

Factsheet 39

Updated on 16 April 2021

Inhalers – The Greener Choice: Part 1

This factsheet has been designed for use by healthcare professionals only.

22 April 2021 marks Earth Day, it is important to understand what we can do to try and reduce the impact of inhalers on the environment.

The NHS Long Term Plan stated a target to reduce the carbon impacts of inhalers by 50% by 2030, and a drive to reduce Pressured Metered Dose Inhalers (pMDI)s prescribing which in 2018 were estimated to be responsible for 4% of the NHS's entire carbon footprint. pMDI's make up around 70% of UK prescribing in comparison to Scandinavian countries which have rates between 10% - 30% whilst other European countries are 50%.

To support the reduction in the carbon footprint the updated GP contract states that:

“All inhaler prescriptions, Structured Medication Reviews or planned Asthma Reviews taking place in primary care should consider moving or facilitating patients to lower carbon options where it is clinically appropriate to do so with a particular focus on combination therapy”.

The latest BTS position statement on Environment and Lung Health (BTS, 2020) recommends:

- Where a new class of inhaler is commenced, this is a Dry Powder Inhaler (DPI).
- Where patients are using several classes of inhalers and poor inhaler technique is identified with one device, a DPI class is prioritised if the patient is able to use these safely. Similarly, future and additional inhalers would ideally also be DPIs.
- During all respiratory reviews, prescribers recommend low carbon alternatives to patients currently using pMDIs where patients are able to use these safely.
- Taking all opportunities, including respiratory reviews, to optimise inhaler technique which may improve drug delivery/lung deposition.
- Supporting patients to reduce hoarding and use up existing medication in the first instance.



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- The dissemination of information that some devices can be reused, and the canister changed, and that prescribers encourage patients to ask their pharmacists about safe inhaler disposal.

Furthermore, the Primary Care Respiratory Society (PCRS) *Greener Healthcare Initiative and White Paper (Greener Respiratory Healthcare That is Kinder to the Environment 2020)* sets out to promote the practical action that can help to reduce the environmental impact of respiratory healthcare including highlighting the importance of inhaler use and recycling.

The paper highlights that:

“Patients should be informed of whether safe disposal or recycling schemes are available for their inhaler, the difference between them and how to access them. They should also be educated on the importance of ensuring their inhalers are fully empty before submitting them for recycling. The role of community pharmacies in education and monitoring of patients should be supported. Community pharmacists are ideally placed to check support patients to manage their condition in terms of recognising triggers, checking patient inhaler technique, providing education on the importance of preventer medication use and monitoring the number and frequency of reliever inhalers used.”

There are a number of schemes which have been introduced to recycle inhalers. In February 2021 Chiesi Limited had launched a unique pilot scheme in Leicestershire to easily dispose of and recycle inhalers through the post. The scheme is called **Take AIR (Action for Inhaler Recycling)** and is supported by the University Hospitals of Leicester NHS Trust and Leicestershire and Rutland Local Pharmaceutical Committee. The scheme will run for 12 months and involves safely and effectively recycling empty, unwanted, or expired inhalers through the post. The scheme can be used for any inhaler – any brand and any type.

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After the twelve-month period, the scheme will be measured for effectiveness and how it can best be rolled out in other areas. Further details of the scheme can be found on the page [here](#).

So how can we consider the environmental factors when choosing an appropriate inhaler for a patient? Read Factsheet 40 Greener Choice part 2 to learn more.

References and further reading:

- British Thoracic Society [BTS] (2020) The environment and lung health. Available from: <https://www.brit-thoracic.org.uk/document-library/governance-and-policy-documents/position-statements/environment-and-lung-health-position-statement-2019/>.
- British Thoracic Society/Scottish Intercollegiate Guidelines Network [BTS/SIGN] (2019) British guideline on the management of asthma. Available from: <https://www.brit-thoracic.org.uk/standards-of-care/guidelines/btssign-british-guideline-on-the-management-of-asthma/>
- Global initiative for chronic obstructive lung disease [GOLD] (2020) Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease Available from: <https://goldcopd.org/gold-reports/>
- Janson C, Henderson R, Löfdahl M, et al (2020) Carbon footprint impact of the choice of inhalers for asthma and COPD Thorax 2020;75:82–84.
- Macdonald G, (2020) 'Respiratory Chat' delivered 3 August 2020
- NHS England (2020) Update to the GP contract agreement 2020/21 - 2023/24 Available from <https://www.england.nhs.uk/wp-content/uploads/2020/03/update-to-the-gp-contract-agreement-v2-updated.pdf>
- Usmani O, Capstick T, Saleem A, Scullion J. (2020) Choosing an appropriate inhaler device for the treatment of adults with asthma or COPD Available from: www.guidelines.co.uk/respiratory/inhaler-choice-guideline/455503.article
- Primary Care Respiratory Society (PCRS) Greener Healthcare Initiative and White Paper (Greener Respiratory Healthcare That is Kinder to the Environment 2020), Available from: <https://www.pcrs-uk.org/sites/pcrs-uk.org/files/White-Paper-Greener-Respiratory-Healthcare-20201118.pdf>