punishment, or your dog will think he is in trouble instead of being pampered.

**Symptoms.** Heat stroke begins with heavy panting and difficulty breathing. The tongue and mucous membranes appear bright red. The saliva is thick and the dog may vomit. Normal body temperature for dogs is between 100.5° F and 102.5° F. Heat stroke is seen when body temperature rises anywhere from 104° to 110°F. The dog becomes progressively unsteady and passes bloody diarrhea. As shock sets in, the lips and mucous membranes turn gray. Collapse, seizures, coma, and death rapidly ensue.

**Treatment.** Emergency measures to cool the dog must begin at the first sign that heat stroke may be occurring. Move the dog out of the source of heat, preferably into an air-conditioned building. Take his rectal temperature every 10 minutes. Mild cases may be resolved by moving the dog into a cool environment.

If the rectal temperature is above 104°F, begin cooling by spraying the dog with a garden hose or immersing him in a tub of **cool water** (not ice cold water) for up to two minutes. Alternatively, place the wet dog in front of an electric fan. **Cool packs** (not icy cold) applied to the groin area may be helpful, as well as wiping his paws off with cool water. Monitor his rectal temperature and continue the cooling process until the rectal temperature falls below 103°F. At this point, stop the cooling process and dry the dog. Further cooling may induce hypothermia and shock.

Following an episode of heat stroke, take your dog to a veterinarian as soon as possible, as other more serious consequences and side effects can occur many hours later. Any dog that has even a mild episode of heat stroke should be monitored by a veterinarian as soon as possible.