

## **Preventing, Recognizing and Treating Heat Stroke (Hyperthermia) in Northern Breed Dogs**

There has been little validated research done on how working dogs are affected by heat and even less on Northern breeds. The information prepared for you here is based on conversations with vets who work with northern breed dogs regularly, research that was done by the Iowa State University, northern breed conferences, AKC, Siberian Husky Club of Canada, plus information shared from long distance mushers.

Although most dogs are not adversely affected running in warmer conditions (some literature says 1:4; others 1:10) it is important we understand the possible consequences of overheating our precious animals and do all we can to prevent, recognize and treat them should it occur.

Overall, there is no one answer to our question – at what temperature should we not run dogs. Perhaps then, the best approach is for our club members to:

- a) Understand how a dog can get overheated or develop hyperthermia, recognize the signs and symptoms in our dogs (or others), and know how to treat the dog.
- b) Adopt a temperature guideline as an initial tool in making the decision to run the dogs (see next page) This decision would be determined using the temperature guideline that includes temp and humidity, amount of sunshine the dogs will be exposed to, difficulty of the course (hills, steep climbs), wind chill conditions, distance to travel and speed of the event (race vs training)
- c) Each musher should assess the health of his/her team, fitness level, type of coat and overall health of each dog and make his/her own decisions about running the team; always keeping in mind that you should only run your dogs to the level of the slowest or most at risk team member.

Recommended Reference Chart 100% below:

The most common temperature guide that has been referenced most frequently is the 100 rule.  
Temperature + humidity = 100 (above)

The following is a list of Questions with answers to help musher better understand the problem.

**Q: What is the difference between Heat Stroke or Hyperthermia and overheating in a dog?**

Overheating and hyperthermia can occur when your dog creates more heat than it is able to dissipate. When heat production is greater than heat loss the dog's temperature rises.

## SNOWDRIFT SIBERIANS

### TEMP/HUMIDITY RUNNING GUIDE

TEMP	Celsius	Fahrenheit	HUMIDITY						LEGEND
			30%	40%	50%	60%	70%	80%	
0	32	62	72	82	92	102	112	122	
1	33	63	73	83	93	103	113	123	
2	35	65	75	85	95	105	115	125	
3	37	67	77	87	97	107	117	127	
4	39	69	79	89	99	109	119	129	
5	41	71	81	91	101	111	121		
6	42	72	82	92	102	112	122		
7	44	74	84	94	104	114	124		
8	46	76	86	96	106	116	126		
9	48	78	88	98	108	118	128		
10	50	80	90	100	110	120	130		
11	52	82	92	102	112	122	132		
12	53	83	93	103	113	123	133		
13	55	85	95	105	115	125	135		
14	57	87	97	107	117	127	137		
15	59	89	99	109	119	129	139		
16	60	90	100	110	120	130	140		
17	62	92	102	112	122	132	142		
18	64	94	104	114	124	134	144		
19	66	96	106	116	126	136	146		
20	68	98	108	118	128	138	148		

### **DISCLAIMER**

- It is a guideline (and I do stress the word guideline) that worked for us personally when we were starting out as novice mushers.
- Every person who runs their dogs in harness - whether it be a pet owner giving their dogs much needed exercise, or a professional musher - needs to first and foremost - KNOW THEIR DOGS as well as take into account other normal factors that are big influencers (what unique weather conditions are to be found in your area, your dogs' age, fitness levels, health, coat density - etc. etc).
- This guideline was set up for DRYLAND sledding.
- Need advice? Contact us via email: [info@snowdrift.ca.ca](mailto:info@snowdrift.ca.ca) / [snowdriftsib@yahoo.com](mailto:snowdriftsib@yahoo.com) or via PM on Facebook.

**OVERHEATING DOGS**  
**CAN CAUSE SERIOUS**  
**HEALTH ISSUES!**

According to the AKC, normal core temperature for a dog is 101-102.5 F or 38.3-39.2 C. A body temperate of 104-106 F (40.0-41.1 Celsius) is considered a moderate heat stroke and most dogs can recover within an hour with no ill effects as long as they have been cooled down properly and have not suffered from hyperthermia in the past.

Sever and life threatening heat stroke that will have long term health problems for your dog and even cause death occurs when the dog's body temperature reaches 106 (41.1 C) or greater. At this temperature the brain becomes damaged as well as internal organs – heart, lungs, kidneys, gut.

### **Q: What are the Signs and Symptoms of heat stroke?**

- Rapid panting
- Bright red tongue
- Red or (worse) pale gums – late sign
- Thick, sticky saliva
- Weakness (dog may slow down during run)

- Vomiting – sometimes blood (this could also be ulcers)
- Massive diarrhea especially if blood is present
- Unconsciousness – late sign and often fatal
- Lethargy – dog may not want to get up after a run, take water or food – late sign
- Seizure – late sign

If your dogs has developed a cough, becomes short of breath easily, always has thick mucus around the mouth after running your dogs may be showing signs of a previous mild to moderate heat stroke that you did not notice (this could also indicate other health problems in your dog). A dog who has suffered from moderate heatstroke in the past, is highly likely to have a heatstroke again. This dog is at great risk of developing sever hyperthermia.

**Q: What should I do if I suspect my dog is too hot?**

If your dogs has any of these signs, stop the dog's activity, take it to a cool place, if possible take the dog's temperature. Allow the dog to pant freely, offer water and let the dog take it when ready. Cool the dog with tepid water if available (rub on underside of belly and paws) NEVER use cold water or snow – this could cause the temperature to drop too fast and cause clotting (DIC) of the dog's blood and death. Put the dog in the shade. Seek medical attention immediately if temperature was above 41.1 C (106 F) or the dog experienced any signs and symptoms of sever hyperthermia or does not recover within the hour.

**Q: What dogs are considered to be more “at risk”?**

- a) Any dog with a predisposing health problem – heart, thyroid, kidney, respiratory disease
- b) Any dog who has had heat stroke in the past
- c) Overweight dogs
- d) Older dogs and young dogs
- e) Out of shape dogs - especially early in the season or those dogs that join us on Training Days.
- f) Dark coated dogs
- g) Muzzled dogs
- h) Pregnant dogs (their internal temp is already higher than normal)