# Does my dog have heatstroke? How can I prevent it? LARGE PRINT VERSION

26 June 2024
Animal Care, Medical, Raising
Awareness, Rescue Policy and
Advice



We are a black dog rescue, and as such always offer adopters

advice on how to keep your doggies safe specific to black dogs first and foremost. Heatstroke can be a major issue as black dogs will overheat more quickly. Other dogs and circumstances that make dogs extra vulnerable to heatstroke are

- Overweight dogs
- 'Flat faced' breeds such as Pugs and French Bulldogs
- Breeds such as St. Bernards, Labradors/Retrievers, Greyhounds, Border Collies, English Springer and Cocker Spaniels, Irish Wolfhounds, Doberman Pinschers, Siberian Huskies and Pointers
- Dogs with thick coats/double

#### coats

- Old or very young dogs
- Any dog with pre-existing conditions, especially infections, or with breathing/lung or heart problems, or <u>Hyperthyroidism</u>
- Exposure to known toxic agents such as hops, mycotoxins, and compounds that can also cause seizures like strychnine and metaldehyde.

But symptoms of heatstroke may go unnoticed until it is too late. And every time we get a heat wave we see 100s of posts on social media on how to cool down an overheating dog, all giving lots of different advice that often makes your dog worse.

However **ALWAYS** check with a vet (many vets in the UK have or are connected to an emergency vet that you can talk to on the phone, and most vets have email or other ways to communicate if phone calls are difficult for you) if you suspect your dog is in a bad way due to possible heatstroke or any other symptom that is worrying you.

What is heatstroke and how can I tell if my dog have it?
The short version is that it's a life-threatening condition

where the body temperature increases to a point where serious consequences, including organ failure and even death, can occur. It's even more dangerous when it happens to dogs as are unable to cool down by sweating all over as humans do, so they are less able to regulate their body temperature. Vets may also refer to heatstroke as hyperthermia (not hypothermia, that's when they're too cold and can't get warm) or elevated body temperature.



Of course, it's unlikely you have a thermometer especially if you're out on a walk, but a quick taking of temperature can help you see how badly overheated your dog is.

We wouldn't advise you try if you've never done it before but general advice for doing this is

- never use a human thermometer, always use one made for dogs
- coat the thermometer with a lubricant such as petroleum gel or baby oil
- gently insert the thermometer about one inch into your dog's anus and wait up to two minutes if it's a glass one with it inserted, (if using an electronic thermometer, the device will usually beep when the temperature is ready to be read), then wipe off the lubricant gently, to see results.
- There are also <u>no-contact infra</u> <u>red thermometers</u> and <u>ear</u> <u>thermometers</u> that with practice

could be less stressful to use on your dog.

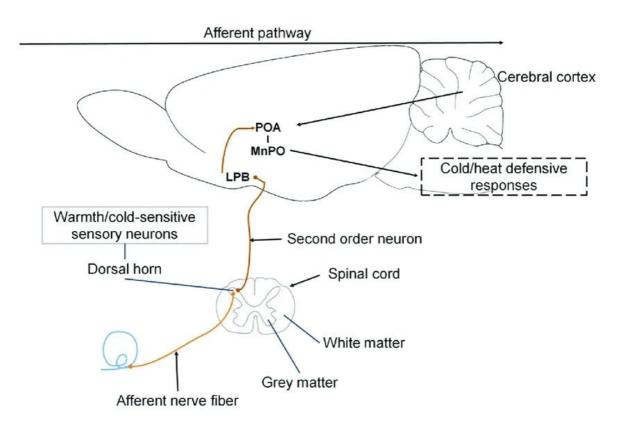
Of course this might *not be* practical, or you could hurt your dog if you're not experienced, to try this, especially if your dog is panicking because they can't breathe, but for guidance if the temperature rises above 103°F (39.4°C), your dog has an abnormal or hyperthermic temperature.

And if the dog's temperature goes **above 106°F** (41°F) without previous signs of illness that's usually due to exposure to excessive external or environmental heat (like a walk when it's too hot or being left in

the car without proper ventilation, or outside with no shade, none of which we recommend at ALL) and is usually referred to as **heatstroke**.

Unfortunately the critical temperature where multiple organ failure and death is likely is only a degree or two higher than that- from 107°F to 109°F (41.2°C to 42.7°C). So it quickly becomes a massive emergency if your dog overheats, especially as heatstroke can take just minutes to occur. And even worse, dogs with short noses like pugs and bulldogs can get to heatstroke levels even faster, and once a dog suffers heatstroke once, should they

survive, they are at greater risk for heat stroke in the future as the condition also damages their 'thermoregulatory centre' (the part of the body that controls temperature).



