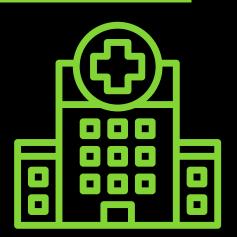


# ANESTHETIC GASES & SURGERY



Anesthesiologists and surgeons are key players in the decision-making around which anesthetic gases are preferred/used as well as the resource-intense set-up of hospital Operating Rooms (ORs). With climate change being described by the United Nations as "the greatest threat that modern humans have faced," we have a responsibility to make better choices for patients and the planet.

### **Examples of sustainable improvements include:**

- 1) Selecting anesthetic techniques that minimize the use of gases with high global warming potential (e.g., Replacing Desflurane);
- 2) Powering hospital ORs with clean and renewable energy sources;
- 3) Reducing energy consumption and plastic waste.

## **SUCCESSES**

**Tangible outcomes in education and results:** "We have been engaging with politicians to educate them about climate change and how we can ban desflurane from entering the atmosphere" -SM



-Encouraging hospitals to adopt the gas sevoflurane into their practices (in place of Desflurane). Both are effective anesthetics but sevoflurane leaves a smaller carbon footprint (Desflurane would be completely unusable if it was subjected to a carbon tax)





Sevoflurane = 40km drive







- -Connect and engage with provincial organizations, politicians, and other leaders to prioritize action-oriented change (with the support of quantitative data, including cost data)
- -These changes can be recommended during meetings with senior leadership

In some cases, the groups that have the power to make change may be "more interested in the cost-saving data than they are in the environmental aspects. And that is okay because our goal is to implement a change in practice." -AR

# **FUTURE GOALS**

"We need a coordinated effort across the province. This is an important to address. because it involves tax payer dollars...and the air that they breathe. " -AR



- -Education is important but accountability on individual physician practices should be prioritized
- -We need to continue advocating for 1) a greenhouse gas inventory; and 2) a Sustainability Officer in the Ministry of Health

### Interviewees:

Dr. Anita Rao (Mississauga)

Dr. Sanjiv Mathur (Sudbury)

Dr. Antonio Caycedo-Marulanda (Kingston)

