



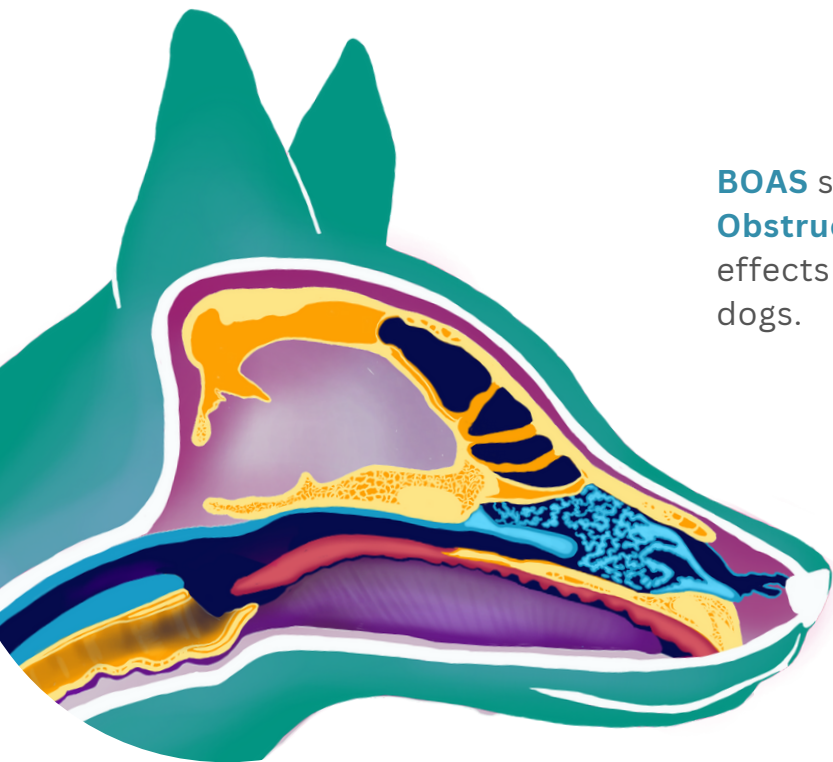
**hamilton**  
SPECIALIST REFERRALS

A mini guide to:

