



# KEEPING BRACHYCEPHALIC BREEDS HEALTHY

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From pugs to bulldogs and Cane Corsos to Boxers and Boston Terriers, short-snouted breeds (known as brachycephalic dogs) may suffer if dog guardians don't recognize the signs that their dog's health status may be compromised. Research has shown that the having extremely narrow nostrils (known as stenosis of the nares or stenotic nares) has been shown to be a key predictor that the dog will develop full blown BOAS (brachycephalic obstructive airway syndrome).

In fact, one study of over 250 brachycephalic dog guardians showed that 58% of their dogs had diagnosable BOAS but the guardians had not yet identified their rough breathing as a medical problem.

Even non-BOAS diagnosed brachycephalic dogs can face intense issues with summer heat. These short-snouted dogs had twice the odds of suffering heatstroke than dogs with an average muzzle (like Labradors and crossbreed), from:

- heart damage due to difficulty drawing a breath or ineffective panting
- heatstroke due how much heat these dog's more compact frames and bigger muscles hold (also obesity).

Here are two bulldog pictures – note the narrow nostrils and check which picture shows distressed breathing:



Normal tongue & breath



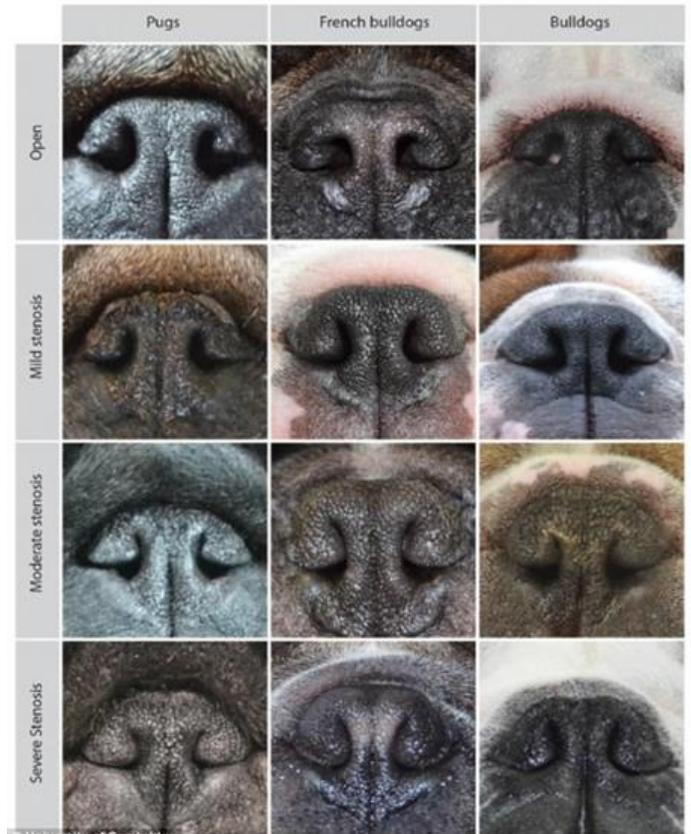
Overly-curved "distress breath" tongue

If your dog has very narrow nostrils or is consistently panting with a curled tongue, we recommend you talk to your veterinarian about the possibility of your dog having BOAS. If your dog has a curled tongue on a very hot day or after vigorous exercise, please take them to a cool location immediately and call your veterinarian on how to watch for heat stroke and what to do if your dog doesn't quickly cool down.

## References

Hall, E.J., Carter, A.J., O'Neill, D.G., 2020. Incidence and risk factors for heat-related illness (heatstroke) in UK dogs under primary veterinary care in 2016. *Sci. Rep.* 10, 9128. <https://doi.org/10.1038/s41598-020-66015-8>

Liu, N.-C., Troconis, E.L., Kalmar, L., Price, D.J., Wright, H.E., Adams, V.J., Sargan, D.R., Ladlow, J.F., 2017. Conformational risk factors of brachycephalic obstructive airway syndrome (BOAS) in pugs, French bulldogs, and bulldogs. *PLoS One* 12, e0181928. <https://doi.org/10.1371/journal.pone.0181928>



[Graphic courtesy of BOAS Research Group Cambridge, UK]