

Reducing your use of Nitrous Oxide (N<sub>2</sub>O) is one of the ways you can improve the environmental impact of your day-to-day practice in the Emergency Department

## What's the problem?

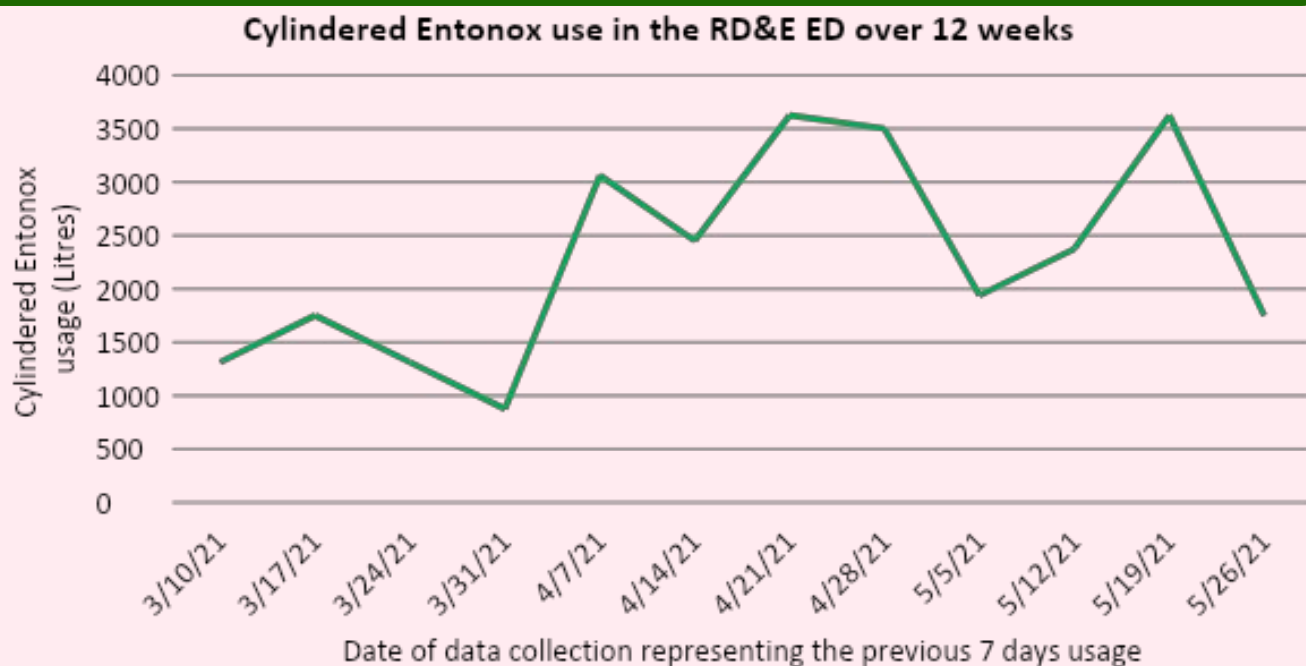
- Entonox is a 50:50 pre-mixed cylinder of Nitrous Oxide (N<sub>2</sub>O) and Oxygen (O<sub>2</sub>)
- Nitrous oxide (N<sub>2</sub>O) is harmful to the environment
- N<sub>2</sub>O's global warming potential is **298** times that of carbon dioxide over 100 years
- N<sub>2</sub>O is the leading cause of ozone-depletion from human activity

## How much do we use?

- In the RD&E Emergency Dept. we typically use 2000L Entonox every week\*

\*this excludes use of piped nitrous from the wall supply in Resus

- Every 1000L Entonox used is equivalent to driving 3750 miles in an average sized petrol car
- Each year our usage of cylindered Entonox alone is equivalent to driving an average-sized car around the world 15.7 times



## OK, so what are the alternatives?

### Early conventional analgesia

- Cheap and available.
- Good adjunct, often forgotten.
- May not be enough on its own.

### Sedation

- Very effective procedural analgesia.
- Requires resus space and additional competent practitioner.
- Can be time consuming.

### Methoxyflurane (aka Pentrox)

- Rapid onset, portable, efficacious analgesia.
- Low global warming potential, low ozone depletion potential, short environmental lifetime.
- Safe at low doses but can't be used more than twice each visit.
- More expensive.



### Regional anaesthesia

- E.g. Bier's block, anatomical landmark or US guided nerve blocks.
- Largely under utilised. An expanding area of practice with increasing availability of ultrasound?



There is no denying that N<sub>2</sub>O can be an incredibly useful drug, and that sometimes its use may be justified.

But before you default to using it, please ask yourself:

**'Can I say no to N<sub>2</sub>O?'**