



The Respiratory Function Grading Scheme Functional grading assessment protocol for the Bulldog

- 1. Initial examination prior to exercise test:** the dog should be kept as calm as possible with gentle restraint. If the dog is stressed, please allow a period of time to calm. Auscultation is performed directly over the larynx from the side, avoiding any upward pressure on the pharynx and larynx. Head should be in a neutral position, not flexed or extended.
- 2. Exercise test (ET):** this is designed to keep the dog active for 3 minutes. The dog should be encouraged to trot at 4-5 miles per hour by the assessors or the owners, but not pulled on the lead. Toilet stops should be accommodated. If the dog has reasons that it cannot manage this pace (e.g osteoarthritis, obesity, anxiety), a fast walk should be attempted. If the dog has two refusals then the test should be stopped. Any dogs that have severe stertor or dyspnoea prior to the ET are grade 3 and should not be exercised.
- 3. Examination after the exercise test:** the dog should be auscultated immediately following the exercise test.
- 4. Functional grading:** The clinical grading is based on respiratory signs before (pre-ET) and immediately after the exercise test (post-ET). **The highest grade from any of the three categories (respiratory noise, respiratory pattern, cyanosis/syncope) should be given as the final grade.**

Additional considerations

- The dog must be over 12 months of age to receive an official scheme certificate
- Dogs that have had episodes of syncope and/or cyanosis are classified as Grade 3 without an exercise test
- Dogs with moderate intermittent nasal stertor when sniffing have similar BOAS index (objective respiratory function) to dogs only with mild respiratory noise, therefore, these dogs are considered Grade 1
- Some dogs may have quieter mouth breathing after exercise than their nasal breathing prior to exercise. These are usually Grade 1 dogs

^a Respiratory noise (stertor and/or stridor) is diagnosed by pharyngolaryngeal auscultation on the side of the neck. Stertor: Low pitched vibratory respiratory noise, commonly described as snoring, awake or asleep. Stridor: High pitched harsh respiratory noise. Localises to the larynx or trachea, usually inspiratory. Mild: only audible under auscultation; Moderate: intermittent audible noise that can be heard without stethoscope; Severe: loud, constant audible noise that can be heard without stethoscope

^b Respiratory pattern (Normal, Inspiratory effort or Dyspnoea) is diagnosed by observation. Normal: A normal respiratory pattern observed; Inspiratory effort: Extra effort required to inhale, manifested by one or more of the following, longer inspiratory times, increased movement to the chest wall, and/or bellowing of the thoracic inlet; Dyspnoea: Severely increased respiratory effort with signs of discomfort such as rigid stance with elbow abduction, irregular breathing pattern, signs of discomfort, such as a tense facial expression and/or a lack of normal social behaviors

^c Cyanosis/Syncope is diagnosed by observation and owner reports. Cyanosis: Blue/grey or purple discoloration of mucous membranes (lips/gum/tongue) due to low blood oxygenation. Syncope: Fainting, temporary loss of consciousness. Dogs that have had episodes of syncope and /or cyanosis as documented by owner's report are classified into Grade III without ET. These dogs do not need an exercise test.

^d Dogs with moderate intermittent nasal stertor when sniffing have similar BOAS index (objective respiratory function) to dogs only with mild respiratory noise, therefore, these dogs are considered Grade 1

Nasal Whistle: high pitched inspiratory noise related to the external nostril. At the moment this does not affect the respiratory grading but should be noted on the form.

BOAS Functional Grading for the Bulldog

Grade 0 – Free of respiratory signs; annual health check is suggested if the dog is under 2 years.

Grade I – Mild respiratory signs of BOAS but does not affect exercise tolerance. Annual health check is suggested if the dog is under 2 years old.

Grade II – Moderate respiratory signs of BOAS. The dog has a clinically relevant disease and requires management, including weight loss and/or surgical intervention.

Grade III – Severe respiratory signs of BOAS. The dog should have a thorough veterinary examination with treatment. Should not be bred.

		Respiratory noise ^a	Respiratory pattern ^b	Cyanosis/ Syncope ^c
Grade 0	Pre-ET	Not audible	Normal	Not present
	Post-ET	Not audible	Normal	Not present
Grade I	Pre-ET	Not audible to mild stertor, and/or moderate intermittent nasal stertor when sniffing ^d	Normal	Not present
	Post-ET	Mild stertor, and/or moderate intermittent nasal stertor when sniffing ^d	Normal	Not present
Grade II	Pre-ET	Mild to moderate stertor	Normal	Not present
	Post-ET	Moderate to severe stertor	Normal to inspiratory effort. Dyspnoea not present.	Not present
Grade III	Pre-ET	Moderate to severe stertor	Inspiratory effort to dyspnoea.	May or may not present cyanosis or syncope. Inability to exercise.
	Post-ET	Severe stertor	Inspiratory effort to dyspnoea.	May or may not present cyanosis or syncope.

ET, exercise test