The thermoregulatory centre in dogs

At the vets, or with an adopter experienced in safely taking a dog's temperature, a dog's rectal temperature will be monitored and treatment discontinued once the dog shows signs of recovery or the temperature has fallen to 103°F (39.4°C). *If cooling is not* discontinued at the right time, then the dog could go too far the other way and develop hypothermia (dangerou sly low body temperatures) so try not to overdo it, especially if you can't get them to the vets (fast enough.)

### What is hypothermia?

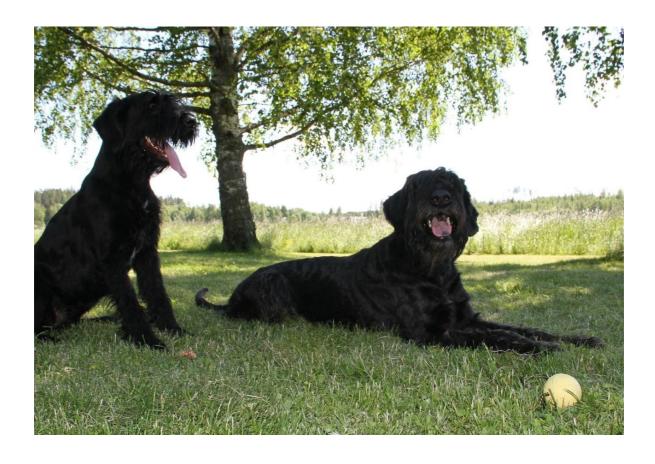
"There are three different stages of hypothermia, from mild to severe. Dogs with mild hypothermia (90-99°F/32-37°C) may shiver or seek heat sources; dogs with moderate hypothermia (82-90°F/27.7-32°C) may stumble or have difficulty walking, be curled or hunched up, or may act confused or sluggish; dogs with severe hypothermia (68-82°F/ 20-27.7°C) may have have slow or laboured breathing or lose consciousness."

But if you don't have a thermometer or you're not sure how to use one, there are some obvious indications your dog may be heading towards heatstroke.

### Other things to look out for, in order of seriousness

- Hugely increased thirst
- panting that won't stop when taken somewhere cooler (can also be called elevated breathing rates)
- dry or sticky gums
- abnormal gum colour
- bruising in the gums
- appearing lethargic or disoriented
- or even seizures and collapsing
- Bleeding
- Coma

## How do I avoid heatstroke in my dogs?



If you think your dog is more than just 'a bit hot', immediately

- Move your dog to a shaded spot, or even to an airconditioned room
- Offer fresh, cool water and if they won't drink, apply to their feet or head (for more places to put or not put water on dogs to cool them down see below)
- Stop all physical activities until their symptoms have resolved enough for you to get them into a car etc (ONLY if you've managed to cool the car down so it feels cool to YOU and have very good air con and fans added for the dogs to keep the temperature low) to get them to the vet
- If there's a <u>moving water</u>
   <u>source</u> like a stream or

river nearby, no deeper than a foot in depth, this can help cool them down too but only if they are still able to stand

 Call your vet or animal hospital for advice

Of course if you're out on a walk, this could be difficult to do right away. So try and be in the habit of taking a doggy walking kit with you that includes water and a bowl, and/or expanding towels that swell up when you apply water but are easy to put in your pocket or bag as they're usually no bigger than a washing pod (all on sale in our non profit shop) that you can use until you can get them to the vet. And if the

pavement is too hot for your bare hand, don't walk them, never leave them in the car by themselves, and do not leave them outside too long with no shade in the first place!



## How do I safely cool them down?

If you suspect your dog is overheating, treat it as an immediate medical emergency. Safe and controlled reduction of body temperature is a priority. ACT FAST to start treatment but do not try to reduce the temperature too quickly or for too long though. It's not easy for the average adopter to work out when to stop which is why we always advise you consult with a vet.

Cool water (not cold) may be poured over the head, stomach, armpits and feet, NOT the back or covering the entire body, (so we do not recommend 'cooling coats' that seem to be available everywhere online) or *cool* cloths may be applied to these areas, leaving the back and head free to lose heat at their own pace. If using cool wet cloths, these should be *continually* replaced, or they will start to retain heat. Cooling mats that go in the fridge could also work, but do not put them over the dog, and they need to be replaced and cooled again as often as towels in cases of heatstroke.



