SUSTAINABLE ANESTHESIA

PRACTICE RECOMMENDATONS

PRE-OPERATIVE CHECKLIST

- For cases using inhalational anesthesia, ensure that desflurane has been turned **off** in favor of sevoflurane or isoflurane
- CO_2 absorbents are free of strong bases (NaOH, KOH)
- The minimum fresh gas flow has been estimated using an accredited formula or simulation software

INDUCTION REMINDERS

- During intubation, leave the fresh gas flow off/vaporizer on
- Pediatric Induction:
  - Limit nitrous oxide unless medically necessary
  - Incorporate IV anesthetics
  - Minimize fresh gas flow for the duration of induction
  - For a sevoflurane mask induction, use distraction techniques such as electronic media, conversation, and premedication

MAINTENANCE REMINDERS

- Minimize fresh gas flow
- Avoid nitrous oxide unless clinically preferred
- Set the vaporizer to deliver a concentration greater than intended
- Closely monitor O_2, CO_2, and anesthetic concentrations while delivering gas at minimum FGF

WHY IS IT IMPORTANT?

- All common inhaled anesthetics have global warming potential.
- We can reduce the global warming impact of anesthetic agents by managing fresh gas flow and inhalational agent choice.
- Anesthetic agents are a significant contributor to US healthcare CO_2 emissions

SUSTAINABILITY MEASURES

GLOBAL WARMING FOOTPRINT

SUS-02: Global Warming Footprint, Maintenance

SUS-03: Global Warming Footprint, Induction

FRESH GAS FLOW

SUS-01: Fresh Gas Flow, less than or equal to 3L/min

SUS-04: Fresh Gas Flow Less than/equal to 2 Liters per minute

SUS-06-Peds: Low Fresh Gas Flow, Pediatric Induction

NITROUS OXIDE AVOIDED

SUS-05-Peds: Nitrous Avoided, Induction

SUS-07: Nitrous Avoided

Learn more about Sustainable Anesthesia on our website:

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