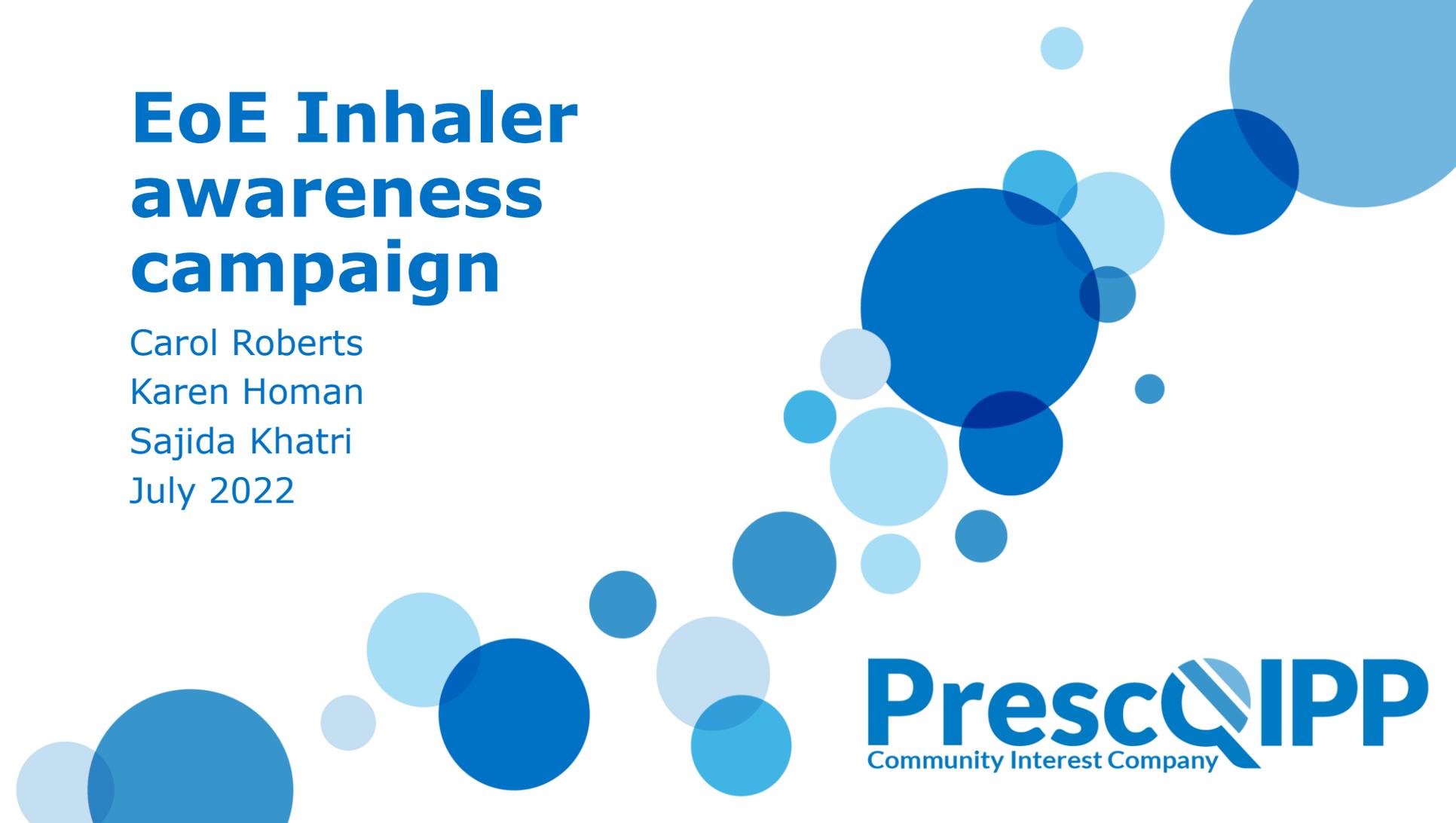


EoE Inhaler awareness campaign

Carol Roberts
Karen Homan
Sajida Khatri
July 2022



PrescQIPP
Community Interest Company

Housekeeping

- The session is being recorded
- All attendees are muted to keep the background noise level down
- If you want to speak, we can unmute you. Use the hands up function to let us know
- Please use the question panel on your GoTo Webinar sidebar to ask any questions you may have during the presentation
- There will be Q&A sessions and polls throughout this session
- Please do answer the questions in the survey at the end of the session

PrescQIPP overview

- Community Interest Company (CIC) “**not for profit**” - Independent and solely **funded by the NHS for the NHS**
- Started life within NHS (2010) SHA Medicines Efficiency & Productivity QIPP Programme now cover >95% commissioning organisations
- ‘Information to implementation’ support for medicines optimisation projects
- Access all our evidence-based resources at www.prescqipp.info