Ensure a continuous flow of air (like car air con or an electric fan focused on the dog if the noise of fans doesn't stress out your dog, and available cheaply online in all sorts of styles from ones that go on headrests, ones with flexible legs (also good on prams and pushchairs) or clip on

ones that plug into the cigarette lighter or a leisure battery) across the dog's whole body to help increase heat loss that happens when a dog is in cooler air, until you can get your dog safely to a vet or veterinary hospital.



Vets have the equipment and

# <u>experience</u> to know how to implement more focused treatment of heatstroke

- introducing intravenous fluids (where they put in an IV to directly put cooling fluids into their bodies to reduce internal body temperature)
- mild <u>sedation</u> if the dog is panicking (do not try and sedate the dog yourself!) or
- low-concentration <u>oxygen</u>
   <u>therapy</u> which must be done at the vet clinic
- Vets can also do a blood count, serum blood chemistry, and urinalysis for a baseline evaluation, and treat with glucose (sugar)

supplementation, antibiotics, gastrointestinal protectants, blood products to treat bleeding disorders, cardiac (heart) drugs or pain management drugs if they feel they are needed.

are also commonly used by vets to treat heat stroke.

What should I never do if I
think my dog has heatstroke?
Rubbing alcohol on the paws
Some 'experts'
recommend 'rubbing alcohol' on
the footpads to expand the skin

pores and increase 'perspiration'. We think this is a very bad idea! For one, DOGS DO NOT SWEAT like we do, though they do release water to some extent through their paws and noses! . Isopropyl alcohol which is the science name for rubbing alcohol, can be very toxic to dogs. Possible side effects can include:

- Gastrointestinal pain, diarrhoea and stomach cramps
- Nausea and vomiting
- Severe skin irritations
- Severe breathing problems and permanent damage to the throat
- Loss of body coordination/

#### movement

- Drowsiness and dizziness
- Unconsciousness
- Nerve damage and kidney failure (with prolonged use)
- Death!

So please be very wary of this substance, and bear in mind so many products (including products humans use, especially in cosmetics, solvents (glue) antiseptics and more) can contain it. Check things you buy for you or your dog with isopropyl alcohol in, and that it can also be listed in the ingredients as Propyl alcohol, Propanol, Isopropanol, 2hydroxypropane, 2 propyl alcohol or Dimethyl carbinol.

### IPA Isopropyl Alcohol Isopropanol 99.9% Pure

PROPAN-2-OL

BNO: 2512HAD

ED No: 200-661-9

CAS No: 67-63-0

UN1219



HIGHLY FLAMMABLE

Highly flammable. Irritating to eyes.

Vapours may cause drowsiness and dizziness.

Keep out of the reach of children.

Keep container tightly closed.

Keep away from sources of ignition.

No Smoking.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Exp

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#### Ice packs

While using 'cold treatments' can really help reduce general swelling (inflammation) in your dog as it reduces pain and damage to muscles immediately after an injury, surgery or heavy exercise, it is not recommended when you think your dog has heatstroke. It is possibly ok to use them if it's all you have to hand, but always ensure you have a damp towel between the ice pack and the dog's skin to prevent any ice burn and never put them on your dog's back or head; rather, use them to keep the towels you have on your dog cooler for longer by wrapping them in the other end of the towel you have

on your dog so the cold can slowly seep through the rest of the towel. Sudden reduction of a dog's temperature when they are dangerously overheated can cause even more problems!



NOT a good idea at all to put an ice pack on a dog's head! And this is not how you take a dog's temperature!

So using ice packs on an overheating dog is controversial as they may contribute to reduced too much blood flow to the skin surface where heat exchange can take place. Blood in the veins can congeal and the veins shrink or retract too fast, leading to blood clots or cutting off blood flow to the brain, lungs or heart.

And never give your dog any human medicines intended to lower fever or temperature, such as acetaminophen or ibuprofen,

as they can be poisonous to dogs and cause severe injury or death.



For more reading for more details/depth on heatstroke, click the purple bits in the blog as those will take you to professional sites on the issues, or try <a href="https://">https://</a>

animalemergencyservice.com.au/blog/heat-stroke-in-dogs/https://pethelpful.com/dogs/How-to-Keep-a-Pet-Dog-Cool-on-a-Hot-Summer-Dayhttps://vcahospitals.com/know-your-pet/heat-stroke-in-dogs