



Resource Guide for Pediatric Oncology Clinicians

This resource guide is designed as an introduction to:

- health care professional organizations that have resources or programs on environmental health.
- nonprofit groups who work on health and environment issues, and
- government agencies that can help you with questions you may have concerning your patients' or families' potential exposures to toxic substances, prevention strategies, and opportunities for community engagement.

Arguably, many children who have cancer or have undergone treatment for cancer may have an increased vulnerability to toxic exposures so these resources are important not just in preventing primary cancers but also improving the quality of life of those living with cancer. It's also important to make clear to parents that while lifestyle changes to reduce exposures is important, no parent is able to reduce all exposures. Changes are necessary at the manufacturing and regulatory levels. Through the power of purchasing we can make changes if we buy products that are safer.

Health Provider Networks and Resources

Alliance of Nurses for Healthy Environments (ANHE) is the only national nursing organization focused solely on the intersection of health and the environment. Its mission is to promote healthy people and healthy environments by educating and leading the nursing profession, advancing research, incorporating evidence-based practice, and influencing policy. https://envirn.org/

American Academy of Pediatrics (AAP) provides networks and resources in children's environmental health, including the handbook *Pediatric Environmental Health*, also known as the "Green Book," created in recognition that environmental hazards are among parent's top health concerns for their children. By American Academy of Pediatrics Committee on Environmental Health.

http://www.aap.org

Handbook: Pediatric Environmental Health – 4th Edition

American Association of Occupational Health Nurses provides professional resources, educational activities and standards of care and practice. http://www.aaohn.org

American College of Occupational and Environmental Medicine serves as a professional organization of occupational medicine physicians. http://www.acoem.org

American Lung Association addesses topics of air quality, chemical hazards in school and workplace settings, and tobacco control.

http://www.lungusa.org

American Nurses Association (ANA) Center for Occupational and Environmental Health provides expertise on issues related to the nursing professional and healthcare industry. http://www.nursingworld.org/

http://nursingworld.org/coeh/

Pollution Prevention Kit for Nurses: http://nursingworld.org/dlwa/osh/environm.htm

American Public Health Association has a section on Environment that "works to focus attention on human health effects of environmental factors and helps to shape national environmental health and protection policies." Environment Section: https://www.apha.org/apha-communities/member-sections/environment

Association of Occupational and Environmental Clinics includes 55 clinics across the United States and Canada with professionals able to evaluate environmental health issues in families. Provides referrals to clinics for medical advice and care, conducts educational activities, and maintains a lending library.

http://www.aoec.org

Health Care Without Harm works to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice.

http://www.noharm.org

National Cancer Institute

Cancer in children and adolescents

https://www.cancer.gov/types/childhood-cancers/child-adolescent-cancers-fact-sheet

Pediatric Environmental Health Specialty Units (PEHSUs) The PEHSUs are a national network of experts in the prevention, diagnosis, management, and treatment of health issues that arise from environmental exposures from preconception through adolescence. The PEHSU's have been developed to provide education and consultation for health professionals, public health professionals and communities about the topic of children's environmental health. There are 10 federal regions. – find the PEHSU nearest to you: https://www.pehsu.net/



Western States PEHSU – Has programs and literature specifically about childhood cancer and the environment. https://wspehsu.ucsf.edu/

Resources on childhood cancers: https://wspehsu.ucsf.edu/projects/childhood-cancer-environment-overview/

A Story of Health, Cancer/Leukemia: Stephen's story – multimedia eBook and CE course https://wspehsu.ucsf.edu/main-resources/training/a-story-of-health-a-multimedia-ebook/

Apps for Toxics Reduction

Center for Environmental Health and Clearya, For years the Center for Environmental Health (CEH) has tested products to give consumers the resources to make the best decisions for their family's health. CEH has partnered with <u>Clearya</u>, a Google Chrome extension and mobile app that helps consumers make healthier choices when shopping online, to integrate science into their shopping.

Silent Spring Institute, <u>Detox Me</u> is a free app that walks you through simple, research-based tips on how to reduce your exposure to toxic chemicals where you live, work, and play.

National PEHSU Network, Pediatric Environmental Health Toolkit

Environmental Health Information, Education, and Advocacy

Beyond Pesticides, provides a wide range of resources on how to reduce pesticide use in and outside the home, on foods, in communities etc

http://www.beyondpesticides.org/

California Department of Pesticide Regulation Getting rid of pests without using a lot of pesticides takes common sense, good cleaning practices, and some simple tools. These videos walk you through the process of integrated pest management (IPM), with demonstrations of tools and practices filmed in real child care centers.