Our aims

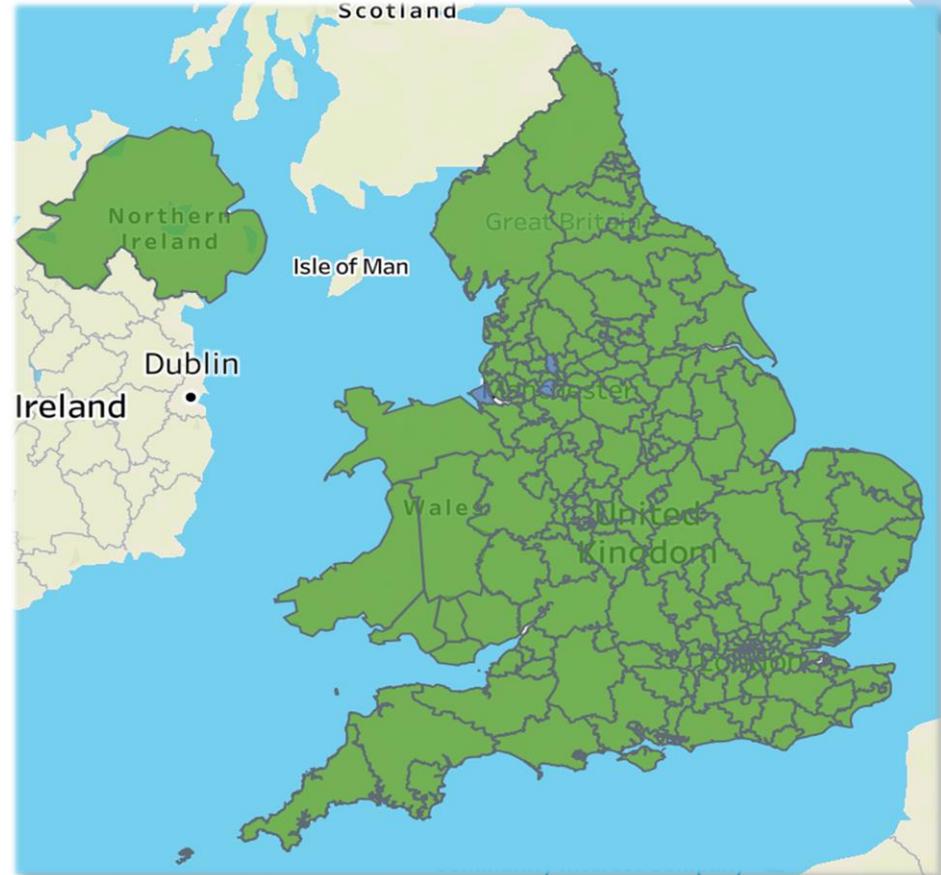
- To **improve patient outcomes** and manage medicines budgets effectively
- **Reduce duplication** and support collaboration
- Highlight and **spread prescribing good practice and innovation**

Quality assured

- All of our resources are produced using a transparent and **robust quality assurance** process.
- Wide stakeholder engagement
- **NICE endorsement** for some resources
- Skills for care accredited provider

Who subscribes to PrescQIPP?

- All English ICBs
- Welsh Health Boards
- Northern Ireland
- 50% Scottish Health Boards
- NHS England Health & Justice, Jersey, Isle of Man
- Have grown to cover >95% of the UK commissioners



PrescQIPP resources

- Clinical resources which include bulletins, briefings, data, audit tools, patient information, clinical system searches
- Non clinical resources covering system changes or implementation of national strategy
- Prescribing data analytics/benchmarking
- Training courses such as leadership, clinical systems
- E-learning courses- available via our e-learning store
- Face to face training courses
- Numerous virtual professional networks

Agenda

- Background
- EoE inhaler awareness campaign
- Inhaler technique videos and leaflets
- 3 key themes:
 - Environmentally friendly inhaler choices
 - Your salbutamol inhaler is changing to a more environmentally friendly version Salamol
 - What should I do if I need to use my reliever inhaler often for my asthma?

Poll

What is your area of practice?

- Community pharmacy
- Practice or PCN pharmacist
- Practice nurse
- GP
- Medicines optimisation team member
- Other

Background

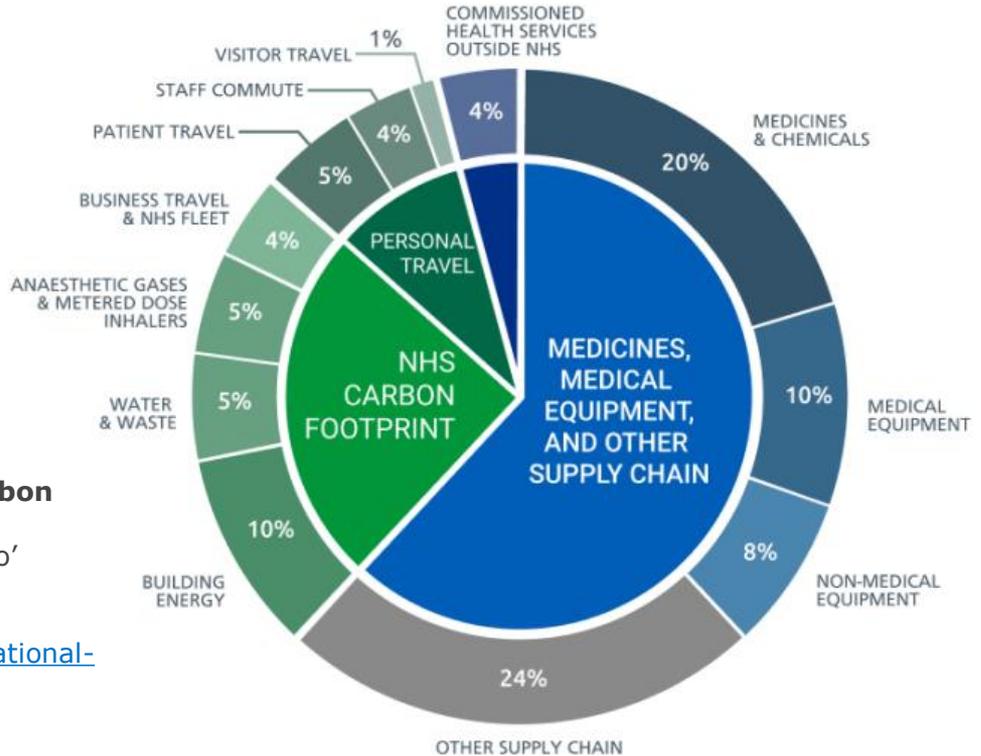
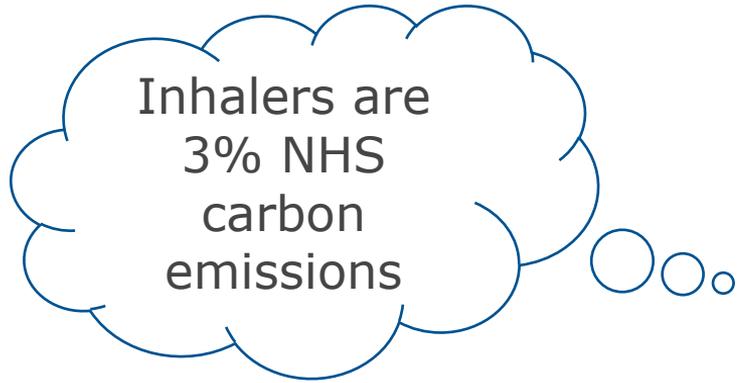


PrescQIPP
Community Interest Company

Global warming and climate change



NHS carbon emissions



Source of carbon emissions by proportion of NHS Carbon Footprint Plus

NHS England and NHS Improvement. Delivering a 'Net Zero' National Health Service. Published October 2020.

