

Endocrine Society Comments on the US Environmental Protection Agency Draft National Strategy to Prevent Plastic Pollution. Docket (EPA-HQ-OLEM-2023-0228)

July 31, 2023

The Endocrine Society appreciates the opportunity to comment on the Environmental Protection Agency (EPA) Draft National Strategy to Prevent Plastic Pollution. Founded in 1916, the Endocrine Society is the world's oldest, largest, and most active organization dedicated to the study of hormone biology and treatment of endocrine diseases. Our members include scientists studying the effects of chemicals on endocrine systems, also known as endocrine-disrupting chemicals (EDCs). EDCs are often found as additives in plastic products, resulting in exposures that affect both human and ecological health. In our comments, we propose several improvements to the strategy that would lead to better, enhanced protection of public and environmental health through reducing exposures to harmful EDCs present in plastics.

Improve Health by Reducing Chemical Exposures

The Endocrine Society views the strategy to prevent plastic pollution as an important public health opportunity; we were therefore surprised that the National Institutes of Health (NIH) was not one of the listed organizations with which the EPA coordinated in the development of the draft strategy. Intramural and extramural investigators funded by the NIH have unique and important expertise about the health effects of chemicals in plastic that need to be considered in the implementation of health-focused objectives. For example, academic scientists could provide insights on chemicals and health impacts as part of the lifecycle analyses described in objective A2.1. Furthermore, endocrine scientists could provide guidance on identifying EDCs as chemicals of concern to inform the standards described in objective A2.2. We also contend that health-focused objectives should be more explicit throughout the strategy. For instance, we welcome the development of methodologies to measure and reduce greenhouse gas emissions through the lifecycle of plastic products; a similar objective to measure and reduce the body burden of hazardous chemicals in plastics would be appropriate as a separate objective. Finally, the outreach and educational initiatives described in objective C4.2 could include science-based educational materials about hazardous chemicals in plastic and how to avoid them. Throughout objective A, EPA should acknowledge and provide solutions for environmental justice impacts experienced by overburdened communities who have greater exposures to chemicals in plastics through occupational exposure or lack of diverse food options that do not rely on plastic packaging. EPA should consider how communities may face greater exposure to hazardous chemicals in recycled plastics and develop plans to reduce these exposures.



Reduce Production to Achieve Multiple Goals

While we understand that the draft strategy is focused on pollution and emphasizes recycling, a circular approach to plastics will be insufficient to address the problem of plastic pollution and associated health impacts. Indeed, we are concerned that recycling processes may further concentrate hazardous chemical additives, require additional additives in the recycling process, and create a more complex mixture of hazardous exposures for workers and consumers. A fundamental shift away from the production and consumption of plastic materials is therefore required; this would contribute to multiple goals and objectives within the plan as a cross-cutting measure. Indeed, we strongly support the statement in Objective A regarding the essentiality of reducing the increasing rates of both plastic production and consumption. Towards this goal, we urge EPA to work with other federal agencies to reduce plastic production through restrictions and rulemaking. For example, EPA could partner with FDA and NIH to identify particularly problematic chemicals used in plastic food packaging or other food contact materials and prioritize restrictions at the production phase aimed at reducing exposure to these chemicals. EPA could also work with federal partners to promote alternatives to plastic products and develop educational materials and incentives to encourage the adoption of alternative materials and safer consumer goods. EPA should also include a separate objective that clearly defines actions that the federal government can take to reduce environmental and climate justice impacts of plastic production using urgent timelines that can help with climate mitigation and adaptation.

In conclusion, the Endocrine Society welcomes the Draft National Strategy to Prevent Plastic Pollution and encourages EPA to incorporate and prioritize health-focused objectives that limit plastic production and reduce exposure to hazardous chemicals in plastic. We look forward to the publication of the final plan and our members stand ready to provide scientific and technical expertise towards these objectives. If we can be of further assistance, please contact Joe Laakso, PhD, Director of Science Policy at jlaakso@endocrine.org.