

Preventing and Moderating Heat-related Illness (HRI) in Dogs



BACKGROUND

- Heat-related illness (HRI) in dogs can result in tissue and organ damage and is potentially fatal.
- Flat-faced (brachycephalic) dog breeds are at least twice as likely to suffer from HRI compared with breeds with medium skull shapes1. Some flat-faced breeds can overheat in temperatures as low as 21°C² and in humid as well as hot weather.
- But the good news is that the majority of cases can be avoided by knowing what breeds are most at risk, what are the main triggers, what signs to look out for, and what to do if you think your dog might be suffering from HRI.

Most common triggers for HRI in dogs³ Remember: "Dogs die in hot cars and on hot walks" Most important trigger by far: 5.2%



panting, tiredness, drooling, vomiting and diarrhoea, which can ultimately progress to unconsciousness and death4.



Overweight and obese dogs are at higher risk of HRI than dogs at a healthy weight¹. Obesity in flat-faced dogs reduces the effectiveness of panting as a cooling mechanism⁵.

BWG recommendations to prevent or moderate HRI

- Early care for any dog suspected of HRI can help to prevent progression to more severe forms. This includes:
 - Remove the source of over-heating e.g. stop exercise, seek shade, remove from car
 - Seek veterinary advice
 - Wetting, soaking or water spray with air movement, or immersion in tap water (ensuring the dog does not inhale water)
- Owners of flat-faced dogs should maintain a lean bodyweight in their dogs.
- Owners should use the **VetCompass Clinical Grading Tool** for HRI in dogs to support earlier and more accurate recognition of HRI.
- Avoid or reduce exercising dogs during the hottest part of the day, during heat wave events and in direct sunlight.
- Ensure fresh water is always available for drinking and cooling during exercise and in hot weather.
- Consider using a walking harness for exercise because using leads attached to collars can compress the airway, affecting breathing and panting.
- Be cautious exercising dogs with fever, dehydration, heart failure or severe breathing problems. Seek veterinary advice before exercising any dog that is unwell.
- Never leave a dog unattended in a car or other vehicle, regardless of how short a time and whether windows are left open.
- Reduce travel time, avoid travel in the hottest times of the day and avoid dogs being in direct sunlight during travel e.g. provide window shades. Plan for possible delays by

References: 2020;10(1):9128.

CLICK TO READ FULL BWG STATEMENT ON HRI

1. Hall EJ, Carter AJ, O'Neill DG. Incidence and risk factors for heat-related illness (heatstroke) in UK dogs under primary veterinary care in 2016. Scientific Reports.

2. Lilja-Maula L, Lappalainen AK, Hyytiäinen HK, Kuusela E, Kaimio M, Schildt K, et al. Comparison of submaximal exercise test results and severity of brachycephalic obstructive airway syndrome in English Bulldogs. The Veterinary Journal. 2017;219:22-6. 3. Hall EJ, Carter AJ, O'Neill DG. Dogs Don't Die Just in Hot Cars—Exertional Heat-Related Illness (Heatstroke) Is a Greater Threat to UK Dogs. Animals. 2020;10(8):1324.

4. Hall EJ, Carter AJ, Bradbury J, Barfield D, O'Neill DG. Proposing the VetCompass clinical grading tool for heat-related illness in dogs. Scientific Reports. 2021;11(1):6828. 5. Davis MS, Cummings SL, Payton ME. Effect of brachycephaly and body condition score on respiratory thermoregulation of healthy dogs. Journal of the American

Veterinary Medical Association. 2017;251(10):1160-5.

having access to water, shade, ventilation and fans.