<https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf>

Quiz

1. Which of these inhalers has a low carbon footprint?
 - a) Dry powder inhalers (DPIs)
 - b) Breath-actuated metered dose inhalers (BA-MDI)
 - c) Soft mist inhalers (SMIs)
 - d) CFC-free MDIs

Quiz answer

1. Which of these inhalers has a low carbon footprint?
 - a) Dry powder inhalers (DPIs)
 - b) Breath-actuated metered dose inhalers (BA-MDI)
 - c) Soft mist inhalers (SMIs)
 - d) CFC-free MDIs

Answer: a, c

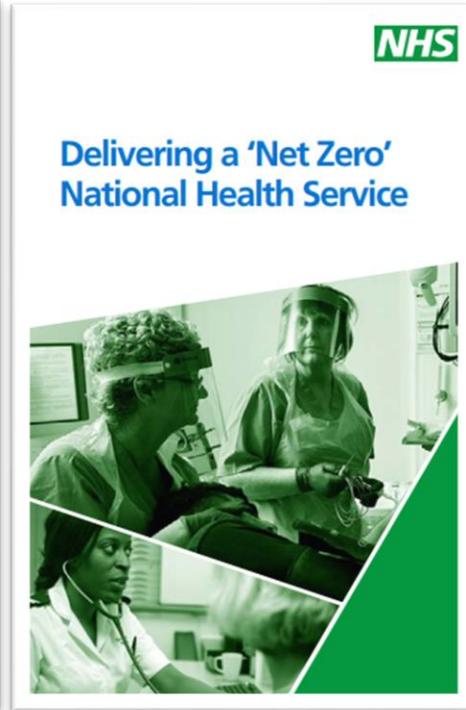
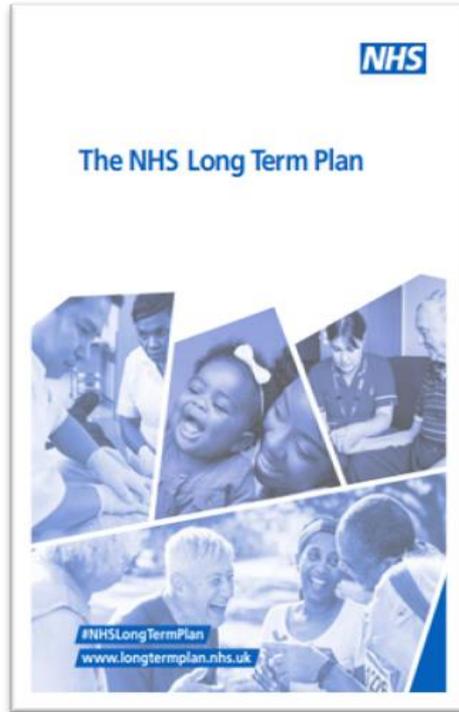
What's the problem with MDIs? (1)

- Propellant
- CFCs, ozone depleting, phased out in UK by 1996
- 'CFC-free' inhalers containing hydrofluorocarbons (HFCs)
- HFCs are powerful greenhouse gases which contribute to global warming
- Air pollution is harmful to lung health
- Breath actuated MDIs
- DPIs and SMIs - no HFCs

What's the problem with MDIs? (2)

- Two propellants in UK inhalers (AR5 value)
 - HFA134a (100-year GWP 1300)
 - HFA-227ea (100-year GWP 3350)
 - Carbon dioxide (100-year GWP is 1)
- Large vs small volume MDIs (ethanol)
- 2025 low carbon footprint propellants, HFC-152a

NHS response to climate change



Optimise
prescribing

Substitute
high carbon
for low
carbon
alternatives

Improve
production
and waste
processes

[Home](#) > [Our resources](#) > [Bulletins](#) > Bulletin 295: Inhaler carbon footprint

<https://www.prescqipp.info/our-resources/bulletins/bulletin-295-inhaler-carbon-footprint/>

Bulletin 295: Inhaler carbon footprint

Respiratory

Medicines optimisation

Bulletin

Respiratory System

This resource supports the NHS objective for lowering the inhaler carbon footprint.

The bulletin, briefing and attachment 1 have been endorsed by NHSEI Inhaler Working Group.

Inhaler carbon emissions data for each inhaler are provided.

The data tool provides comparative inhaler prescribing data at all levels. The inhaler switch tool allows users to view the impact of any inhaler switches on the inhaler carbon footprint and costs.

There will be monthly data updates of the visual data pack for a total of 12 months.

For subscribers, 2 new [scorecard indicators](#) will be available from December 2021 (updated monthly): Salbutamol carbon footprint per inhaler (gCO₂e); pMDI (excluding salbutamol) to DPI & SMI (excluding salbutamol) as a % of total items (excluding salbutamol).

A full download pack of bulletins and attachments are also available.

