

# PHARMACY TECHNICIANS FIGHT CLIMATE CHANGE



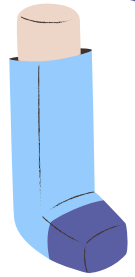
Each metered-dose inhaler (MDI) = carbon footprint equivalent to driving up to **139km** by car (1)

Island Health uses 2,930 inhalers monthly = carbon footprint of driving around the circumference of the earth **4.5 times** (2)

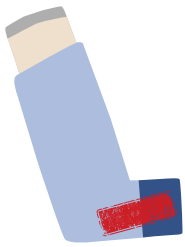
Inhaler loss/waste significantly increases carbon footprint without adding to patient care.

Up to **80%** of patients have 1+ identical inhalers dispensed per admission (3)

Up to **98%** of doses per inhaler are wasted (4)



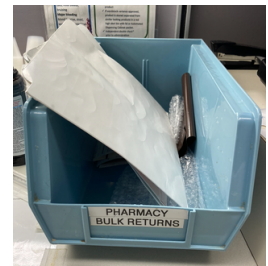
## WHAT I CAN DO TODAY



If the tamper seal is intact, disinfect inhaler with wipe as per infection control recommendations and return to inventory/stock



During BPMH, write inhaler compliance comments (eg frequency, last use) plus any other information in the supplemental note. This will help the prescriber or pharmacist decide whether it is needed while in hospital.



Encourage patients and providers to return used inhalers to pharmacy for safe disposal

**The Critical Air Project**

**WANT TO LEARN MORE?  
WANT TO GET INVOLVED?**

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1. Stoynova V, Culley C. 2022. Detailed Inhaler Carbon Footprint Chart. Retrieved from <https://cascadescanada.ca/resources/tools-templates/#inhalers>  
2. Deng M, Culley CL, Stoynova V. An Assessment of Inhaler Workflow and Disposal Practices Among Nursing Staff. 2022. Unpublished.  
3. Sakaan S, Ulrich D, Luo J, Funch CK, Self TH. Inhaler Use in Hospitalised Patients with Chronic Obstructive Pulmonary Disease or Asthma: Assessment of Waste Doses. Hosp Pharm. 2015;50(5):386-390.  
4. Aeng ESY, McDougal KC, Allegretto-Smith EM, Tejani AM. Hidden Costs of Multiple-Dose Products: Quantifying Ipratropium Inhaler Wastage in the Hospital Setting. Can J Hosp Pharm. 2021;74(2):117-121.