



# Guidance on Low Flow Anaesthesia

Anaesthesia &  
Analgesia  
Service

## On **CIRCLE** breathing system only\* for **DOGS and CATS**

Induce anaesthesia with injectable anaesthetic agent

Connect patient ETT to circle breathing system

- Set Fresh Gas Flow (FGF) at 2 – 3L/min with Isoflurane vaporizer 2 – 2.5 %
- Make sure the patient is breathing to take in isoflurane
- Manually ventilate 5 – 10 breaths per minute if not breathing spontaneously
- Check anaesthetic depth regularly
- Adequate depth is reached (expected in 5 – 10 min):
  - Eyes rolled ventrally
  - Sluggish or absent palpebral reflex
- Turn FGF down to 1L/min
- Check depth and if adequate, drop flow to 0.5L/min for animals <50kg
- Reduce vaporizer setting gradually

**Re-check depth** every time you move the patient

- Give injectable anaesthetic **BEFORE** moving if plane is light
  - Propofol 0.5mg/kg IV
  - Alfaxalone 0.2 – 0.3mg/kg IV

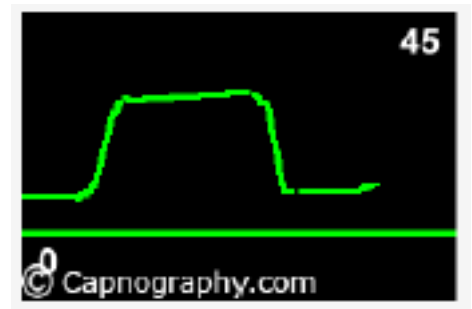
For longer procedures you can reduce the FGF to 10ml/kg/min† Check anaesthetic depth regularly

\* In non-rebreathing systems (Lack, Magill, Bain, T-piece) FGF is required to purge exhaled CO<sub>2</sub> to prevent rebreathing and low flow anaesthesia cannot be used.

† Vaporizer accuracy drops below FGF 0.5L/min. Frequent monitoring of depth is important to prevent the anaesthetic becoming too light.

For **Non-Rebreathing** Systems:

Use your capnograph to lower your FGF until you start to see evidence of CO<sub>2</sub> rebreathing (curve not returning to baseline)



Mktg/ReferralsCollateral/Anaesthesia/Guide to Reduced O2 in high demand (COVID-19) Low Flow Anaesthesia

**PrideVeterinaryCentre**

Hospital

Riverside Road, Derby DE24 8HX  
Telephone: 01332 548911  
referrals@prideveterinarycentre.co.uk  
prideveterinarycentre.co.uk