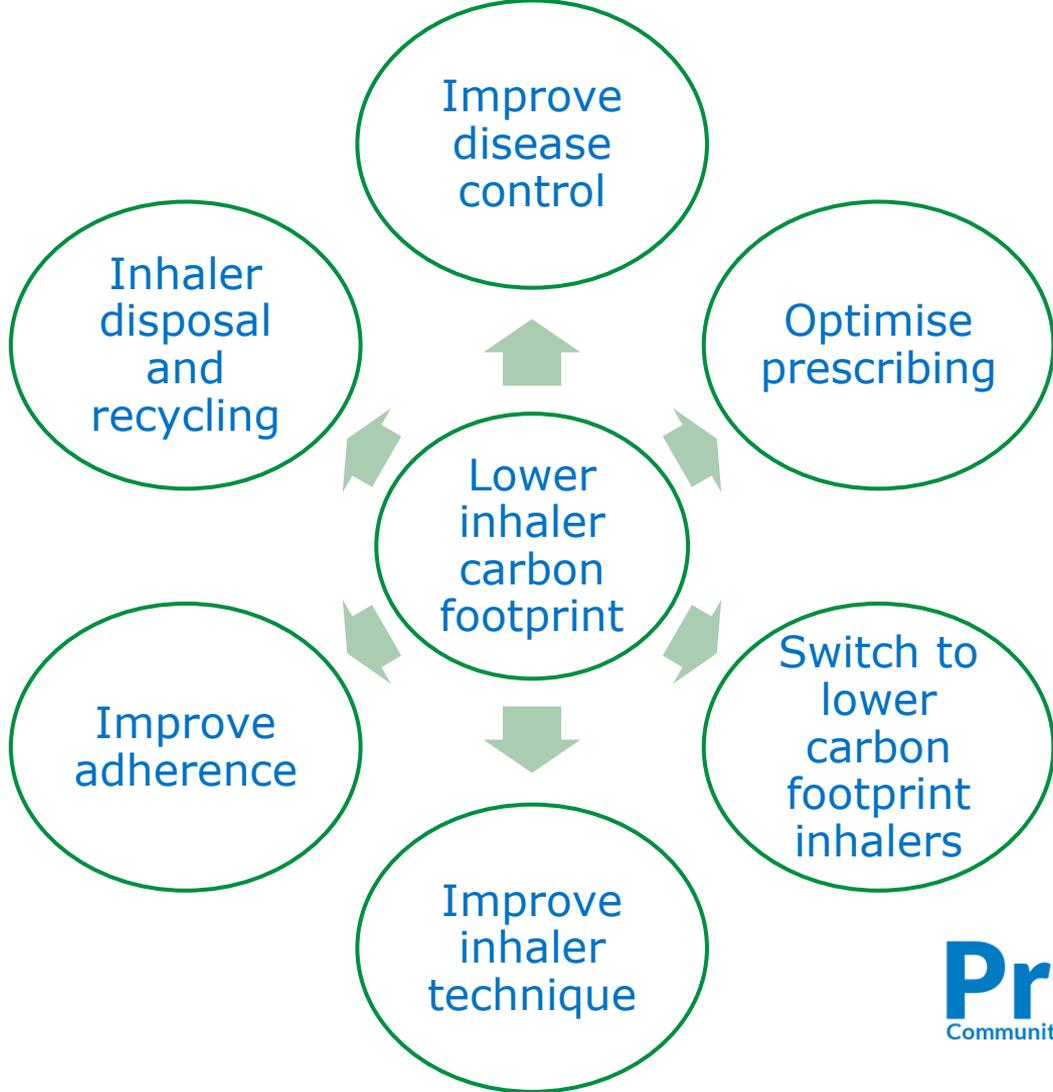
For queries or comments on these resources, please visit <https://help.prescqipp.info/>

Downloads



Attachments





Investment and Impact Fund (IIF)

Indicator	Description
ES-01	% MDI (non-salbutamol) age ≥ 12 years old (44% LT – 35% UT)
ES-02	Salbutamol inhaler mean carbon emissions (kg CO ₂ e) (22.1kg LT – 18.0kg UT)
RESP-01	% patients on QOF Asthma Register regularly prescribed ≥ 3 ICS last 12 months (71% LT – 90% UT)
RESP-02	% patients on QOF Asthma Register who received ≥ 6 SABAs last 12 months



LOOK

The NHS has committed to reducing the carbon impact of inhalers used in the treatment of respiratory conditions. Dry powder inhalers (DPIs)/Soft Mist Inhalers (SMIs) do not contain HFCs and so have a lower carbon footprint than pressurised metered dose inhalers (pMDIs) and breath actuated inhalers (BAIs).

1. Select ICS: All
2. Select Commissioner: All
3. Select PCN (or leave to keep all practices): All
4. Select Practice (free text search on code or name):

Across England, Wales & Scotland, the average % pMDI to DPI/SMI 55.79%. The 21/22 PCN DES lower threshold is 53% and upper threshold is 44%.



REVIEW

- Identify and audit patients who are suitable for a switch to a lower carbon footprint inhaler alternative.
- Select patients for review and send invitation letters.
- Consider whether inhaler treatment needs stepping down, stepping up or is to remain the same, to get or maintain good control of asthma or COPD before considering a switch to a lower carbon footprint inhaler alternative.
- Consider lower carbon footprint inhaler switches which have cost savings or are cost neutral before those which have a cost pressure. Inhaler switches should be tailored to the individual.



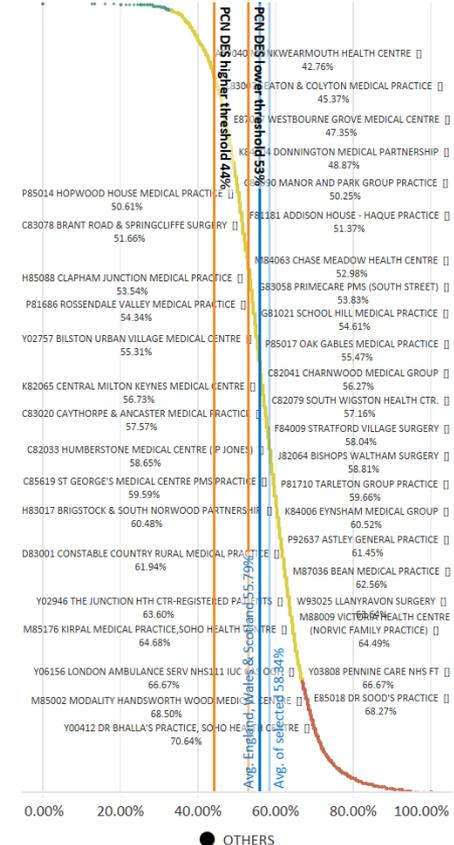
DO

- Use the NICE decision aid on inhalers for asthma <https://bit.ly/2X7qQVI> with patients to help them consider how important a low carbon alternative is to them. Check and instruct patients on inhaler technique.
- Switch to combination inhalers if clinically appropriate.
- Encourage patients to reduce inhaler waste by not over-ordering their inhalers, looking after their inhalers, and returning used or unwanted inhalers to their pharmacy for environmentally safe disposal (except spacers currently).

