

## EDITORIAL Calling for research articles on environmental health

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In the early 1990s, an increasing awareness of environmental impacts on the health of children occurred. Driven by the recognition that lead and mercury at extremely low levels reduce the IQ of children, multiple environmental chemicals are now recognized to impact children's health. These chemicals include pesticides, polychlorinated biphenyls, dioxins, phthalates, volatile organic chemicals, and many others. The rise of the environmental justice movement also identified the need for fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws and policies. With this increase in the data clearly showing a connection between maternal, paternal and/or child exposure to poorer health outcomes both in the children and in the adults they became, protective policies at the state and federal levels and internationally were sought after to prevent these exposures. These policies ranged from minimizing production of these chemicals, reducing use of these chemicals particularly in places where children were likely to be exposed, to banning them outright for use in the United States and Europe. Worldwide, such policies assisted in reducing global drift, improved water and food guality, and raised awareness to the dangers of indiscriminate contamination of the environment.

Now, however, we face a set of new challenges. Despite the many successes and advancements in the field of children's environmental health (CEH) over the past few decades, today's children face an epidemic of illnesses and chronic diseases—linked to environmental exposures and our changing climate. There is an urgent need to put children and their families into the forefront of our public health and environmental health-related actions. A paradigm shift in the field of CEH is required so that all levels of all societies work to proactively consider children and our future generations.

In 2015, the Blueprint for Protecting Children's Environmental Health: An Urgent Call to Action was released with the input of many stakeholders in the United States. The Blueprint can also be used as a foundation for developing similar courses of action in other countries. It emphasizes urgent action to make children's health a priority for the United States. It outlines the steps that are necessary for progress towards protecting children's environmental health, and for developing a solid foundation to support future commitments moving forward. The recommendations provided in the Blueprint include:

- Mobilize "society" to take action on children's environmental health
- Create knowledge essential for effective action and make use of the knowledge we have

- Marshal the engine of the economy to achieve environments in which children can thrive and enjoy abundant opportunity for building a sustainable, economically secure future
- Build the political will in our institutions of government for child-centered policies
- Establish a connected and vibrant children's environmental health community

While progress in all of these identified areas of need is in motion, none can be accomplished without the solid foundation of peerreviewed science. Today, many protective policies, the offices that oversee the work associated with these policies, and the science providing the foundation for all standards are under attack or have already been eliminated. For example, the United States Environmental Protection Agency that houses the Children's Health Protection Advisory Committee is particularly hard hit with its Director, Dr Ruth Etzel, a prominent Pediatrician and Epidemiologist recently being put on leave with no official explanation. Obviously this raises concerns about whether regulatory issues that impact children's health will be made without her expertise, or that this may be a prelude to closing the office. While environmental regulatory offices globally have not uniformly seen budgets slashed, the risks of similar movements arising in other developing countries is very real. In addition, the developing world continues to bear the brunt of toxic waste problems, as they deal not only with their own environmental problems, but also with those of developed countries. Electronic waste (aka 'e-waste') contains multiple hazardous chemicals (metals, plasticizers, etc.), and the majority of ewaste is now exported to Asia and Africa, where it is recycled under poorly managed and unregulated conditions, increasing the risks of exposure to the local population.

Pediatric Research, which publishes the full spectrum of translational research from basic to epidemiology, is focusing on publishing the data that links pediatric health effects to environmental exposures. To this end, we have created a new section on environmental health with Robert O. Wright as the section editor. Our audience is the community of pediatric researchers. We wish to create a place in the pediatric literature where pediatric environmental health research articles can be published and read by the researchers who care for children.

## ADDITIONAL INFORMATION

Competing interests: The authors declare no competing interests.

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