

CROSS-INDUSTRY Organizations

An introduction to the International Pharmaceutical Aerosol Consortium (IPAC)

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The Montreal Protocol phase out of chlorofluorocarbons (CFCs) and other ozone depleting substances has been declared one of the most successful international treaties in history. The International Pharmaceutical Aerosol Consortium (IPAC) was formed in 1989 in response to the Protocol's mandates. IPAC and its members collaborated with governments around the world, including the US EPA, European Commission, UK Department for Environment, Food and Rural Affairs (Defra) and others, as well as patient and clinician stakeholders, to achieve a smooth transition away from CFC-based pressurized metered dose inhalers (pMDIs) to CFC-free pMDIs using propellants HFC-134a and HFC-227ea. The transition away from CFC MDIs presented significant technical and logistical challenges. Commitments to innovation and collaboration among stakeholders with a shared mission of patient care were core elements of the successful response to these challenges.

While hydrofluorocarbons (HFCs) do not contribute to ozone depletion, they are considered to be substances with a high global warming potential (GWP) and are therefore included in existing and emerging environmental controls. For instance, in 2016, parties to the Montreal Protocol adopted the Kigali Amendment, which calls for the global phasedown of HFCs. Many countries have ratified or are ratifying the Kigali Amendment and are also working on policies to regulate the use and production of HFCs



An example of IPAC's public awareness social media campaign in the UK, encouraging patients to return used or surplus inhalers for proper disposal.

in multiple sectors. IPAC is closely monitoring and engaging in policy discussions on the intersection of sustainability and patient care. These issues are inextricably linked and it is essential to undertake a holistic, balanced, patient-focused approach to the sustainability journey.

Highlights of recent initiatives

The year 2021 was intense, as HFC policies continued to evolve around the world. Highlights included:

- On World Asthma Day (May 5), IPAC participated in a live panel discussion organized by the European Respiratory Society (ERS). Participants discussed the implications of climate change for asthma patients and highlighted different ways to achieve environmental progress, while simultaneously enhancing patient care. The same day, IPAC presented its white paper titled, "A Multi-Stakeholder Approach to Minimizing the Environmental

Impact of Inhaled Therapies and Improving Patient Care" at the Respiratory Drug Delivery Conference. This paper provides context about the continued legislative and regulatory issues relevant to medical propellants. It emphasizes the need for a holistic, patient-centered approach to the environmental aspects of inhaled therapies and the need for policy and regulation that support innovation.

- In September, IPAC presented to a diverse audience of industry stakeholders along the pMDI supply chain. Engaging all members of the supply chain to be innovative and future-looking is essential. IPAC is working to sustain the momentum from this gathering and identifying opportunities to collaborate with other industry organizations, including the Association of the British Pharmaceutical Industry (ABPI) and the European Federation of Pharmaceutical Industries and Associations (EFPIA).

- IPAC actively engaged with the US Environmental Protection Agency (EPA), the UK's Defra, and the European Commission (DG Clima, DG Sante) on regulatory proposals with implications for HFCs as medical propellants. IPAC prepared in-depth comments and intervened during public consultation processes in the US, UK and Europe.
- IPAC is an active member of the UK National Health Service (NHS) Inhalers Working Group—a multi-stakeholder collaboration aimed at meeting the NHS's net zero commitments. IPAC presented to the Working Group several times and engaged stakeholder members.

Initiatives spotlight: IPAC inhaler return campaign in the UK

In July 2021, IPAC launched a communications campaign in the UK to encourage patients to return their used or surplus inhalers to pharmacies for environmentally appropriate handling in the medicines waste stream. Under the existing NHS infrastructure, individuals who are no longer in need of their inhalers may return them to UK pharmacies for high temperature incineration. The process ensures that the propellant is destroyed and not emitted into the atmosphere. IPAC, in collaboration with patients (Asthma UK/British Lung Foundation) and community pharmacies (PSNC), developed the Inhaler Return Campaign to help protect the environment by encouraging this safer means of inhaler disposal.

The communications campaign leverages social media to raise awareness. It consists of graphics, available in English and Welsh, as well as sample language that can be shared with the materials. The campaign was well-received in 2021 and IPAC looks forward to continuing the campaign throughout 2022.

For questions about the Inhaler Return Campaign, becoming

involved or obtaining communications materials, please contact IPAC through its website, listed below.

IPAC-RS

The International Pharmaceutical Aerosol Consortium on Regulation & Science (IPAC-RS), was launched in 1998 with a mission to enhance the quality and availability of orally inhaled and nasal drug products (OINDPs). IPAC-RS encourages scientifically driven advancements related to the development and regulation of OINDPs. IPAC and IPAC-RS are autonomous organizations, with separate governance and distinct membership. As appropriate, the groups coordinate and will likely collaborate on issues relevant to the transition to novel medical propellants.

Contact IPAC

IPAC's current members are AstraZeneca, Boehringer Ingelheim, Chiesi, Cipla, GlaxoSmithKline, Kindeva, Organon and Teva.

Its website provides details on activities and resources: www.ipacinhaler.org.