Inhaler carbon footprint

(Figures in this briefing represent average latest 3 months data; Dec21-Feb22)

Chart to show achievement across practices % pMDI to DPI/SMI





LOOK

- Poor asthma control is associated with excessive prescribing of short-acting beta-2 agonist (SABA or reliever) inhalers.
- Prescription or collection of three or more SABA inhalers per year is associated with poor asthma control, approximately twice the number of exacerbations compared with low SABA users and increased asthma-related healthcare utilisation (we have used 6 or more in the indicator to cover patients that may have spare inhalers e.g. at school).

1. Select ICS: Multiple values
2. Select Commissioner: All
3. Select PCN, or leave to keep all practices: All
4. Select Practice (free text search on code or name):

In your organisation, **133880** patients were prescribed six or more SABA inhalers in the 12 month period Feb21-Jan22.

- Asthma patients should be regularly prescribed an inhaled corticosteroid (ICS or preventer inhaler), where clinically indicated, as this improves disease control and enables reductions in unnecessary SABA inhaler prescribing.

In your organisation, **135804** patients were prescribed three or fewer ICS inhalers in the 12 month period Feb21-Jan22.



REVIEW

- Undertake an audit of patients receiving six or more SABA inhalers in the last 12 months.
- Undertake an audit of patients receiving three or less ICS inhalers in the last 12 months.

DO

- Explain to patients that getting control of their asthma by regularly using an ICS inhaler (preventer) can improve their health and reduce their reliance on SABA (reliever) inhalers.
- Ensure that patients understand their asthma and their treatment plan by asking them to explain the key points back to you.
- Check inhaler technique and provide instruction on inhaler use through face to face instruction, use of inhaler technique videos, patient instruction leaflets or referral to a community pharmacist for a new medicine service where applicable.
- Encourage patients to return empty or no longer needed inhalers to their community pharmacy for environmentally safe disposal. Where inhaler recycling is available, encourage patients to take part in these recycling schemes.
- Refer to implementation support resources available at <https://www.prescqipp.info/our-resources/bulletins/bulletin-295-inhaler-carbon-footprint/>



Chart to show number of patients across practices excluding <5 patients



3 key campaign themes

- Environmentally friendly inhaler choices
- Your salbutamol inhaler is changing to a more environmentally friendly version Salamol
- What should I do if I need to use my reliever inhaler often for my asthma?

EoE Inhaler awareness campaign materials

- Inhaler videos with carbon footprint symbols
- Patient leaflets
- Inhaler comparison tool
- Animated videos and videos coming soon
- Branding



Reducing the inhaler carbon footprint

PrescQIPP inhaler technique videos



The NHS wants to use more environmentally friendly inhalers which have a low carbon footprint where possible

Metered dose inhalers have a high carbon footprint, which is shown using this symbol 

It is important you do not stop using your inhalers

Ask your doctor, nurse or pharmacist which low carbon footprint inhalers might be suitable for you

Improve inhaler technique



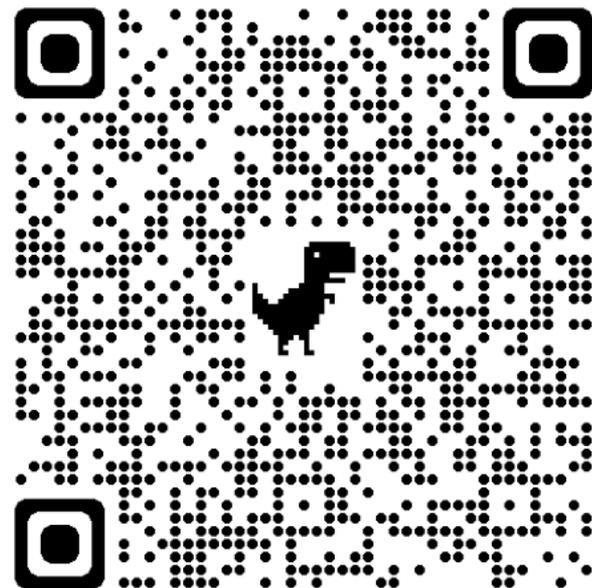
NHS

**How to use a
Metered Dose Inhaler**

high CO₂

Environmentally friendly inhaler choices

- Patient leaflet
- Inhaler carbon footprint comparison tool
- Videos – animated and with actors (coming soon)
- <https://www.prescqipp.info/our-resources/bulletins/bulletin-295-inhaler-carbon-footprint/>



Environmentally friendly inhaler choices

key messages

- Gas in your current inhaler is a powerful greenhouse gas.
- Climate change increases air pollution which can worsen lung conditions.
- NHS supports a change to environmentally friendly inhalers if this is the right choice for you.
- Ask your doctor, nurse or pharmacist if there is an environmentally friendly inhaler which might be right for you.



Why choose a more environmentally friendly inhaler?

You use a metered dose inhaler (MDI) for your lung condition. These are the most common type of inhaler used in the UK. MDIs contain a gas (propellant) in a metal canister that you press down into a plastic case to release the medicine into your lungs. Inhalers are a vital part of your treatment. It's really important that you continue to take your inhalers as prescribed, to keep your lungs healthy.

The gas in your current inhaler is a powerful greenhouse gas. This means that when the gas is released, it stays in the air and traps the sun's heat, like glass in a greenhouse. This warms the planet which is a problem for the climate. Climate change increases air pollution which can worsen lung conditions.

Surveys have shown that most patients with inhalers want to try to reduce greenhouse gas emissions from their inhalers. There are many ways to achieve this, including changing the way you use and dispose of your inhalers, or switching to a different more environmentally friendly inhaler.

The NHS supports the change to environmentally friendly inhalers if this is the right choice for you. NHS research has shown that people are willing to change to environmentally friendly inhalers.

Environmentally friendly inhalers which do not contain a greenhouse gas are dry powder inhalers (DPI) or soft mist inhalers (SMIs). Not all patients can use these sorts of inhalers, although many patients find them easier to use. They all come with dose counters, making it easier to keep a track of your medicines. With DPIs you don't need to co-ordinate pressing and breathing in at the same time. Some DPIs have the benefit of being once-daily inhalers that work for 24 hours.

Some MDIs contain a smaller amount of greenhouse gas than other MDIs, making them more environmentally friendly.



Some MDIs contain a powerful greenhouse gas. Other MDIs contain a less powerful greenhouse gas and so are more environmentally friendly.