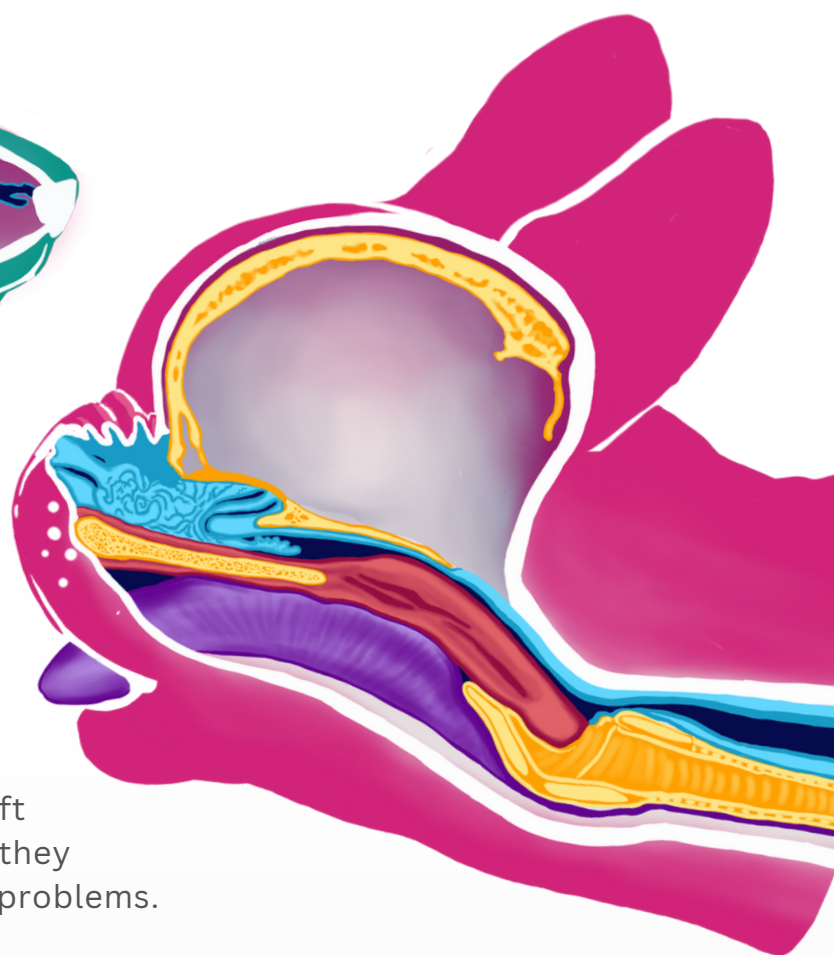
# BOAS



# Overview: What is BOAS?



**BOAS** stands for **Brachycephalic Obstructive Airway Syndrome** and affects short-nosed (brachycephalic) dogs.



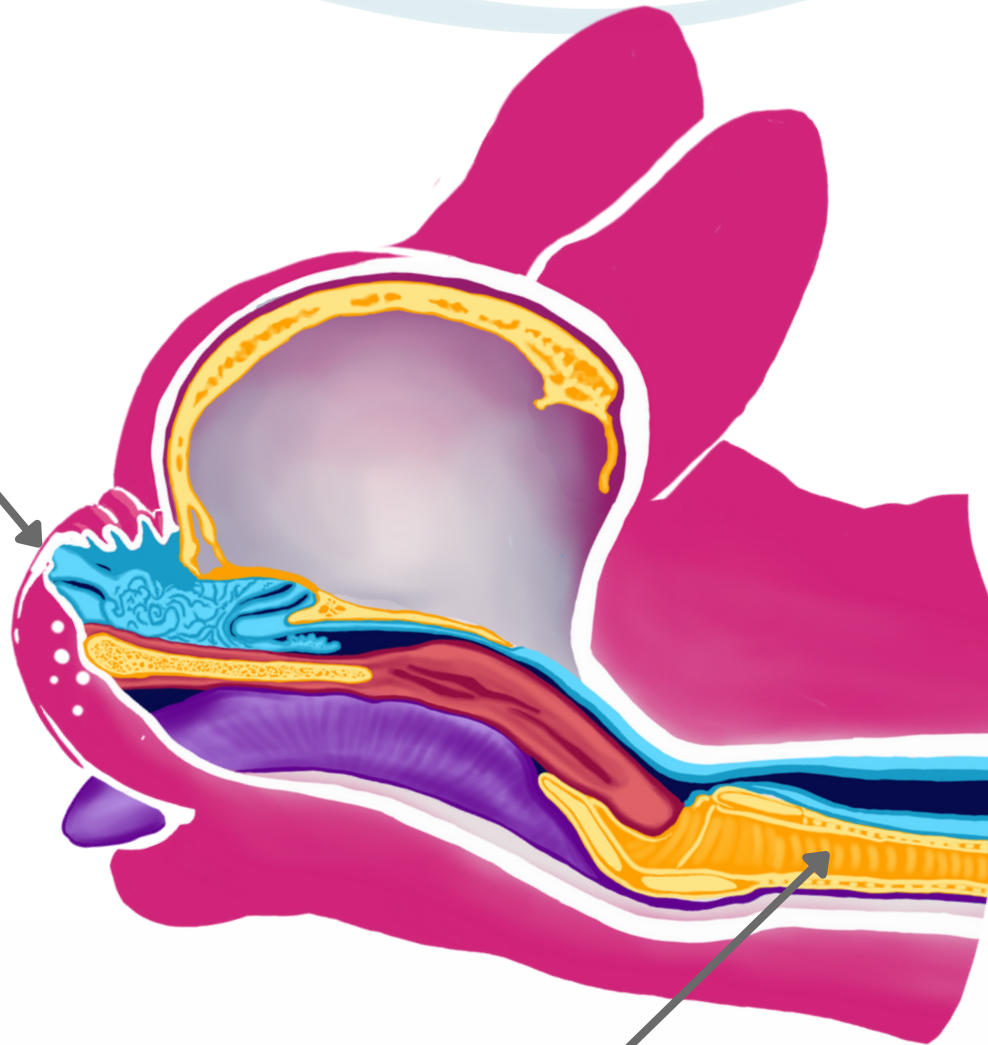
These dogs have compressed skulls that result in overcrowding of the soft tissue within the skull, meaning that they are at risk of developing respiratory problems.

**BOAS** is seen in certain breeds, with **Pugs, English Bulldogs and French Bulldogs** being over-represented.

# Overview: What is BOAS?

## Stenotic nares

Narrow nostrils that do not allow sufficient air to pass through.