Child Care IPM YouTube Video Series

https://www.youtube.com/playlist?list=PLgU4sA8HrUfrrheC4rNNgB1ou7JlnpKvP

Cancer Free Economy (CFE) is a network cultivating an inclusive movement to promote healthy environments where no one gets sick because of toxic chemicals where they live, learn, work, and play.

Childhood Cancer Prevention

https://www.cancerfreeeconomy.org/childhood_cancer_prevention/

Childhood Cancer Prevention Initiative, Childhood Cancer: Cross-sector Strategies for Prevention https://www.cancerfreeeconomy.org/wp-content/uploads/2020/09/CFE ChildhoodCancerPrevention Report F2.pdf

Center for Envirornmental Health Good resource for sustainable purchasing of children's products https://ceh.org/product-testing/childrens-products/

Center for Health, Environment and Justice (CHEJ) founded in 1981, by Lois Gibbs, at Love Canal, seeks to help local citizens and organizations work toward a healthy, sustainable future.

http://www.chej.org/

Children's Environmental Health Network is a national project dedicated to pediatric environmental health. Includes information for health professionals and communities such as a leukemia fact sheet: https://cehn.org/resources/for-healthcare-

professionals/. **Collaborative on Health and the Environment** (CHE) is an international partnership, founded in 2002 at Commonweal, committed to strengthening the scientific and public dialogue on environmental factors linked to cancer, chronic disease and disability.

http://www.healthandenvironment.org/

Environmental Health News – In a world with few environmental health reporters left at major news organizations this award winning publication is a trusted source for a curated feed of the lastest scientific papers, journalistic news stories and opinion pieces. https://www.ehn.org

Environmental Working Group provides databases on safer products including cosmetics, what's in your tap water, and their Shopper's Guide to Pesticides in Produce https://www.ewg.org/foodnews/https://www.ewg.org/

The Green Science Policy Institute's. A source of well vetted scientific information and policy recommendations about hazardous chemicals including flame retardants and halogenated "forever" chemicals.

https://greensciencepolicy.org/

Health Care Without Harm works to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice, offering information for hospital systems such as the reduction of toxic chemical uses, reduction of pharmaceutical waste, addition of healthier food options for patients and personnel and healthier building options.

http://www.noharm.org

Helping to Heal, A guide for improving nutrition and environments for seriously ill children https://www.helping2heal.org/

Mother to Baby a project of Organization of Teratology Information Specialists providing information to clinicians and the public about environmental exposures and medications during pregnancy and lactation

https://mothertobaby.org

Referral of patients for information on exposures during pregnancy. https://mothertobaby.org/health-providers/

MADE SAFE® is a human-health- and ecosystem-focused independent, third-party, scientific certification program that screens for known toxic chemicals in personal care, baby, and other household products. MADE SAFE uniquely employs an ecosystem evaluation approach to guide companies and consumers.

www.madesafe.org

Our Water Our World is a joint effort by water pollution prevention agencies, participating retail stores, and pesticide distributors and manufacturers — working together to reduce the risks associated with pesticide use. https://ourwaterourworld.org/

Pesticide Action Network (PAN) advocates the adoption of ecologically sound practices as an alternative to pesticide use. With other groups, it promotes sustainable agriculture, food security, and social justice. http://www.panna.org/

The Toxics Use Reduction Institute (TURI) is an independent government agency with a mandate to help protect workers, communities and the environment from toxic chemicals and pollution. Working with businesses, government agencies, local communities and international organizations, TURI helps identify actions companies, schools and communities can take to protect workers and public health. Also has a number of chemical fact sheets. https://www.turi.org/

University of California Statewide Integrated Pest Management Program (UC IPM) helps residents, growers, land managers, community leaders, and professional pest managers prevent and solve pest problems with the least unintended impacts on people and their surroundings. Web and printed publications provide how-to information about

identifying and managing pests. Online training courses also available. https://ipm.ucanr.edu/

Federal Government Sites

Agency for Toxic Substances and Disease Registry (ATSDR) is a federal agency of the U.S. Department of Health and Human Services that provides trusted health information to prevent harmful exposures and diseases related to toxic substances. Their web based "Case Studies in Environmental Medicine" including "Taking a Pediatric Exposure History" and "Principles of Pediatric Environmental Health" are self-instructional, continuing-education (CE) primers designed to increase primary care providers' knowledge of hazardous substances and aid in the evaluation of patients potentially exposed to hazardous substances.