Ask your doctor, nurse or pharmacist if there is an environmentally friendly inhaler which might be right for you.

Even if your MDI has a high carbon footprint and you are concerned about climate change, it is very important that you continue to use your inhaler to keep your lungs healthy.

There are additional ways you can help yourself and the environment when using inhalers:

- Make sure you use your preventer (treatment) inhaler every day, as this should lessen how much you need to use your reliever inhaler. Look at your inhaler dose counter, if it has one, or think about ways to help you remember to use your inhaler.
- Check that you are using your MDI correctly so that you get all the benefits from using your inhaler. You can read a leaflet or watch a video on how to use your inhaler. [\[Insert link to inhaler videos and leaflets\]](#)
- Follow your asthma action plan, or [self-management](#) plan for COPD, which tells you what to do when your symptoms are getting worse.
- Most inhalers are disposed of before all the doses have been used up. If your inhaler has a dose counter, use that to see when it is empty. If not, make sure you know how many doses your inhaler has when it's new to help you keep track.
- Return your empty or unwanted inhalers to a community pharmacy or dispensary for environmentally safe disposal or recycling. Did you know that inhalers, like other medicines, should not be put in your household waste bin or recycling bin? Even when your metered dose inhaler is empty, it still contains some of the greenhouse gas.



Inhaler carbon footprint comparison tool



Inhaler carbon footprint comparison tool

Your doctor, nurse or pharmacist will use this table to help you choose a more environmentally friendly inhaler that is good for you and the environment.

The NHS supports the change to more an environmentally friendly inhaler if this is the right choice for you. NHS research has shown that people are willing to change to a more environmentally friendly inhaler.

How to use the inhaler carbon footprint table

- Inhalers have been put into alphabetical order by inhaler name in the contents list. There is also a list of inhaler types. These lists are interactive, so when you click on the inhaler brand or type you wish to view, you will automatically jump to that page.
- The table includes photos of the inhalers, a list of their active ingredients, and the type of inhaler.
- The symbol next to the inhaler indicates whether it has a:

Low (green) carbon footprint



Medium (orange) carbon footprint or



High (red) carbon footprint



- Inhalers with a green low carbon footprint are more environmentally friendly.

Using this tool with your doctor, nurse or pharmacist means you can talk about which environmentally friendly inhalers may be suitable for you to consider.

Which inhaler devices are less environmentally friendly?

Metered dose inhalers (MDIs), sometimes called 'pumps' or 'puffers' are less environmentally friendly. They contain a gas (propellant) that is a powerful greenhouse gas which adds to global warming. They have a red high carbon footprint symbol next to them in the table.

Some metered dose inhalers have less of the greenhouse gas in the inhaler. They have an orange medium carbon footprint symbol next to them in the table.

Which inhaler devices are more environmentally friendly?

Dry powder inhalers (DPIs) or soft mist inhalers (SMIs) do not contain greenhouse gases and so have a lower carbon footprint. They are more environmentally friendly and have a green low carbon footprint symbol next to them in the table.

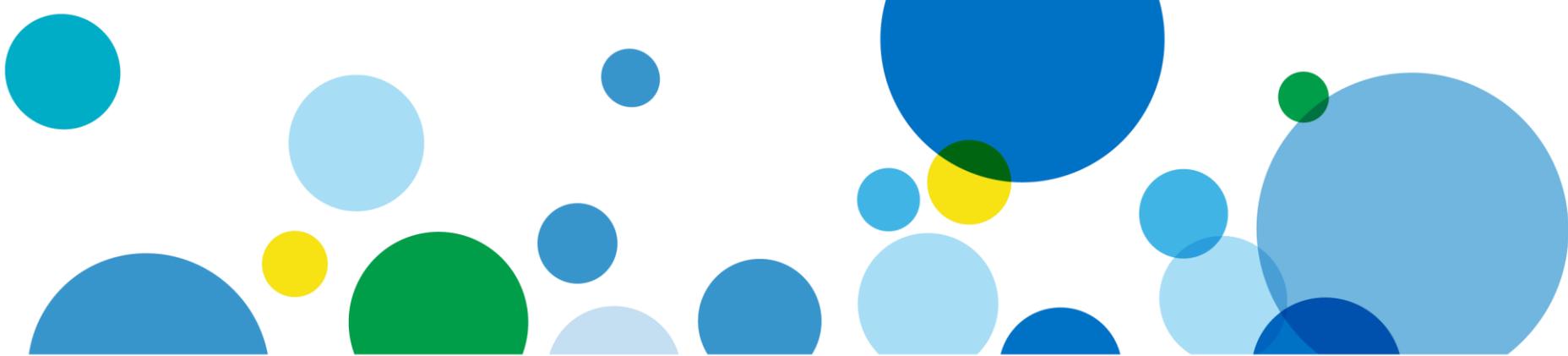


SABA SAMA LABA LAMA ICS ICS+LABA/ ICS+LABA (MART) LABA+LABA ICS+LABA+ LABA

Short-acting beta-2 agonist (SABA)

Inhaler brand name	Inhaler image	Carbon footprint	Active ingredient(s)	Type of inhaler
Airomir® 100 micrograms pMDI		medium CO ₂	Salbutamol	SABA - reliever
Airomir® Autohaler® 100 micrograms BA-pMDI		medium CO ₂	Salbutamol	SABA - reliever
Bricanyl® Turbohaler® 500 micrograms DPI		low CO ₂	Terbutaline	SABA - reliever
Easyhaler® Salbutamol 100 micrograms DPI		low CO ₂	Salbutamol	SABA - reliever
Easyhaler® Salbutamol 200 micrograms DPI		low CO ₂	Salbutamol	SABA - reliever
Salamol® Easi-Breathe® 100 micrograms BA-pMDI		medium CO ₂	Salbutamol	SABA - reliever
Salamol® CFC-Free inhaler 100 micrograms pMDI		medium CO ₂	Salbutamol	SABA - reliever
Salbulin® Novolizer® 100 micrograms DPI		low CO ₂	Salbutamol	SABA - reliever





Discussion point

How can I use the leaflet and/or inhaler carbon footprint comparison tool in my everyday practice?

Type your answers in the question box.

