

Chapter 6: The Role of Policy in Prevention: Protecting People and the Environment

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While the role of governments in promoting health policies and regulations to protect and support all its citizens, particularly those more vulnerable, needs to be reaffirmed, the work of non-profit organizations should be highlighted. Nsedu Obot Witherspoon discusses the mission, contributions, and actions of a national non-profit organization—the Children’s Environmental Health Network—that strives to foster equity, protect all children from environmental hazards, and promote safe and healthy environments for children to thrive in. This commitment is challenged by the traditional approach to environmental health laws and regulations that is based on proving harm from environmental hazards, such as carcinogens, before measures are taken to protect all, especially the most vulnerable. The goal of fostering a cancer free society is a collective and shared endeavor, which requires to acknowledge and address the troubling effects of systemic discrimination and racism on low wealth, Black, Indigenous, and People of Color communities.

The Children’s Environmental Health Network (CEHN) is a national non-profit organization dedicated to protecting all children equitably from environmental hazards and promoting safe and healthy environments for children to thrive in. In 2015, CEHN released *A Blueprint for Protecting Children’s Environmental Health: An Urgent Call to Action*.¹ As the leading national U.S. based non-profit organization, focused on protecting all children equitably from environmental hazards, CEHN led a multi-disciplinary process that prioritized where collective effort is needed in order to change the current paradigm. The traditional approach to environmental health laws

¹ See Kristie Trousdale, Rachel Locke, Nsedu Witherspoon, Carol Stroebel, Brie Sleezer, and Brenda Afzal, “A Blueprint for Protecting Children’s Environmental Health: An Urgent Call to Action,” *Children’s Environmental Health Network*, October 2015, cehn.org/wpcontent/uploads/2015/11/BluePrint_Final1.pdf.

and regulations is that harm must be proven before measures are taken to protect all, especially our most vulnerable, such as children.

The *Blueprint* emphasizes urgent action to make children's health a priority for our nation. 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 *Blueprint* is a high-level resource that is available to assist community leaders and the children's environmental health field in prioritizing the needs of our children. Key recommendations include: to mobilize society to take action on children's environmental health, to create knowledge essential for effective action and make use of the knowledge we currently have, to marshal the engine of the

economy to achieve environments where children can thrive and enjoy a sustainable and economically secure future, and to build political will for child-centered policies.

In genuine efforts to protect all, especially the most vulnerable, from environmental hazards such as carcinogens, inequities need to lead to solutions. Achieving health equity requires assessment of cumulative environmental health burdens within a social determinants of health framework.² It is necessary to address environmental justice as a structural public health challenge. A "health in all policies" approach must be coupled with thoughtful integration of social, economic, and political indicators, and affected communities must be an integral part of the process.

² See the policy statement American Public Health Association, "Addressing Environmental Justice to Achieve Health Equity," Policy Number 20197, November 5, 2019, www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2020/01/14/addressingenvironmental-justice-to-achieve-health-equity.

Promoting a Cancer Free Society

There are some specific examples of approaches working toward equitable systems change in the cancer prevention arena. The Cancer Free Economy Network combines the efforts of leaders within impacted communities, public health and science, market shift, and policy/legal sectors. All are working to lift the burden of cancers and other diseases by driving a dramatic and equitable transition from toxic substances in our lives, communities, and economy to safe and healthy alternatives for all.³ Our collective work is organized across teams that include focus on building power, health science, shifting markets, communication, and policy/legal strategies.

Building power aims to assist, strengthen, and mobilize vulnerable community members in their daily fights to promote prevention. Health science provides the evidence of chemical exposures upon health and well-being, while leading to the creation of a multidisciplinary cancer prevention research agenda. Shifting markets implies creating demand for and supply of healthy and safe alternatives. Through effective communications, building public awareness fosters demand for change. There is also a focus on the promotion of policy and legal strategies to protect the health of all.

Actions that the Cancer Free Economy (CFE) Network supports include, first, changing the public narrative to promote acceptance of the fact that exposures to harmful chemicals may increase risk for cancer diagnosis. Second, there is emphasis on mobilizing communities around cancer prevention. Third, there is a push for interdisciplinary cancer prevention research. Fourth, there is a focus on coordinating supply and demand strategies to reinforce progress on healthy alternatives.