https://www.atsdr.cdc.gov/environmentaleducation.html

ATSDR also feature six *A Story of Health* CE modules including a chapter on leukemia/childhood cancer, "Stephen's story."

https://www.atsdr.cdc.gov/emes/health_professionals/index.html

other resources include a Toxic Substances Portal that leads to a wealth of information on toxic chemicals, and other valuable resources.

https://www.atsdr.cdc.gov/substances/index.asp

And, they have regional offices that may be helpful about local environmental hazards http://www.atsdr.cdc.gov

The Centers for Disease Control and Prevention (CDC) is the nation's leading science-based, data-driven, service organization that protects the public's health. https://www.cdc.gov/

CDC Unusual Patterns of Cancer, Cancer Clusters https://www.cdc.gov/nceh/cancer-environment/about.html

CDC National Biomonitoring Program publishes the National Report on Human Exposure to Environmental Chemicals https://www.cdc.gov/biomonitoring/index.html

National Center for Environmental Health, part of the CDC, provides leadership to promote health and quality of life by preventing or controlling those diseases, birth defects, or disabilities resulting from interaction between people and the environment. and lead in blood. http://www.cdc.gov/nceh

Environmental Protection Agency (EPA) provides a wealth of information about EPA activities, products, recommendations, and requirements on its extensive website. The mission of EPA is to protect human health and the environment. http://www.epa.gov

 Protecting Children's Environmental Health https://www.epa.gov/children

- Envirofacts contains data from five EPA systems that are used to assist the Agency in monitoring and overseeing compliance with federal regulations.
 http://www.epa.gov/enviro/index.html
- National Pesticide Information Service

NPIC is a cooperative effort of Oregon State University and the U.S. EPA 1-800-858-7378

Questions on pesticides to: npic@ace.orst.edu
http://npic.orst.edu/

U.S. EPA National Indoor Air Quality Information

Health information, on passive smoke, formaldehyde, and other indoor air quality issues. https://www.epa.gov/indoor-air-quality-iaq/forms/contact-us-about-indoor-air-quality

• **Safer Choice** helps consumers, businesses, and purchasers find cleaning products that perform and contain ingredients that are safer for human health and the environment. https://www.epa.gov/saferchoice

National Institute of Environmental Health Sciences (NIEHS) is one of the National Institutes of Health within the U.S. Department of Health and Human Services. The mission of the NIEHS is to reduce the burden of human illness and disability by understanding how the environment influences the development and progression of human disease.

NIEHS publishes *Environmental Health Perspectives* (*EHP*) a monthly journal of peer-reviewed research and news on the impact of the environment on human health. Its content is free online: http://www.ehponline.org/
http://www.niehs.nih.gov

NIEHS and EPA operate the **Superfund Basic Research Program (SBRP)** which offers funding support for research on hazardous waste sites and their health effects as well as networking opportunities for researchers and partnering organizations. http://www-apps.niehs.nih.gov/sbrp/index.cfm

Research Briefs:

http://list.niehs.nih.gov/pipermail/sbrp-brief/2004-January/000047.html

National Library of Medicine (NLM), the world's largest biomedical library - http://www.nlm.nih.gov/

Information for healthcare providers https://www.nlm.nih.gov/portals/healthcare.html

Occupational Safety and Health Administration (OSHA) is entrusted with overseeing worker protection and enforcement of workplace standards. Web site offers information and links on programs and services, compliance assistance, standards, and technical information.

http://www.osha.gov

Chemical Fact Sheets

New Jersey Department of Health Workplace Health and Safety Program provides online access to hundreds of chemical fact sheets including identification, hazard summary, how to determine exposure and workplace exposure limits, ways of reducing exposure, acute and chronic health hazard information, workplace controls and practices, personal protective equipment, safe handling and storage, definitions of terms, information on flammability and reactivity, and recommended first aid practices. Most available in Spanish. http://web.doh.state.nj.us/rtkhsfs/indexfs.aspx?lan=english

Hotlines and Clearinghouses

Hazardous substances

U.S. EPA Emergency Planning and Community Right-to-Know (EPCRA) Information Hotline (800) 424-9346
Information on community right-to-know and emergency planning regulations...

EPA Radon Help Line in conjunction with Kansas State University and National Radon Program Services

1-800-SOS-RADON https://sosradon.org/

Pesticides and Toxicants

National Pesticide Information Center http://npic.orst.edu/ (800) 858-7378

Pollution Prevention

U.S. EPA Pollution Prevention Information Clearinghouse

(202) 566-0799

Technical, policy, and grant information for companies and communities seeking to reduce use and production of hazardous materials.

For journal article references, use this QR code to access online:

