

ENVIRONMENTAL IMPACT OF INHALERS

Your inhaler can have a big impact on your carbon footprint. The most commonly used inhaler in the UK, Ventolin Evohaler, has a carbon footprint of 28kg per inhaler. That's the same as driving 175miles (or from Liverpool to Newcastle upon Tyne) in a small car. Dry powder inhalers on the other hand typically have a carbon footprint of less than 1kg.

Ventolin Evohaler
(MDI) (100 2-puff
doses)



175 miles – Liverpool to Newcastle-upon-Tyne



Ventolin
Accuhaler (DPI)
(60 1-puff doses)



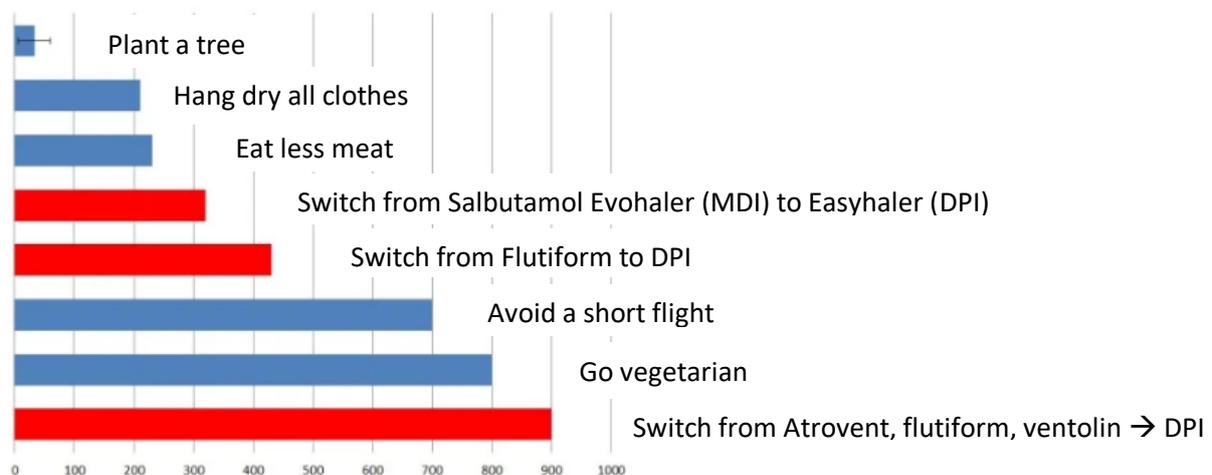
4 miles – Liverpool to... another bit of Liverpool



This is because Pressurised metered dose inhalers (pMDI), like Ventolin Evohaler, and Breath Actuated Inhalers (BAIs) contain propellants that are powerful greenhouse gases and which contribute to global warming.

Dry powder inhalers (DPI) and Soft mist inhalers (SMI) (like the RespiMat device) do not use these propellants and so have substantially lower global warming potential.

Changing the type of inhaler you use could reduce your carbon footprint as much as becoming vegetarian:



Will a dry powder inhaler be suitable for me?

For the majority of patients dry powder inhalers are an effective alternative to metered dose inhalers. They do rely on a hard, fast, deep breath to disperse tiny particles of the medicine through your airways though, and not all patients can use them effectively. Young children, some elderly patients and those with a very weak breath in may struggle. The practice nurses or GPs will be able to advise you further on whether you can use one safely.

This chart summarises some of the differences between MDIs and DPIs:

Type of inhaler	Metered Dose Inhaler	Dry Powder Inhaler
What is the climate change impact?	Very large – typically 20kg of CO ₂ per inhaler, but it can be more than twice this amount. 20kg of CO ₂ is similar to driving about 125 miles in a Ford Fiesta.	Small – typically equivalent to 1kg of CO ₂ per inhaler.
Do I need to breathe in and press button at the same time?	Usually yes, although some “breath-actuated” devices don’t require you to press a button.	No, the dose can be prepared before breathing in through the inhaler.
What sort of breath in should I do?	Slow and deep breath.	Strong deep breath. Some patients may not be able to breathe in hard enough to use these inhalers.
How much do they cost?	Highly variable depending on the type of inhaler, but typically between £2 and £60 per inhaler.	
Can it be used with a spacer?	Yes, nearly all can be used with a spacer.	No.
Does it have a dose counter?	Many do, but most reliever inhalers and steroid inhalers don’t, so you need to keep track of how many doses you’ve used.	All dry powder inhalers either come with a dose counter, or sometimes you put a capsule in each time you use it.

WASTE AND RECYCLING

Used inhalers should not be placed in general waste.

- Approximately 73 million inhalers are used in the UK every year
- Landfill disposal of inhalers is harmful to the environment both in material waste and in greenhouse gas emissions, as the residual gas from canisters is released into the atmosphere
- If every inhaler-user in the UK returned all their inhalers for one year, this could save 512,330 tonnes of CO₂ – the same as VW Golf car being driven around the world 88,606 times

They can be recycled at certain pharmacies and hospitals
(see <https://pharmacyfinder.completethecycle.eu/index.html>)

Rowlands and **Asda** pharmacies offer this service in our area. Please drop off your used inhalers there.

For more information see: <https://greeninhaler.org/> (The images in this leaflet have been edited from that source)