

# HEAT RELATED ISSUES IN FIELD DOGS

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By Camie Barrow

Hyperthermia or heat stroke occurs when a dog's internal temperature overcomes the dog's natural ability to dissipate the heat. A dog's normal temperature is typically 101.5°F to 102.5°F. When a dog's body temperature reaches 105.8°F permanent injury or death can result. **THE DEGREE OF DAMAGE CAUSED BY HEAT STROKE IS DETERMINED BY HOW HIGH THE CORE BODY TEMPERATURE IS AND FOR HOW LONG.**

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## *ENVIRONMENTAL/WEATHER RISK FACTORS*

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**BEFORE going out into the field** decide how to handle tricky trial situations and/or how to adapt the training plan based on the presence of the environmental risk factors below.

<b>Temperature:</b>	When the outside temperature between 75°F and 80°F there is an elevated risk of heat related issues. When the temperature reaches 86°F and above dogs aren't able to cool themselves efficiently. (See the appendix).
<b>Humidity:</b>	Extra environmental moisture, like humid air and wet fields reduce a dog's ability to regulate their temperature.
<b>Air movement:</b>	Static air puts dogs at a greater risk of heat related illnesses.
<b>Field Cover:</b>	The thicker the cover, the harder a dog has to work and the hotter they will get.

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## *SIGNS OF HEAT RELATED ILLNESS IN DOGS*

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Some of the most common signs of heat related issues that we see in the field are below:

### **WATCH FOR SIGNS OF HEAT EXHAUSTION**

<b>Watch the tongue</b>	As the dog gets hotter, the tongue hangs further out of the mouth in an effort to expel more heat.
<b>Watch the gait</b>	A dog in danger will start missing steps and become uncoordinated.
<b>Watch the eyes</b>	Impaired dogs will often exhibit a glassy stare in addition to rapid breathing and poor coordination.
<b>Watch the breathing</b>	Dogs will pant excessively when trying to cool themselves down. Listen for unusual breathing sounds – rapid, loud, whistling sounds
<b>Watch the dog's response to commands</b>	Sluggishness or confusion following commands point to a mentally and physically stressed dog.

### **SIGNS OF HEAT STROKE/AN EMERGENCY**

- Excessive drooling
- Wobbly gait/drunken stagger
- Collapse
- Seizure
- A core temperature of 105.8°F or higher

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## TREATMENT

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### GENERAL

- Get the dog out of the sun & heat. Pick the dog up and carry it if any signs of an emergency are present.
- **DO NOT GIVE GLUCOSE** to an overheated dog.
- **DO NOT FORCE WATER** into the dog if they are showing signs of heat exhaustion or heat stroke. Offer small sips.

### HEAT EXHAUSTION: (The dog's core body temperature is 105.8°F or lower)

- Get the dog into a tub of cool/cold water quickly.
  - o Ice baths (30% ice/70% water) for 1-3 minute intervals can be used.
- Soak the dog's **ears, arm pits, groin, belly** and **nose**. Also get the neck and back wet.
- Spray the dog down and get a fan blowing on it to increase evaporative cooling.
- Stop cooling when the dog's temperature is down to 103.5°F.
- Let the dog recover in a well ventilated place.
- Give the dog small amounts of cool/cold water frequently.

### HEAT STROKE/A DOG IN CRISIS: (The dog's core temperature of 105.8°F and above)

#### If a veterinarian is on site

- Get the dog off the field ASAP and to the vet.
- The vet will administer cooled IV fluids to the dog.
- Recheck the dog's temperature every 5 minutes (with a rectal thermometer) until it drops to 103.5°F. Continue to monitor the dog's temperature until it has stabilized

#### If there is no veterinarian on site

- GET TO THE VET – Time is critical.
- Lay the dog on a cool, wet towel in the car. Bring extras to keep cooling the dog while in route.
- Measure the rectal temperature and note the time.
- Spray the dog down with cool/cold water.
- Get a fan blowing or drive with the windows open to increase evaporative cooling.
- Wipe the feet with rubbing alcohol in route to the emergency room.
- Call the emergency room and let them know you are coming.
- Continue to monitor the dog's temperature every 1-5 minutes. If the dog's temperature drops to 103.5°F stop cooling the dog and dry the dog off to avoid hypothermia.

### ICE OR NO ICE

- There is some debate about using ice baths to cool down a dog in crisis. Putting a dog in crisis in ice water can cause secondary complications. However, the longer a dog's temperature stays elevated, the more damage to the internal organs will occur. The take home message is there are no good options so **DO NOT LET IT GET TO THIS POINT.**

\*Written with input from Lee Dinwiddie, DVM and Jeff Miller, DVM. This is intended to inform the average dog handler, but not replace the oversight and care of a qualified veterinarian.

APPENDIX

Temperature	Small Dog	Medium Dog	Large Dog	Risk Level / Advice
60°	1	1	1	① No evidence of risk: Have fun outside!
65°	1	1	2	② Risk is unlikely: Have fun outside, but be careful!
70°	2	2	3	③ Unsafe potential, depending on breed. Keep an eye on your pet outdoors.
75°	3	3	3	④ Dangerous weather developing. Use caution.
80°	3	3	4	⑤ Potentially life-threatening heat. Avoid prolonged outdoor activity.
85°	4	4	5	
90°	5	5	5	+1 if obese
95°	5	5	5	+1 if brachycephalic breed
				+1 if less than 6 months old or elderly
				-1 if area is shaded from sun
				-1 if water is available

source: adapted from The Feline Animal Condition and Care (FACC)

Petplan

GoPetplan.com

\*Note that the relative dew point or humidity on a given day will influence these break points.

References:

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