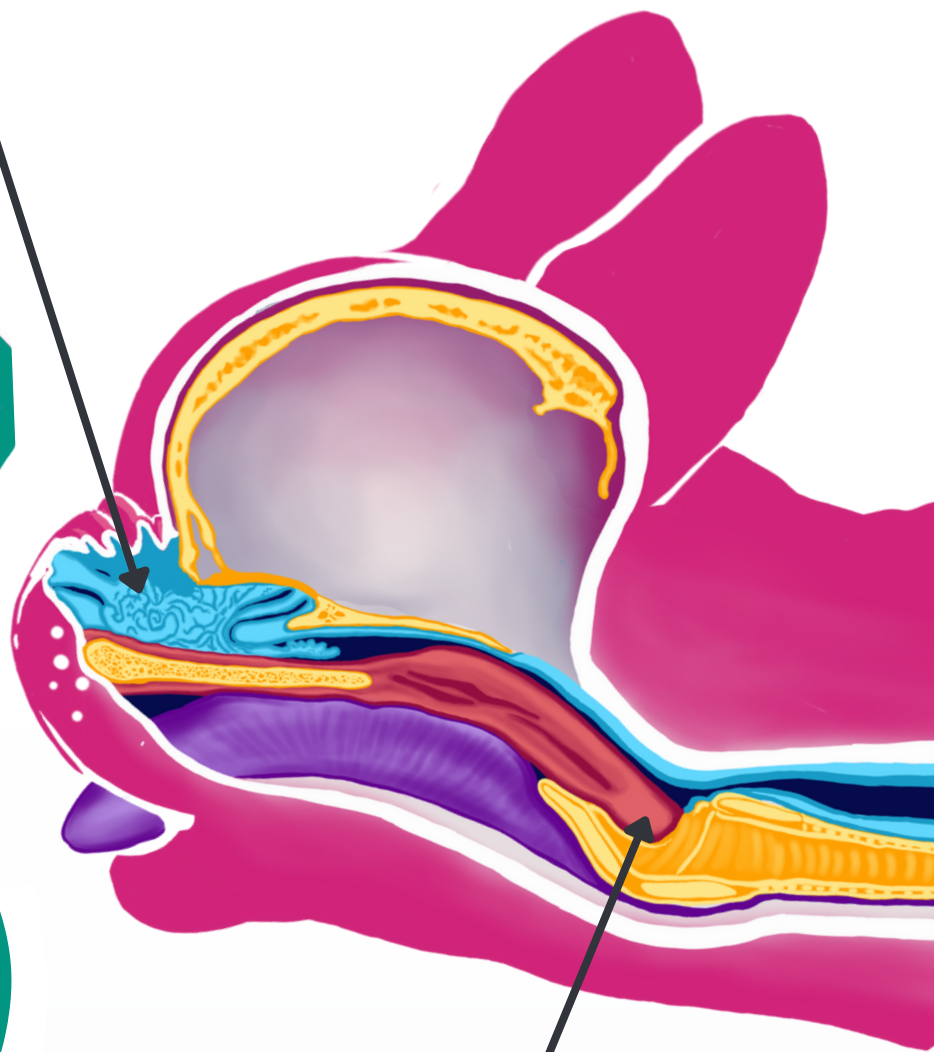
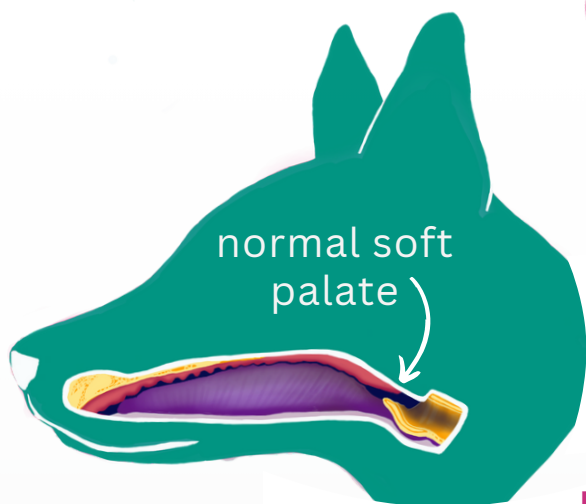
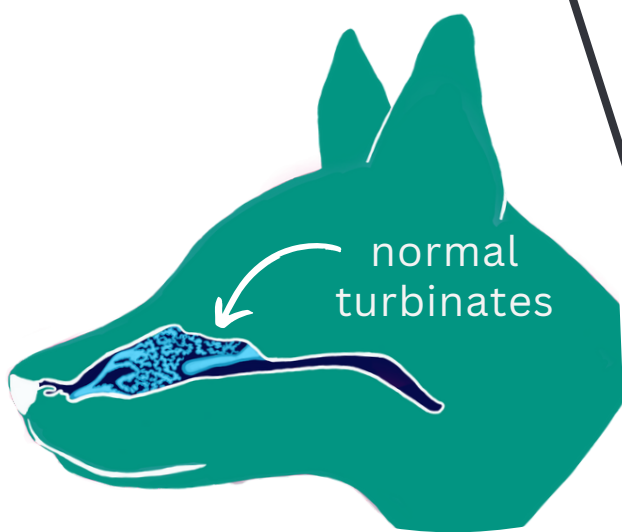
## Hypoplastic trachea

The trachea has a smaller diameter, allowing less air to pass through.

