

1) What is heatstroke?

Heatstroke happens when extreme elevations in body temperature arise (hyperthermia) and the body's heat dissipating mechanisms cannot accommodate the excessive heat (1). Heatstroke can lead to multi organ failure and potentially death.

2) Who is at risk for developing heatstroke?

Any animal is at risk for developing heatstroke. Animals that are brachycephalic (short faces), very young or elderly have a greater risk factor as these animals cool themselves less efficiently.



3) What are the signs of heatstroke?

Signs of heat stroke include drooling, panting, red or pale gums, bloody urine/stool, trouble walking, tremors/seizures, collapse and death.

4) What is the treatment for heat stroke?

The first step in treatment is **controlled** cooling of the pet. This is done with cool, wet towels, cooled intravenous fluids and cool water enemas. Depending on the pet's condition, plasma transfusions may also be required.

5) What should you do if you suspect heatstroke in your pet?

Remove your pet from the hot environment. Place cool wet towels on your pet and seek veterinary medical attention immediately.

The internal temperature of a car can elevate to **life threatening** temperatures within a matter of minutes

DANGEROUS TEMPERATURES IN CARS!!!

Elapsed Time (minutes)	Outside Air Temperature (°C)					
	21	24	27	29	32	35
	Inside Closed Car Air Temperature (°C)					
0	21	24	27	29	32	35
10	32	34	37	40	43	46
20	37	40	43	46	48	51
30	40	43	46	48	51	54
40	42	45	48	51	53	56
50	44	47	49	52	55	58
60	45	48	51	53	56	59
more than 1 hour	46	49	52	54	57	60

Figure 1 Rapid Temperature Change Inside a Car

Hyperthermia is a state when the body temperature of a cat or dog is above 39°C. Heatstroke develops at body temperatures greater than 41°C.

Heatstroke can be life threatening and require intensive medical care.

Certain medications can affect your pet's ability to dissipate heat.

Ways to keep your pet cool

- *Always ensure that your pet has access to shade and water when outside. In extreme heat, limit outdoor time*
- *Never leave your pet in a car in the summer, unforeseen events can prolong your time away from a vehicle and put your pet at risk*
- *Do not run your dog in hot/humid temperatures*
- *If you are going to leave your car for a prolonged period of time leave your pet at home.*

Never place ice on your pet.
Use cool, wet towels only.

Cooling a pet too fast can be dangerous!

References:

1. Tilley, L.P., Smith F.W.K. (2011). Blackwell's Five Minute Consult: Canine and Feline 5th Ed. West Sussex, UK: John Wiley and Sons Ltd

Figures:

1. Modified Table accessed June 11, 2015 from: <http://onegreenplanet.org>

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