³ See Cancer Free Economy Network, “About Us,” *Cancer Free Economy Network*, 2020, www.cancerfreeeconomy.org.

One of many key actions of the CFE was the development of the Joint Statement on Cancer Prevention.⁴ This call-to-action results from an unprecedented collaboration of cancer and health leaders calling for the reduction of the burden of cancer by addressing environmental risk factors. The intersections between the climate crisis and toxic chemical exposures are also acknowledged, resulting in targeted work within the CFE to indicate the co-benefits of addressing both. With warmer temperatures comes increased exposure to toxic chemicals, and increased weather events result in concentrated releases of chemicals.⁵ Climate change exacerbates the health impacts from air pollution,⁶ and toxic chemicals increase the vulnerability communities have to climate change effects.⁷

The Effects of Systemic Discrimination and Racism

The same generations of systemic discriminations and racism that have resulted in Black, Brown, and low wealth communities disproportionately suffering from the COVID-19 pandemic are also driving the stark racial inequities in several types of cancer and disease outcomes.⁸ Fenceline, low wealth, Black, Indigenous, and People of Color (BIPOC) communities have been plagued by economic

⁴ See Cancer Free Economy Network, “Cancer and Health Leaders Call for Action to Reduce the Burden of Cancer by Addressing Environmental Risk Factors,” *Cancer Free Economy Network*, September 2020, www.cancerfreeeconomy.org/joint-statement/.

⁵ See Renee Cho, “Climate Change May Be Hazardous to Your Health,” *State of the Planet, Columbia Climate School: Climate, Earth, and Society*, March 12, 2018, news.climate.columbia.edu/2018/03/12/climate-change-may-hazardous-health/.

⁶ See American Public Health Association, U.S. Department of Health and Human Services, and Centers for Disease Control and Prevention, “Climate Change Decreases the Quality of the Air We Breathe,” *Centers for Disease Control and Prevention*, 2021, www.cdc.gov/climateandhealth/pubs/air-quality-final_508.pdf.

⁷ See Aneesh Patnaik, Jiahn Son, Alice Feng, and Crystal Ade, “Racial Disparities and Climate Change,” *Princeton Student Climate Initiative*, August 15, 2020, psci.princeton.edu/tips/2020/8/15/racial-disparities-and-climate-change.

⁸ See Brett Milano, “With COVID Spread, ‘Racism—Not Race—Is the Risk Factor,’” *The Harvard Gazette*, April 22, 2021, news.harvard.edu/gazette/story/2021/04/with-covid-spread-racism-not-race-is-the-risk-factor/.

disinvestment and have served as primary dumping grounds for polluting facilities.⁹ These extremely high risk communities have suffered for decades due to the zip codes that they live in, the occupations that afford the ability to provide for their families, the homes that they reside in, and the early learning/K-12 schools where they learn.

Fenceline communities are also where live most of our essential workers, whom we depend on greatly for the daily functions of community life. These community members have paid and continue to pay the ultimate price for existence, their health. Generation after generation, BIPOC communities absorb the impacts that lack of investment, capacity, and human decency have created. Living among high levels of pollution has created U.S. communities with some of the highest occurrences of asthma, cancer, lead poisoning, obesity, mental health, and learning disabilities.¹⁰ While overall cancer mortality has been declining, cancer health disparities continue to present increased risk of developing or dying from cancer, particularly among Black populations.¹¹ To address this situation the Cancer Free Economy Network developed an agenda for the Biden-Harris Administration that aligns with the Build Back Better concept, encouraging that steps toward cancer prevention and environmental equity are urgent and possible.¹²

⁹ See Katherine Bagley, “COVID-19 Worsens the Role Environmental Injustice Already Plays in Marginalized Communities,” *PBS News Hour*, May 12, 2020, www.pbs.org/newshour/health/covid-19-worsens-the-role-environmental-injustice-already-plays-in-marginalized-communities.

¹⁰ See Shava Cureton, “Environmental Victims: Environmental Injustice Issues That Threaten the Health of Children Living in Poverty,” *Reviews on Environmental Health* 26, no. 3 (2011): 141–147.

¹¹ See National Cancer Institute, “Cancer Disparities,” *National Cancer Institute*, November 17, 2020, www.cancer.gov/about-cancer/understanding/disparities.