# Overview: What is BOAS?

## Abnormal nasopharyngeal turbinates

Cartilage growths that extend into the nasal airway, restricting airflow.

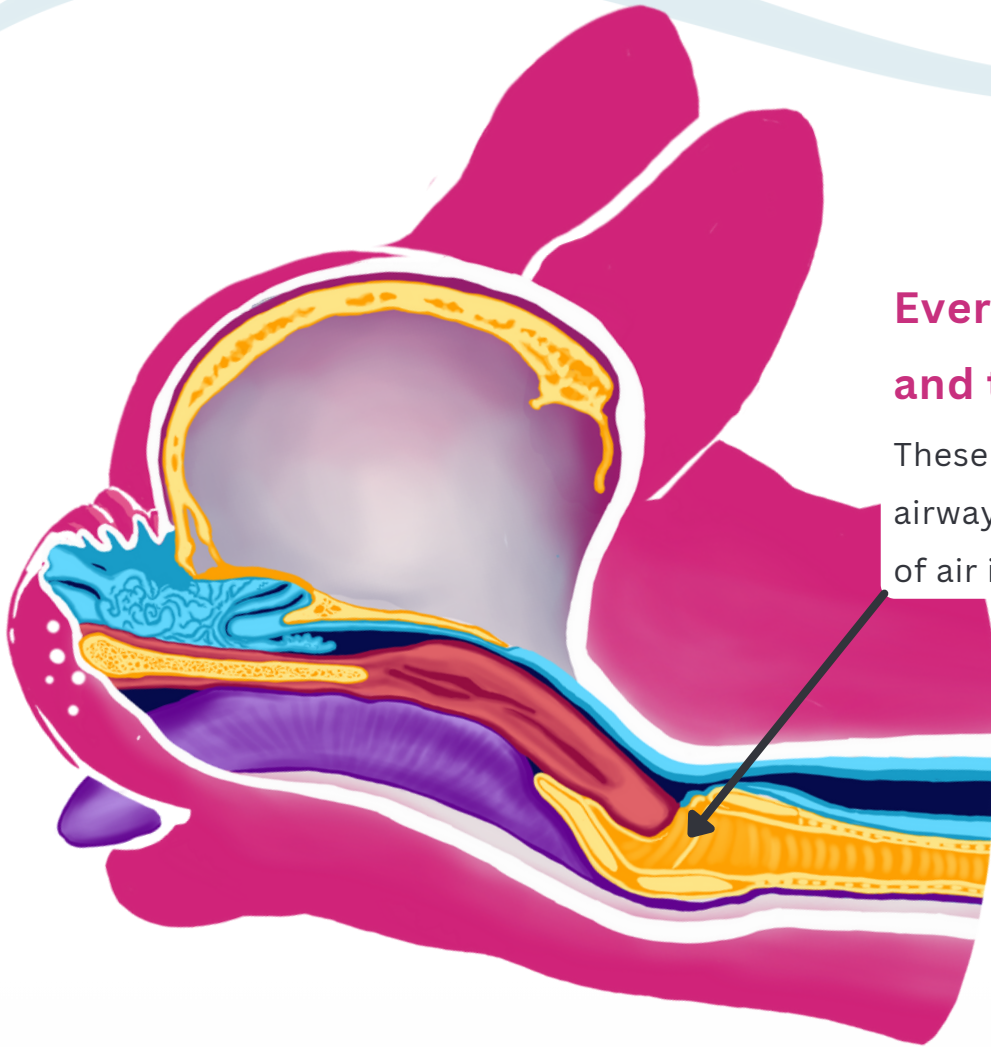


## Elongated soft palate

The soft palate is too long and folds at the back of the throat, restricting airflow and causing a 'snoring' sound when breathing.



