

# CONTINUITY OF CARE IN INHALER MANAGEMENT

## Sustainability Actions from Hospital to Home



### Climate change is affecting the health of Canadians.<sup>1</sup>

Among other health impacts, critical climate events like forest fires, heat domes and floods cause worsening lung disease and cardiovascular disease.



At the same time, healthcare itself can be **carbon intensive**.

**Almost 5%** of Canada's greenhouse gas emissions are related to the delivery of healthcare, which is on par with the aviation industry.<sup>2</sup>

This means that healthcare contributes to climate change, climate change threatens human health, and the resulting health problems increase demand for health care, which then produces even more emissions. It's a vicious cycle!

## THE ENVIRONMENTAL IMPACTS OF INHALERS

About a quarter of healthcare emissions are related to medications, both prescription and over the counter.<sup>2</sup> **Inhalers**, in particular are a significant source of emissions.

Inhalers are medications used for the treatment of lung diseases such as asthma and COPD.

**Metered-dose inhalers** (MDIs) are the best known and most used inhaler devices. They are shaped like the letter L and are usually blue. They contain **HFA**, a powerful **greenhouse gas** that pushes the medication from the cannister with each dose. Each metered-dose inhaler has a carbon footprint equivalent to driving between **38.8 to 139 km** in a standard vehicle.<sup>3</sup>

In addition to the gases emitted when inhalers are used, waste is also produced when the inhalers are disposed of.



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# HOW CAN YOU REDUCE THE CARBON FOOTPRINT OF INHALERS, IN AND OUTSIDE OF THE HOSPITAL?

 <b>01</b> <b>WHEN YOU GO IN TO THE HOSPITAL</b>	<p>If you are coming in for a planned admission – for instance, elective joint replacement surgery – think about bringing your own inhaler from home.</p> <p>This is particularly important if the hospital doesn't carry your exact kind of inhaler device; it will save you from having to learn a whole new inhaler device for only a few days.</p>
 <b>02</b> <b>IN YOUR ROOM</b>	<p>If your inhaler is kept in your hospital room, make sure you leave it in an easy to find location, such as your bedside table.</p> <p>Avoid keeping your inhaler in the bathroom, in a drawer, in your bed covers or among your belongings; this will make it harder for your nurse/doctor to find it in an emergency.</p> <p>Check to make sure your inhaler has a label with your name on it. If the inhaler get misplaced, your healthcare team will be able to safely return it to you.</p>
 <b>03</b> <b>WHEN YOU MOVE ROOMS</b>	<p>When you move between wards, such as moving from the emergency department to the medical ward, or moving from surgical recovery to the surgical ward, ask about whether your inhalers are moving with you if you are able.</p> <p>Inhalers lost during transfers waste hundreds of tons of GHG emissions every year.</p>
 <b>04</b> <b>WHEN YOU USE YOUR INHALER</b>	<p>Ask your doctor, pharmacist, nurse, or respiratory therapist to teach you how to use your inhaler and ask them to watch you use your inhaler and give you feedback.</p> <p>Ask if you need to use a spacer device. Up to 90% of people don't have the right technique to use their inhaler – often without knowing it.*</p> <p>Making sure you have good technique will help you get the most out of your medication and reduce your likelihood of coming back to hospital for breathing difficulties.</p>
 <b>05</b> <b>WHEN YOU ARE GETTING READY FOR DISCHARGE</b>	<p>Ask your healthcare provider if:</p> <ul style="list-style-type: none"><li>• You have been tested to confirm you have asthma or COPD.</li><li>• A lower carbon inhaler option may be right for you.</li><li>• You should be taking your hospital inhaler and/or the spacer device home with you.</li></ul>
 <b>06</b> <b>AFTER YOU GO HOME</b>	<p>Ask your community pharmacist, primary care provider, or lung specialist to look at you using your inhaler every so often. Having a refresher on technique is an important way to make sure you are getting the most use out of your inhaler doses.</p> <p>Bring your empty inhaler back to your community pharmacy for disposal.</p>

To learn more about inhalers and climate change, look up the CASCADES website: [cascadescanada.ca/resources/inhalers/](https://cascadescanada.ca/resources/inhalers/)

## REFERENCES

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