

Article

The carbon footprint of inhalers

The NHS aims to be the worlds’ first net carbon zero health service and the propellants in metered dose inhalers (MDI) are responsible for 3% of the total carbon footprint of the NHS.

In Kent and Medway

- 780,000 salbutamol inhalers are dispensed per year.
- Approximately 1.2 million metered dose inhalers in total are dispensed per year.
- The carbon footprint of a Ventolin® inhaler is 28kg CO2 emissions, whereas a dry powder inhaler (DPI) is around 0.5kg CO2 emissions!

If all patients using Salbutamol MDI were switched to a DPI, we could save 21 million kg of CO2 emissions per year in Kent and Medway alone which is the equivalent of >21,000 return plane trips to New York!!

Actions for practices

- Speak to your patients regarding the carbon footprint of metered dose inhalers and consider switching them to a DPI at their COPD or asthma annual review.
- Consider switching any patient using a salbutamol inhaler to a more carbon friendly version.
- **Switching to a DPI such as Ventolin Accuhaler® or Easyhaler Salbutamol® will save over 27kg CO2e per inhaler!**
- A DPI is preferable but even **switching from Ventolin® to Salamol® or Airomir® will save 18kg CO2e per inhaler!**
- Encourage patients to **return their empty inhalers to the community pharmacy**. Although there are currently no official recycling inhaler schemes operable in Kent and Medway, disposing of inhalers at the pharmacy means the inhalers will be incinerated. **Landfill disposal is harmful to the environment.** The release of remaining propellant can account for up to 25% of the life-cycle CO2 emissions of an inhaler. As well as the gases released, the plastic is generally not recycled which further adds to the carbon footprint.
- Counsel patients with asthma on the overuse of salbutamol inhalers. Not only does overusing salbutamol impact on cardiovascular health, but data in Kent and Medway shows that those **patients using 6 or more salbutamol inhalers a year directly relates to an increase in hospital admissions for asthma**. This is often because patients feel instant relief with salbutamol, and often don’t see the necessity for life saving inhaled corticosteroids.
- Spread the message that asthma management is changing- salbutamol will no longer be a regular feature of management. Patient must use their ICS as prescribed, and there will be a drive for more patients to use MART (maintenance and reliever) therapy.

Thank you for your support. Together we can help the NHS reach carbon net zero by 2040!

	<p>If you would like further information on this subject, please visit the following or contact: kmccg.medicinesoptimisation@nhs.net Maintenance and reliever therapy (MART) Asthma + Lung UK https://www.greenerpractice.co.uk/high-quality-and-low-carbon-asthma-care/ https://www.pcrs-uk.org/sites/pcrs-uk.org/files/NatRevAsthmaDeathsPIW_Final.pdf</p>
2.	<p>Reminder: Deadline for Practices to submit returns for MOS 2021/22 GP Practices are requested to return reporting forms for the national priorities (DOAC monitoring audit) and PCN priorities (Opioid or antibiotic, or benzodiazepine prescribing) parts of the 2021/22 Medicines Optimisation Scheme to local HCP MO teams by 30th June 2022. East Kent MOT HCP - kmccg.eastkentprescribing@nhs.net West Kent MOT HCP- kmccg.wkmedman@nhs.net Medway/Swale MOT HCP - Medwayswale.meds@nhs.net Dartford, Gravesham & Swanley MOT HCP - kmccg.dgscg.medman@nhs.net</p>
3.	<p>We would like to hear from YOU!</p> <p>Have you implemented any medicines related quality improvement ideas, stories of achievements or good practice news that we can share with colleagues across Kent and Medway? If you would like to be featured in our next newsletter, please do contact us! Email expressions of interest and all submissions to: kmccg.medicinesoptimisation@nhs.net</p>

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