

OXYGEN CONSERVATION CONSIDERATIONS

Pre-oxygenation

3 min at 5 L/min or 8 breaths in 60 sec at 10 L/min¹

Intraoperatively

Add appropriate PEEP to ventilator settings (defaults to zero on ventilator)

Consider minimizing flow rates

Consider minimizing FiO₂ to minimum acceptable for your patient

- If have arterial line, can titrate to goal PaO₂ between 80 – 120

Emergence – consider air (not oxygen) as primary fresh gas flow

Postoperatively

Goal sats > 92% for most patients (> 88% for COPD patients)

Nasal cannula – no minimum flow required (keep under 4 L/min for patient comfort)

Face Mask – minimum flow of 5 – 6 L/min

- Consider using lowest acceptable flow rate

Non-rebreather – minimum flow of 15 L/min

DON'T FORGET TO TURN O₂ TANK OFF UPON ARRIVAL TO PACU/UNIT

CHECK AUXILLIARY OXYGEN ON ANESTHESIA MACHINE BEFORE/AFTER EVERY CASE

1. Baraka AS et al. Preoxygenation: Comparison of maximal breathing and tidal volume breathing techniques. *Anesthesiology*, Vol. 91, 612. <https://doi.org/10.1097/0000542-199909000-00009>.