What should I do if I need to use my reliever inhaler often for my asthma? Key messages

- Reliever use three or more days each week is a sign asthma may not be controlled
- Continue to use reliever, but make a routine appointment
- Use your preventer inhaler everyday as instructed

What should I do if I need to use my reliever inhaler often for my asthma?

If you need to use your reliever inhaler for **three or more days each week**, then it may be a sign that your asthma is not well controlled.

Continue to use your reliever inhaler when you need it, and make a routine appointment at the GP surgery, so we can see if there is anything we can do to help you.

What can I also do to help myself?

- Make sure you use your **preventer** (treatment) inhaler every day even if you don't have any symptoms. This should reduce how much you need to use your reliever inhaler.
- Look at your inhaler dose counter, if it has one, or think about ways to help you remember to use your inhaler.
- Check that you are using your inhaler correctly so that you get all the benefits from using your inhaler. You can read a leaflet or watch a video on how to use your inhaler. [\[Insert link to inhaler videos and leaflets\]](#)
- Follow your asthma action plan, which tells you what to do when your asthma symptoms are getting worse.

What is a preventer (treatment) inhaler?

Preventer (treatment) inhalers contain medicines that reduce any swelling or inflammation in your lungs making it easier to breathe.

They shield you from your asthma triggers.

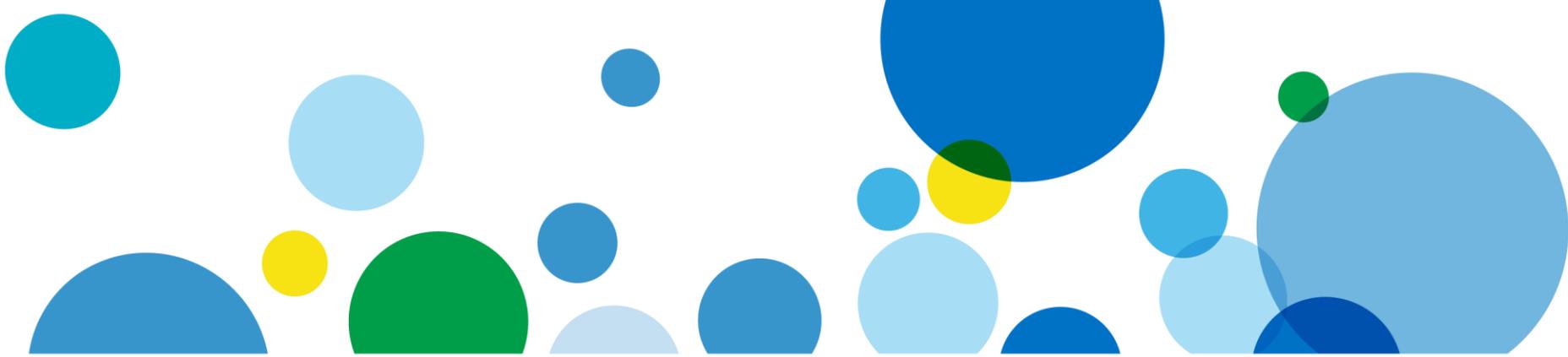
Preventer inhalers should be taken every day as instructed on the label from your pharmacy.

Talk to your doctor, nurse or pharmacist if you are concerned about using an inhaler every day.

What is a reliever inhaler?

Reliever inhalers work quickly when you have symptoms like difficulty breathing, wheezing or coughing.

They contain a medicine that relaxes the muscles in your lungs and so opens your airways. This makes it easier to breathe and stops you from wheezing or coughing.



Discussion point

How can I use the leaflet in my everyday practice?

Type your answers in the question box.

Your salbutamol inhaler is changing to a more environmentally friendly version

Salamol – Key messages

- Salamol has the same medicine and device as your current inhaler
- Works in the same way and has same side effects
- Contains less greenhouse gas and so is more environmentally friendly



Your salbutamol inhaler is changing to a more environmentally friendly version - Salamol®



Use your new Salamol® inhaler in the same way as your current salbutamol (reliever) inhaler. It may look a little bit different, but you shouldn't notice any difference in the way that it works. You can ask your doctor, nurse or pharmacist if you are concerned about this change.

Salamol® is the same type of inhaler and contains the same medicine, (salbutamol) as your current inhaler. It might taste a bit different to your current inhaler. It has the same type of side effects as your current inhaler.

Salamol® has less greenhouse gas than your current inhaler and so is more environmentally friendly.

Why use a more environmentally friendly inhaler?

The NHS supports the change to more environmentally friendly inhalers if this is the right choice for you.

The gas in your current inhaler is a powerful greenhouse gas. This means that when the gas is released, it stays in the air and traps the sun's heat, like glass in a greenhouse. This warms the planet which is a problem for the climate. Climate change increases air pollution which can worsen lung conditions.

So, by changing to Salamol® you can help reduce climate change and reduce your lung risk caused by increased air pollution.

We don't think you will have any problems changing to Salamol®.

You can contact your doctor, nurse or pharmacist if you have any concerns.



Inhaler carbon footprint comparison tool

[SABA](#)
[SAMA](#)
[LABA](#)
[LAMA](#)
[ICS](#)
[ICS+LABA / ICS+LABA \(MART\)](#)
[LABA+LABA](#)
[ICS+LABA+LABA](#)

Short-acting beta-2 agonist (SABA)

Inhaler brand name	Inhaler image	Carbon footprint	Active ingredient(s)	Type of inhaler
Airomir® 100 micrograms pMDI		medium 	Salbutamol	SABA - reliever
Airomir® Autohaler® 100 micrograms BA-pMDI		medium 	Salbutamol	SABA - reliever
Bricanyl® Turbohaler® 500 micrograms DPI		low 	Terbutaline	SABA - reliever
Easyhaler® Salbutamol 100 micrograms DPI		low 	Salbutamol	SABA - reliever
Easyhaler® Salbutamol 200 micrograms DPI		low 	Salbutamol	SABA - reliever
Salamol® Easi-Breath® 100 micrograms BA-pMDI		medium 	Salbutamol	SABA - reliever
Salamol® CFC-Free inhaler 100 micrograms pMDI		medium 	Salbutamol	SABA - reliever
Salbutin® Novolizer® 100 micrograms DPI		low 	Salbutamol	SABA - reliever