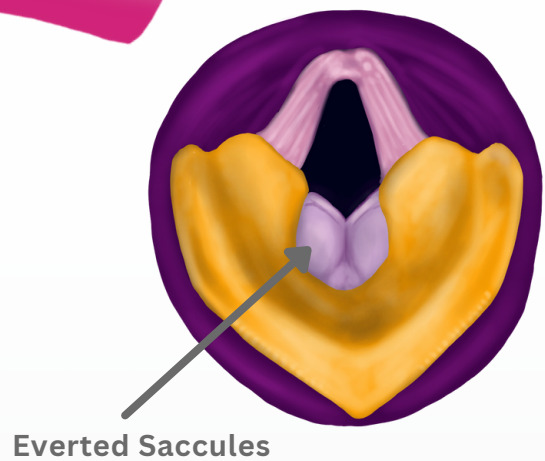
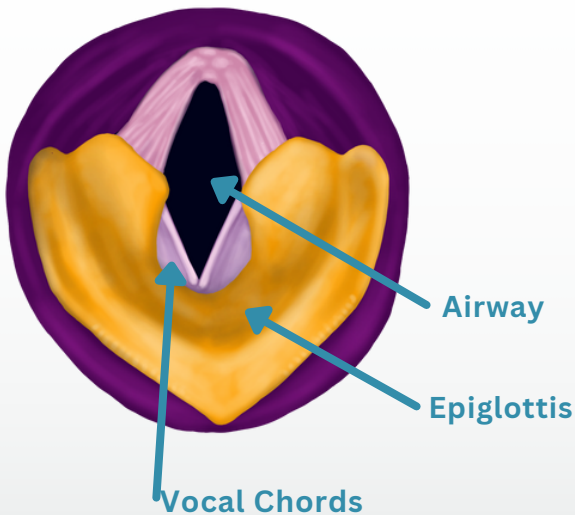
# Overview: What is BOAS?



## Everted saccules and tonsils

These protrude into the airway restricting the passage of air into the trachea.

## Normal Epiglottis



# Diagnosis: Symptoms & Grading

## Symptoms of BOAS include:

- Breathing difficulties
- Reduced exercise tolerance
- Noise whilst breathing
- Regurgitation
- Sleeping disorders

## Grading Scheme:

**Grade 0 – BOAS free**



Yearly check up recommended

**Grade I – mild respiratory symptoms, but otherwise well**



Yearly check up recommended

**Grade II – moderate respiratory symptoms**



Thorough assessment recommended with management intervention, e.g. surgery, weight loss

**Grade III – BOAS affected with severe respiratory signs**



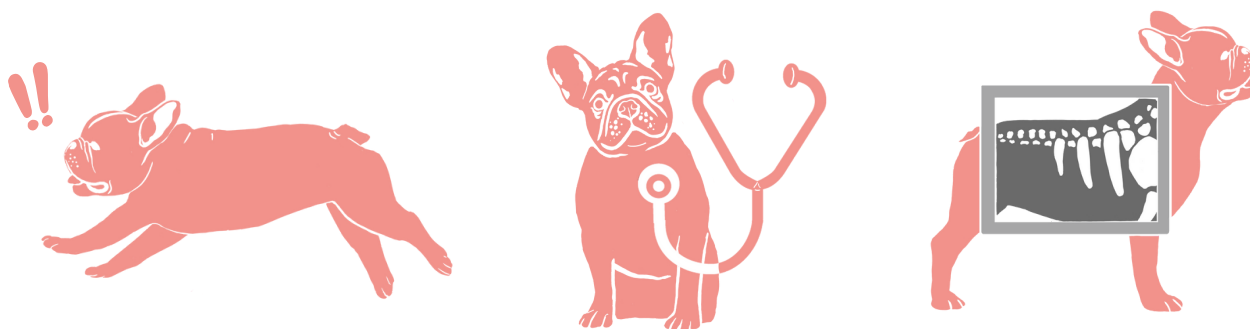
Thorough assessment required with surgical intervention likely

**Speak to your vet to find out how to book a BOAS assessment**

# Treatment: Assessment & Surgery

There is no cure for **BOAS**, however management can help alleviate the symptoms.

Before surgery is considered, a soft tissue surgeon will perform an initial evaluation. This includes a will perform an initial evaluation. This includes a **full historical assessment**, an **exercise tolerance test**, an **airway examination** and **chest x-rays**.



Surgery can involve a combination of **tonsillectomy** (removing the tonsils), **palatoplasty** (reducing the length and thickness of the soft palate), **laryngeal surgery** (if laryngeal collapse is present) and **rhinoplasty** (widening of the nostrils).

In some cases with crowding of the nasal turbinates, **laser turbinectomy** is performed (removal of crowded cartilage folds in nasal passageway).