

## AB114. The environmental impact of unused anaesthetic face mask hook rings

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**Background:** The Irish healthcare system and more specifically anaesthesiologists should not be exempt from climate protection. This project investigated the plastic waste produced by the redundant anaesthetic face mask hook ring. The average Irish hospital theatre segregates out 10% of total waste for recycling when up to 40% could be recycled. To reduce plastic waste, we should eliminate items disposed of unused. The hook was invented by Clausen to attach the anaesthetic mask to the Clausen harness however is now largely obsolete in Ireland and across Europe since the invention of the Laryngeal Mask Airway. Manufacturers in the past have justified their continued supply due to demand by North America; 'the logistics of supplying only to a European market without the hook was far costlier than the manufacture and supply of the hooks to all regions'. A 2 g hook translates to 365 kg of plastic waste produced per year, equivalent to 702 L of diesel. The HSE need to initiate discussions with medical equipment suppliers to ensure we too are minimising our carbon footprint.

**Methods:** Collection took place over a one week period (09/09/2019–13/09/2019) in St. Vincent's University Hospital main theatre complex including the holding bay and recovery room.

**Results:** Collection over five working days yielded 133 face mask hooks weighing 260 grams in total. This gave a weight of approximately 2 g per face mask hook ring. Using the carbon footprint calculator this equates to  $1.56 \text{ kg CO}_2$  emitted. This is equivalent to the footprint 0.5 L of car diesel.

**Conclusions:** Anaesthetic face mask hooks are an unnecessary additive to Irish Hospital's waste production and talks should be instigated with medical device suppliers to remove them from our face masks and reduce our carbon footprint.

Keywords: Anaesthesiology; climate; facemask hook ring

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