

RESPIRATORY FUNCTION GRADING SCHEME ASSESSMENT PROTOCOL FOR ASSESSORS

- **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.
- **Exercise test:** 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.
- **Examination after the exercise test:** the dog should be auscultated immediately following the exercise test.
- **Functional grading:** The clinical grading was 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, inspiratory effort, dyspnoea/cyanosis/syncope) should be given as the final grade.**
- Some dogs may have quieter mouth breathing after exercise than nasal breathing prior to exercise. These are usually grade I dogs.
- If the dog is under 12 months old when first graded, it should be re-graded after a year.

^a Respiratory noise (stertor and/or stridor) was diagnosed by pharyngolaryngeal auscultation. 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 An abnormal respiratory cycle characterized by evidence of increased effort to inhale the air in with the use of diaphragm and/or accessory muscles of respiration and/or nasal flaring with an increase in breathing rate. Mild: minimal use of diaphragm; moderate: evidence of use of diaphragm and accessory muscles of respiration; severe: marked movement of diaphragm and accessory muscles of respiration.

^c Dogs that have had episodes of syncope and /or cyanosis as documented by owner's report are classified into Grade III without ET. Dyspnoea: irregular breathing, signs of discomfort, and labored breathing.

^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 I

Functional Grading

		Respiratory noise ^a	Inspiratory effort ^b	Dyspnoea/ Cyanosis/ Syncope ^c
Grade 0	Pre-ET	Not audible	Not present	Not present
	Post-ET	Not audible	Not present	Not present
Grade I	Pre-ET	Not audible to mild stertor, and/or moderate intermittent nasal stertor when sniffing ^d	Not present	Not present
	Post-ET	Mild stertor, and/or moderate intermittent nasal stertor when sniffing ^d , and/or intermittent gentle stertor when panting	Not present to mild	Not present
Grade II	Pre-ET	Mild to moderate stertor	Not present to moderate	Not present
	Post-ET	Moderate to severe stertor	Moderate to severe and/or regurgitation of foam/saliva	Dyspnoea; cyanosis or syncope not present
Grade III	Pre-ET	Moderate to severe stertor or any stridor	Moderate to severe	Dyspnoea; may or may not present cyanosis. Inability to exercise.
	Post-ET	Severe stertor or any stridor	Severe and/or regurgitation of foam/saliva	Dyspnoea; may or may not present cyanosis or syncope.

EST, exercise test