**Partnering to Decarbonize our Healthcare: MDI Deprescribing**



To our community pharmacy colleagues:

We invite you to help us reduce our carbon footprint by switching eligible patients from metered dose inhalers (MDI) to dry powder inhalers (DPI) or soft mist inhalers (SMIs).

In honour of Earth Month, the South East Toronto Family Health Team (SETFHT) kicked-started an initiative to reduce our MDI prescribing. We also see this as a great opportunity for community pharmacy involvement. Each time a patient refills a MDI, there is an opportunity for you to connect with prescribers to educate them about the environmental impact of MDIs and to suggest a switch to an appropriate alternate. For ODB patients, this may work well as a Pharmaceutical Opinion.

See below for quick FAQs regarding the initiative. We have also attached several resources here (including a templated Pharmaceutical Opinion).

We look forward to working collectively to make our healthcare more sustainable.

If you have any questions or feedback, feel free to contact us at jessica.visentin@setfht.on.ca.

Regards,

Dr. Kit Shan Lee, Dr. Sam Tirkos and Jessica Visentin (SETFHT pharmacist)

**Who are we?**

SETFHT is a clinic comprising of a group of 23 family doctors, over 20 interprofessional healthcare providers and many medical residents and healthcare learners. We have two sites – one at 840 Coxwell Ave. and another at 1871 Danforth Ave.

**Why should we deprescribe metered dose inhalers (MDIs)?**

1. MDIs use a propellant that contain a potent greenhouse gas and contributes to climate change

 ***100 doses MDI = 290 km car ride***

1. There are alternatives to MDI that offer similar, if not more effective, treatment in a medium that has a lower carbon footprint (such as dry powdered inhalers (DPIs) or soft mist inhalers (SMIs)
2. Current GINA guidelines recommend combination formeterol-budesonide as both reliever and controller medication for asthma treatment (ie Symbicort, which comes as a turbuhaler)
3. Switching one MDI to DPI for one year is equivalent to the carbon reduction found if one person becoming vegetarian

**Who cannot be switched?**

* 1. children<12
	2. those with poor respiratory effort
	3. those without insurance plans as MDIs may be more affordable
	4. who may not want to switch

**My patient still needs an MDI, is there anything else we can do to reduce our carbon footprint?**

For those who cannot use alternative to MDI – please advise the following

1. Use a spacer to reduce wasted doses or have them review technique with respiratory educator
2. Try to maintain dose count as to be aware when medication is empty

**How about disposal?**

For all inhalers, please encourage patients to return to pharmacy for disposal and/or recycling. MDIs if not properly disposed of (incinerated) may also emit HFAs that will contribute to global warming.

**What resources are available?**

1. Template of a Pharmaceutical Opinion to send to prescribers (attached)
2. Ontario Lung Association Inhaler Chart (attached)
3. Switching Common Inhalers Infographic (attached)
4. For more information on environmental impact of inhalers: <https://www.sustainablehealthsystems.ca/inhalers>

**Pharmaceutical Opinion Template**

Dear Dr. \_\_\_\_\_\_\_ *{prescriber name}*,

RE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *{patient name}* DOB: \_\_\_\_\_\_\_\_\_\_\_\_

This patient requested a refill of their \_\_\_\_\_\_\_ *{inhaler name}*. We have filled this prescription for the time being, but would like to suggest a switch to \_\_\_\_\_\_\_\_\_\_\_\_ *{new inhaler name}* in advance of future refills.

This is in an effort to opt for a more environmentally sustainable option, as MDIs use a propellant that contain a potent greenhouse gas and contributes to climate change. **100 doses MDI = 290 km car ride**

For more details, see: <https://www.sustainablehealthsystems.ca/inhalers>

*{if suggesting a switch from Ventolin to Symbicort for asthma patient, include the following}*

In addition, the latest GINA guidelines recommend combination formeterol-budesonide (Symbicort) first line as both reliever and controller medication for asthma treatment.

*{choose one of the following}*

Please note, we have discussed this with the patient and they are open to switching inhalers.

*OR*

Please note, we have not yet had a chance to discuss this with the patient. If you have the opportunity, we would encourage you to do so.

Regards,

Pharmacy Team