



# Guide to reduced O<sub>2</sub> use due to high demand (COVID-19) ICU

Anaesthesia & Analgesia Service

Key: always use minimum amount of O<sub>2</sub> to ensure:

- a) SpO<sub>2</sub> > 93 %  
or
- b) Improvement of clinical signs.

If not needed, turn Oxygen off

For all oxygen therapy in ICU: always adjust O<sub>2</sub> flow to use minimum amount to achieve either:

- SpO<sub>2</sub> > 93 % (or threshold indicated by clinician)
- Or stabilization of patient and reduction of respiratory clinical signs

## Flow-By Oxygen

- Flow by: Not recommended as very wasteful.
- Tube must be < 2 cm from nostrils or adjacent to them
- O<sub>2</sub> = 2 L/min

## Mask

- Loose fitting: wasteful but less stressful. O<sub>2</sub> = 2 L/min
- Tight fitting with rubber diaphragm: O<sub>2</sub> = 1 L/min. Remove every 5 min for a few seconds to prevent rebreathing. Can be stressful for patient.

## Oxygen kennels:

- Very wasteful. Only use when absolutely necessary.
- Do not prefill kennel with O<sub>2</sub>.
- Always use oxygen analyser (FiO<sub>2</sub>) – this will guide the use of oxygen
- Start O<sub>2</sub> flow once all procedures and examinations are completed and patient is settled inside kennel.
  1. Fill kennel with 5 L/min until desired FiO<sub>2</sub> is reached (aim for 30 % first to see if this is enough to stabilize patient or increase SpO<sub>2</sub> to > 93 %)
  2. Once at FiO<sub>2</sub> required – reduce flow to 1 L/min
  3. If not able to maintain, increase to a maximum of 2 L/min
- Do not try to achieve Fi O<sub>2</sub> > 50-60 % as it will cause too much O<sub>2</sub> waste due to leaks
  - > If higher FiO<sub>2</sub> required, place a nasotracheal or bilateral nasal cannulas instead.

## Nasal cannulas and nasotracheal cannulas

- Maximum O<sub>2</sub> flow 100 ml/Kg/min as higher can start to cause discomfort and damage mucosa (range is 50-150 ml/kg/min)

Mktg/ReferralsCollateral/Anaesthesia/Guide to Reduced O<sub>2</sub> in high demand (COVID-19) ICU

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