¹² “The Building Back Better (BBB) is an approach to post-disaster recovery that reduces vulnerability to future disasters and builds community resilience to address physical, social, environmental, and economic vulnerabilities and shocks.” Global Facility for Disaster Reduction and Recovery, “Building Back Better in Post-Disaster Recovery,” *Global Facility for Disaster Reduction and Recovery*, 2021, 2, www.recoveryplatform.org/assets/tools_guidelines/GFDRR/Disaster Recovery Guidance Series- Building Back Better in Post-Disaster Recovery.pdf. See also United Nations Office for Disaster Risk Reduction, “Build

The Need to Especially Protect Children

In September 2020, the report *Childhood Cancer: Cross Strategies for Prevention*¹³ was released by a collaboration of over sixty partners and leaders in the health, science, business, policy, and advocacy sectors, including members of the Cancer Free Economy Network. This report stresses that childhood cancer incidence has increased each year since 1975. While mortality from childhood cancers has decreased due to advancements in medicine and treatment protocols, genetics cannot explain the steady annual increase in incidence. The National Cancer Institute's Surveillance, Epidemiology, and End Results Program demonstrates that incidence has increased 41 percent with an annual percent increase of 0.8 percent.¹⁴ Compelling scientific evidence of increased risk identified environmental contributions to childhood cancer trends, including exposures to pesticides, vehicular air pollution, paints, and solvents.¹⁵ With the release of the report also came the public launch of the Childhood Cancer Prevention Initiative.¹⁶

With this initiative, organizations within the childhood cancer community, advocates, health professionals, faith leaders, business investors, and researchers have come together to create awareness of the

Back Better in Recovery, Rehabilitation, and Reconstruction: Consultative Version," *United Nations Office for Disaster Risk Reduction*, 2017, www.unisdr.org/files/53213_bbb.pdf.

¹³ See Polly Hoppin, Molly Jacobs, Bobbi Wilding, Howard Williams, David Levine, Mary Ryan, and Marilyn Markle, "Childhood Cancer: Cross-Sector Strategies for Prevention," *Cancer Free Economy Network*, September 23, 2020, www.cancerfreeeconomy.org/wpcontent/uploads/2020/09/CFE_ChildhoodCancerPrevention_Report_F2.pdf.

¹⁴ See National Cancer Institute, "Surveillance, Epidemiology, and End Results Program," *National Cancer Institute*, 2021, seer.cancer.gov.

¹⁵ See Todd P. Whitehead, Catherine Metayer, Joseph L. Wiemels, Amanda W. Singer, and Mark D. Miller, "Childhood Leukemia and Primary Prevention," *Current Problems in Pediatric and Adolescent Health Care* 46, no. 10 (2016): 317–352; Rosana E. Norman, Alexander Ryan, Kristen Grant, Freddy Sitas, and James G. Scott, "Environmental Contributions to Childhood Cancers," *Journal of Environmental Immunology and Toxicology* 2, no. 2 (2014): 86–98.

¹⁶ See Cancer Free Economy Network, "Childhood Cancer Prevention Is Possible," *Cancer Free Economy Network*, 2020, www.cancerfreeeconomy.org/childhood_cancer_prevention/.

environmental connections while the nature of some forms of childhood cancer are identified. Collectively, cases are made for childhood cancer prevention within the scientific, business, economic, and policy sectors. This Initiative works to prioritize the fact that childhood cancer is the leading cause of death among children with forty-six cases diagnosed daily, 16,000 annually, and \$1.9 billion spent each year on related hospitalizations.¹⁷ In addition to the call for a childhood cancer prevention research agenda, this Initiative also strives to advance public policy to incentivize producing safer chemicals and products, while also supporting the expansion of regulations to reduce known childhood cancer contributors.

In order to address cancer prevention overall, and childhood cancer prevention specifically, a systems approach is required to achieve the largest impact and to foster the opportunity to address multiple exposure pathways.¹⁸ This comprehensive approach depends on the assumption that the breaking down of complex concepts into simple, easy to understand units helps in better addressing such complexity and facilitates articulating effective solutions. In this context, it is critical to ascertain the exposure pathways that place children at risk for cancer and other long-term illness. Within the existing systems, it is also important to identify, understand, and consider the influences, circumstances, beneficiaries, and implications that concern the proposed systemic shifts while possible actions are considered.

