

Decarbonising respiratory care

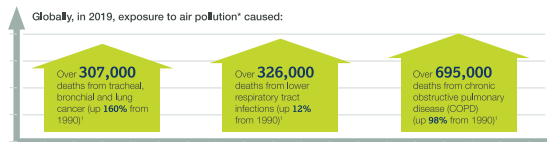
Climate change is recognised as the biggest public health crisis of our time.¹ The World Health Organization (WHO) estimates that air pollution alone causes seven million premature deaths each year and heat-related deaths are expected to treble by 2050.^{1,2}

Chronic respiratory diseases are prime examples of the growing health impacts of climate change. Poor air quality and extreme weather conditions pose great risks to people living with asthma and chronic obstructive pulmonary disease (COPD) and increase the number of people developing these diseases.²

With all medicines and healthcare interactions contributing to greenhouse gas (GHG) emissions,³ everyone in the delivery of healthcare has a role to play in decarbonising health systems. In fact, healthcare’s climate footprint is 4.4% of the global total; meaning if it were a country, it would be the fifth largest emitter on the planet.⁴

Climate change and respiratory diseases

Climate change is an important contributor to increased deaths and morbidity



Air pollution* consists of particles which may enter the bloodstream.²

We are dedicated to discovering and developing respiratory medicines that improve outcomes for patients as well as lowering the carbon footprint of respiratory care which stems from the use of medicines, doctor visits and hospital care.⁵

Decarbonising respiratory care

continued

Early detection, diagnosis and disease control to avoid exacerbations are powerful ways to reduce overall healthcare resource utilisation and hospitalisations, and thus the carbon footprint of care.

Alongside efforts to improve outcomes for patients, another key element to decarbonising respiratory care is the transition to climate-friendly inhaled medicines. These medicines, including pressurised metered-dose inhalers (pMDIs), are essential options for respiratory patients worldwide.^{6,7,8}

While pMDIs contribute less than 0.1% of global GHG emissions,³ we nonetheless believe it is critical to significantly reduce this burden. In fact, at AstraZeneca, work to reduce the carbon footprint of our pMDIs is already underway and represents an important step towards achieving our Ambition Zero Carbon goal.⁹

We are accelerating the development of our next-generation respiratory inhalers using a propellant with near-zero Global Warming Potential⁹ (similar to that of dry powder inhalers), that is also non-persistent (breaks down easily in the environment)¹⁰ and non-bio accumulative¹¹ (does not build up within living organisms).

A practical transition to climate-friendly propellants is important to ensure continuity of patient care and maintain access to essential medicines that can be life-saving. With first launches of these medicines anticipated from 2025,¹² these factors should be considered in any climate policy development.



For more information, scan the QR code or click [here](#).

Source of content: 2023 AstraZeneca Annual Report and www.astrazeneca.com.

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