

EARTH DAY 2021



What is one thing I can do today to fight climate change?

Did you know that there's a huge difference in the climate impact of inhalers?

The hydrofluorocarbon (HFC) propellant in metered-dose inhalers (MDI) is a potent greenhouse gas: 100 doses from an MDI is equivalent to a 290 km journey by car.

Fortunately, we have more sustainable alternatives: the carbon footprint of dry powder inhalers (DPI) is 30 times smaller than MDIs.

Consider offering a DPI alternative at your patient's next Rx renewal.

You can cut greenhouse gases from inhalers by 97% simply by switching from metered-dose to dry powder inhalers



Environmentally Sustainable Opportunities for Health Systems

Metered dose inhalers (MDIs)

MDIs are common medical devices used to deliver inhaled medication. They are typically used in the treatment of asthma and chronic obstructive pulmonary disorder.

MDIs use HFC propellants to deliver medication.¹

HFCs are artificial fluorinated gases that act as potent greenhouse gases (GHGs) when released into the atmosphere. These gases are widely used in industry, including the healthcare sector.

Hydrofluorocarbons (HFCs)

Common HFC propellants used in MDIs include:

HFC 134a	HFC 227ea**
370 GWP*	3350 GWP*

Global Warming Potential (GWP)

Global Warming Potential (GWP) is a standardized metric used to compare the global warming impact of different types of GHGs over a 100-year period. GWP allows us to measure the amount of energy a given gas will absorb, and to estimate the associated amount of carbon dioxide (CO₂) that would be needed to create the same effect.

HFCs are "high-GWP gases" as they trap substantially more heat than CO₂ per unit mass.

100 MDI EQUIVALENT TO 290 km car journey*

Health care systems can curb MDI-related HFC emissions by implementing the following strategies

1 ENCOURAGING MDI ALTERNATIVES

The carbon footprint of MDIs is much higher than that of other inhaler devices such as dry powder inhalers (DPIs), nebulizers, and aqueous mist inhalers. Opting for these alternative treatment options, when appropriate, can help reduce the carbon footprint of inhalers (though all of these options have environmental impacts).

CARBON FOOTPRINTS

Seretide Evohaler MDI	Ventolin Accuhaler DPI	Respimat Soft Mist Inhaler	Electric Nebulizer
234 kg CO ₂ e* ¹	7.5 kg CO ₂ e* ¹	0.08 kg CO ₂ e* ¹	0.05 kg CO ₂ e* ¹

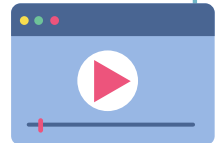
*CO₂e = Carbon Dioxide equivalent

WHEN MDIs ARE NECESSARY...

Choose **smaller volume** relievers. Small volume relievers emit less propellant at each use, and therefore, have lower carbon footprints than large volume relievers.²

See the infographic

Watch the video



Get the poster

Inhalers shaped like this ...

...contain a potent greenhouse gas that contributes to climate change.

Ask about whether switching to a different type of inhaler is right for you.

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