In the past, successful policies promoting public health standards have been implemented. As examples, vehicle seat belt laws have reduced mortality rates from accidents, tobacco cessation efforts have helped to reduce lung disease, food subsidy programs have been shown to reduce

¹⁷ See Hoppin, Jacobs, Wilding, Williams, Levine, Ryan, and Markle, "Childhood Cancer: Cross-Sector Strategies for Prevention."

¹⁸ See Gordan K. C. Chen, "What Is the Systems Approach?," *Interfaces* 6, no. 1 (1975): 32–37.

health inequalities,¹⁹ and the removal of lead from paint and gasoline in the 1970s dramatically reduced childhood blood lead levels.²⁰ These successes should encourage timely and urgent policies to reduce the factors leading to cancer in children.

Government's Role in Cancer Prevention

With an obligation to promote public health, the government's role should include safeguarding existing federal laws with evidence of equitable protection of communities from rollbacks and alterations. The U.S. Environmental Protection Agency should be held accountable for enforcing existing regulations, while air quality and water protections need to be expanded. Among state and federal supported offices and programs, the reduction or elimination of pesticide use should be required. Overall, the goals of eliminating toxics, using safer materials in children's products and our built environments, and promoting innovation and advancements in non-regrettable substitution options need to be required.

The role of responsible governments also includes using government and institutional dollars to purchase nontoxic options, ensuring children's spaces are sited safely, requiring transparent disclosure of chemicals of concern in children's products and in areas intended for use by children (e.g., artificial turf), and increased funding for research on cancer prevention.

Governments have a fundamental obligation to provide for the general well-being of the public and our shared environment, both of which are profoundly at risk due to the ways in which chemicals are manufactured, used, and released. Policies that restrict harmful chemicals

¹⁹ See Katie Thomson, Frances Hillier-Brown, Adam Todd, Courtney McNamara, Tim Huijts, and Clare Bamba, "The Effects of Public Health Policies on Health Inequalities in High-Income Countries: An Umbrella Review," *BMC Public Health* 18, no. 1 (2018): 869, doi.org/10.1186/s12889-018-5677-1.

²⁰ See American Academy of Pediatrics Committee on Environmental Health, "Lead Exposure in Children: Prevention, Detection, and Management," *Pediatrics* 116, no. 4 (2005): 1036–1046.

and drive our economy toward safer solutions are essential if we are serious about preventing debilitating, deadly diseases like cancers.

Our Collective Role in Cancer Prevention

As the demand for sustainable markets continues to gain traction and grow, the question still remains whether we collectively will meet the urgent opportunity before us to add our voices to the children's environmental health movement so that we can adequately and equitably protect our most vulnerable. The Children's Environmental Health Network (CEHN) welcomes partnerships with citizens, relying on their time and energy, as the Network continues to mobilize and leverage the children's environmental health movement. CEHN offers a variety of ways in which people can lend their voices to the fight for equitable protection of all children from known harmful carcinogens and toxics. One way to step up is to participate in action alerts that target elected leaders, community leaders, and decision-makers, asking them to put children first. Another way to actively participate in this vital work is to participate in the Children's Environmental Health Day.²¹

Children's Environmental Health Day is the second Thursday of every October, which is Child Health Month. It is a day of assessment, realignment, networking, and opportunity to share effective strategies, resources, and lessons learned in the field. Partner events, which aim to promote education and action around the protection of children's health, are tracked and available to support people's motivations and encourage to replicate events in other areas of the country. Children's Environmental Health Day Proclamations are also encouraged and secured at the state and local levels.²² These resources become critical tools for advocacy and engagement among partners and community members, with elected representatives and community leaders. This collective work

²¹ See Children's Environmental Health Network, "Children's Environmental Health Day," *Children's Environmental Health Network*, 2021, cehd.org.

²² See Children's Environmental Health Network, "Obtain a Proclamation," *Children's Environmental Health Network*, 2021, cehn.org/cehmovement/cehday/proclamation/.

to change the current paradigm centered on treatment to also include a focus on prevention is a key priority in CEHN's effectiveness strategy, not only to protect the lives of children living today but for generations to come.

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