[Returns to contents page](#)
inhaler carbon footprint comparison tool 6

Attachment 1. Inhaler carbon footprint data

Brand name	Device type	Doses per inhaler	NHS cost per inhaler	Age licensed from	Age ranges for doses	Indicative carbon footprint /inhaler (g CO ₂ e)
Airomir 100 micrograms	pMDI	200	£1.97	4+	<12, 12+	9720
Airomir Autohaler 100 micrograms	pMDI	200	£6.02	4+	<12, 12+	9720
Easyhaler Salbutamol 100 micrograms	DPI	200	£3.31	4+	4-11, 12+	620
Easyhaler Salbutamol 200 micrograms	DPI	200	£6.63	4+	4-11, 12+	620
Salamol CFC-Free Inhaler 100 micrograms	pMDI	200	£1.46	4+	4-11, 12+	11950
Salamol Easi-Breathe 100 micrograms	pMDI	200	£6.30	4+	4-11, 12+	12080
Salbulin Novolizer 100 micrograms	DPI	200	£4.95	6+	6-12, 12+	3750
Ventolin Accuhaler 200 micrograms	DPI	60	£3.60	4+	4-11, 12+	583
Ventolin Evohaler 100 micrograms	pMDI	200	£1.50	4+	<12, 12+	28262

Pharmacy Quality Scheme 2021/22

- New medicine service – asthma and COPD
- Personalised asthma action plans and use of spacers in children with MDIs
- Inhaler technique checks
- Return of unwanted and used inhalers
- 2022/23 scheme under negotiation

Inhaler disposal or recycling

**MDIs not
discarded
before
empty**

**Return
inhalers to
community
pharmacy**

**Use re-
usable
inhalers**

**Local
campaigns**



Do you accept returned inhalers for safe disposal in your community pharmacy or dispensary? Poll

- Yes
- No
- Don't know

PrescQIPP campaign materials to promote environmentally safe disposal

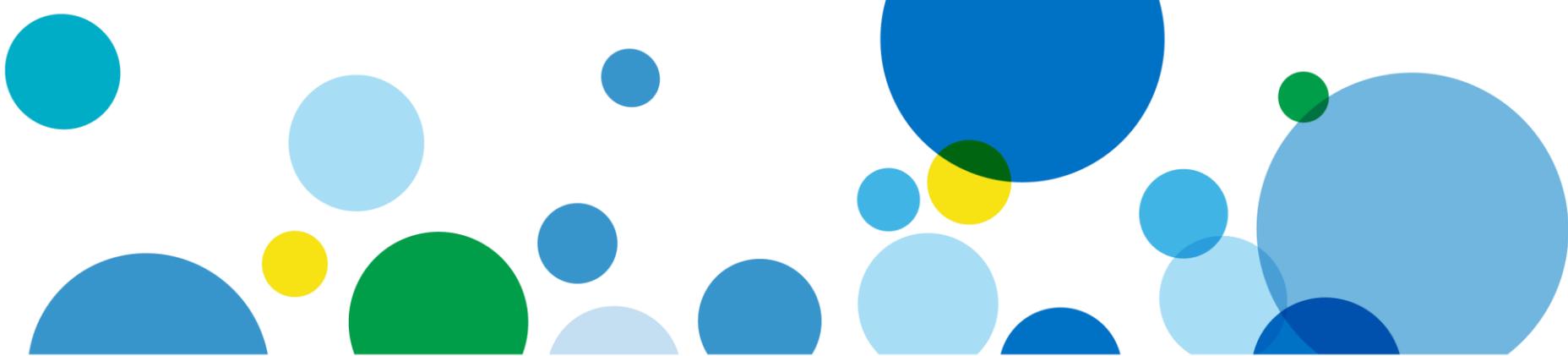
How do I dispose of my inhaler?

- (1) Return your used or unwanted inhaler to a pharmacy. Your pharmacy will arrange for environmentally safe disposal.
- (2) Spacers cannot currently be recycled - please dispose of these safely.

Did you know?



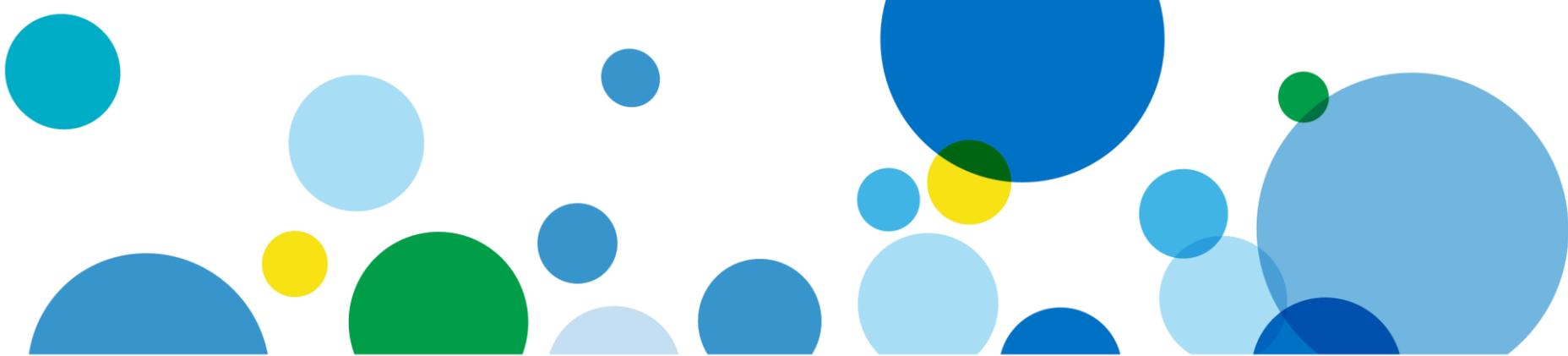
When your pressurised metered dose inhaler is empty it still contains propellants that are powerful greenhouse gases which contribute to global warming



Discussion point

How can I use the leaflets, labels or footer in my everyday practice?

Type your answers in the question box.



Next steps

What are you going to do after this webinar to engage with the inhaler awareness campaign?

Thank you!

Any questions?