Environmental Health and Children: Opportunities for Health Plans

In the past 60 years, over 80,000 new synthetic chemicals have been invented and used in products such as food, clothing and baby bottles.¹ Children encounter more environmental toxins than adults since they spend more time outdoors, tend to put objects into their mouths and breathe in greater levels of polluted air relative to their weight. Additionally, children are more sensitive to environmental toxins than adults because their metabolic pathways are still maturing and their developmental processes are easily disrupted. Since many chronic conditions resulting from toxin exposure can take years to develop, children by virtue of a longer future are more likely to develop these conditions than are adults exposed at the same time.²,³,⁴

Environmental pollutants negatively impact children's academic performance, attendance at school, neurological function⁵ and behavior.⁶ Environmental toxins and pollutants can also exacerbate existing childhood conditions such as asthma.⁷ In addition, the negative effects of environmental pollutants disproportionately impact low income and racial and ethnic minority communities⁸ potentially putting children in these communities at an increased risk of experiencing negative outcomes from environmental pollutants.

There are financial consequences from these health risks as well. Childhood exposure to toxic chemicals costs the United States billions of dollars each year – $76.6 billion in 2008 alone.⁹ The regulatory process for new chemicals in the United States does not require toxicity testing for children, and therefore costs may continue to rise as new chemicals become available.¹⁰

**How Health Plans and Foundations Can Help**

- Support programs that aim to increase the number of health care providers who work to address children’s environmental health issues.
- Promote healthy schools by reducing or eliminating environmental hazards such as known asthma triggers and toxic chemicals.
- Spearhead a clean school bus campaign in your community.
- Fund projects that seek to decrease children’s exposure to environmental toxins.
- Encourage providers to remain up to date on pediatric environmental health issues through continuing medical education and/or by attending conferences.

Recognizing that social, economic and environmental factors impact health and quality of life, the Blue Cross and Blue Shield of Minnesota Foundation awards grants to community organizations through its Growing Up Healthy initiative. One
Growing Up Healthy’s primary focus areas is supporting healthy environments for children by working with grantees to identify environmental risks and promote clean physical environments.

Health plans also have an opportunity to offer evidence-based asthma management programs, which can alleviate exposure to some of the environmental triggers that exacerbate asthma in children. With support from the United States Environmental Protection Agency, America’s Health Insurance Plans (AHIP) created the Taking on Asthma program to support health plan initiatives to offer comprehensive care management of asthma. Taking on Asthma offers resources for health plans and highlights health plan efforts through a best practices in asthma management award and an informational website.

Health plans can encourage providers to learn more about children’s environmental health issues by completing the Agency for Toxic Substances and Disease Registry (ASTDR)’s free interactive online continuing education course, which describes the Pediatric Environmental Health Toolkit. Geared towards physicians, nurses and other health professionals, the course emphasizes the importance of taking an environmental health history, provides environmental health case studies, and explains how to use the Pediatric Toolkit in clinical practice. The Toolkit, which is endorsed by the American Academy of Pediatrics, explains children’s unique susceptibility to environmental toxins and how providers can help parents understand ways to protect their children. The Toolkit also includes easy to use materials that provide guidance to parents about preventing exposure to toxic substances that may affect children’s health.

**Environmental Health Resources**

*United States Environmental Protection Agency*

The [Environmental Protection Agency](https://www.epa.gov) (EPA) is the nation’s environmental health authority, and it proposes rules and regulations regarding the environment and environmental health. The EPA shares many resources with the public and professionals, and it has a dedicated [children’s environmental health](https://www.epa.gov/children/children-environmental-health) website. The website provides tips and resources for the public, which can be adapted for use by health plans.


With support from the EPA, the American Academy of Pediatrics published the second edition of its book *Pediatric Environmental Health*, and the third edition will be available in October of this year. This book is a comprehensive guide covering a wide range of environmental health issues, including risk assessment and risk management. ASTDR’s Pediatric Environmental Health Toolkit is based on this book.
*Children’s Environmental Health Institute*

The [Children’s Environmental Health Institute](#) in Austin, TX strives to identify, develop and promote solutions to improve children’s environmental health through scientific research, education and public policy. The institute also offers environmental health resources for medical and health professionals and parents.

*Children’s Environmental Health Network*

The [Children’s Environmental Health Network](#) is a national voice for children’s environmental health issues in Washington, DC promoting the development of sound public health and child-focused national policies through advocacy, education and research. The CEHN offers resources for the parents, professionals, policy makers and others on a variety of children’s environmental health issues, including air quality, radon exposure and noise pollution.

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5 Ibid.
8 Mohai, et al. 2011