

Green Inhalers for Asthma & COPD



A Summary for Healthcare Professionals



Types of Inhaler Devices:

- Dry Powder Inhalers use the force of patient's lungs to deliver the medication this is a green option
- Soft Mist Inhalers are powered by a spring to deliver an aerosol mist this is a green option
- Metered Dose Inhalers use HFA propellants to deliver medication to a patient's lungs - this is greenhouse gas intensive and contributes to global warming

Carbon Footprint of Inhaler Devices:

- Depending on the type, one aerosol inhaler (Metered Dose Inhaler or MDI) has the same carbon footprint of driving up to 170km in a gas car!
- Consider choosing a green alternative, such as Dry Powder Inhalers (DPIs), Soft Mist Inhalers (SMIs), or a MDI with lower carbon footprint (such as Bricanyl)



Key Considerations for Healthcare Professionals:

- Does the patient need the inhaler? Has a diagnosis of COPD or asthma been confirmed?
- Has controller medication been optimized so that PRN use is minimized?
- Is there any reason why DPIs cannot be prioritized over MDIs?

Note: DPIs may not be appropriate due muscle weakness, physical limitations, frailty, or cognitive impairment, as these may result in the inability to generate the inspiratory force required to achieve adequate pulmonary drug delivery.

References:

- cascadescanada.ca/resources/all-topics/inhalers/
- <u>choosingwiselycanada.org/recommendation/respiratory-medicine/</u>
- tandfonline.com/doi/full/10.1080/24745332.2023.2254283