

2015



A Blueprint

for Protecting Children's Environmental Health:
An Urgent Call to Action



CHILDREN'S
ENVIRONMENTAL
HEALTH
NETWORK

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FOREWARD

My name is Cynthia Moices. I am a community advocate for environmental, climate, and social justice. I graduated from Ithaca College with a Bachelor of Science. I am also a Puerto Rican woman in her early twenties, who comes from a low-income community of color -- Brownsville, Brooklyn, NY -- a community that experiences a disproportionate amount of environmental burdens. Now I work for UPROSE, a community-based organization in Sunset Park, Brooklyn, which is a similar community to Brownsville. UPROSE is an intergenerational, multi-racial organization and is nationally-recognized for promoting the sustainability and resiliency of its community. We do this through community organizing, education, leadership development, and cultural/artistic expression.



I chose this path -- to work at an organization like UPROSE -- because of my personal experience of growing up in a town where environmental burdens affect the health and wellness of my friends and family. However, it wasn't until I started working in the field of environmental justice that I was really able to make the connection between environment, climate, and people's health, and to articulate that connection. My heart always told me that the reason my family and friends were getting sick was not entirely their fault, but rather the result of their environment.

On a global scale, my generation, and the generations after me, are in trouble. We are in trouble because there is a legacy of pollution in our communities. We are in trouble because so many untested and potentially harmful chemicals are added to products that make their way into the communities and homes where we live, learn, and play. We are in trouble because we have inherited a climate crisis and will continue to suffer from the serious health consequences associated with it. However, we can step up and be a part of the solution to reduce the effects of climate change so that we don't leave our children with this legacy.

INTRODUCTION

Since 1992, the Children's Environmental Health Network (CEHN), a national and multi-disciplinary organization, has been working to bring attention to children's environmental health, and to promote the need to protect the developing child from environmental health hazards and promote healthier environments. CEHN conducts this vital work by supporting prevention-oriented research, serving as a leader by increasing awareness, education, and prevention strategies, and promoting the development of sound public health and child-focused national policy.

When CEHN celebrated our 20th anniversary in 2012, we took that time to truly assess where the field of children's environmental health protection has come and identified the gaps that still require serious attention. Although noteworthy efforts to improve the environmental health of children have been achieved over the last two decades, we faced the hard reality that current research



focuses, policies, and practices still do not adequately protect children from an ever-changing environment. The paradigm shift required at all levels throughout society to proactively consider children and future generations has not yet been made.

This hard reality provided CEHN with the drive and motivation to utilize our leadership in the field of child health protection to create a proactive vision for the 21st century: a vision that will focus on healthy environments and speak to the widening definition of "environment and health outcomes", that will expand to include many more sectors, and that will make strong connections with science, innovative technology, basic and creative community action, and state and national policy. A vision that will form a framework for productive action by many individuals and organizations nationally and potentially across our borders.

After several key stakeholder meetings over the last two years, including a historical Wingspread Summit in the fall of 2014, the vision that we collectively sought was developed and confirmed. From there, CEHN, with the assistance of various leaders in the research, community health, non-profit, practice, legal, policy, economic, and Federal arenas, spent the majority of the last year working on the framework that the field has been seeking for productive action to protect children from environmental hazards. This framework is titled A Blueprint for Protecting Children's Environmental Health: An Urgent Call to Action.

This Blueprint is intended to be a high-level resource to assist various leaders in our communities -- and for the entire field of children's health and protection -- to prioritize the needs that are still very prevalent, on behalf of our children. The purpose of this resource is also to leverage those efforts that are showing, or that have a strong potential to show positive return to children and their families living in U.S. communities across the nation. It is our responsibility to do much better for our children.

We cannot continue to risk the future of our children of today and those generations to come by not acting on the science, case examples, and practice strategies available to us. The time to act is now!

Nsedu Obot Witherspoon, MPH
Executive Director, CEHN

CHILDREN FIRST: THE NEED FOR ACTION NOW - A RENEWED VISION

The State of Children's Environmental Health Today and the Urgent Need for a Better Tomorrow

Twenty years ago, the Children's Environmental Health Network (CEHN) convened leading researchers at the first-ever national symposium on children's environmental health. The participants critically examined children's environmental health in the United States and produced a blueprint for change¹. Although progress has occurred since then, today's children face an epidemic of illnesses and chronic diseases linked to environmental exposures.

The Federal Interagency Forum on Child and Family Statistics, established by Executive Order in 1997, recently published a compendium of indicators of children's well-being in the U.S.² This report provides critical information about children:



Demographics

- ▶ Children under 18 years of age number 74 million and comprise 23% of the population;
- ▶ 53% are white, 24% are Hispanic, 14% are black, and 5% are Asian;
- ▶ 22% of America's children live in poverty.

Children experience increased rates of disease and disease risk factors:

- ▶ Only 68% are fully immunized;
- ▶ 18% are obese;
- ▶ 10% suffer from asthma.

Too many children lack the basic necessities of life:

- ▶ 46% reside in "hazardous housing";
- ▶ 22% are "food insecure";
- ▶ 686,000 suffer abuse/neglect;
- ▶ 9% lack health insurance.

Children are routinely exposed to significant environmental hazards:

- ▶ At least 4 million households include children exposed to high levels of lead - children of color and living in poverty are disproportionately at risk for elevated blood lead levels³;
- ▶ 8,684 children die from injuries
- ▶ 66% live in poor air quality areas.

Generally, children of color and those who live in poverty experience greater exposures and have poorer health outcomes⁴⁻⁷. To improve these conditions, all children must be at the forefront of our nation's actions addressing health and environment, while taking into account the social determinants of children's health – from research and education to policymaking.

Research, Science, and Policy Have Advanced, but Challenges Remain

Significant advancements in research and science since the last blueprint nearly 20 years ago highlight the urgency of taking action to improve children's environmental health today.

Science now clearly demonstrates that children are disproportionately exposed to health risks and safety hazards from the environments where they live, learn, and play; children's typical behaviors expose them to more environmental risks than adults. Environmental exposures are particularly damaging to children because their neurological, immunological, digestive, and other body systems are still developing, and because they breathe, eat, and drink three times as much per pound of body weight as adults⁸⁻¹².



Public health research has also provided important new insights into how children's environmental exposures affect children's health. Studies have identified risks from exposures to very low doses of toxicants from before birth (in utero)¹³⁻¹⁶. Even preconception maternal and paternal exposures can have negative effects on children. In addition, science now shows links between early childhood exposures and chronic disease later in life¹⁷⁻²¹. These new insights support the urgency of finding new and different approaches to address children's environmental health today.

In the 1980's, it became clear that lead exposure poses a significant threat to children's health. With this increased understanding of lead exposure came a number of policy and regulatory initiatives to address children's environmental health. These initiatives were followed by several key meetings about children's environmental health in the 1990s, which led to advocacy efforts among medical, environmental justice, and non-profit organizations and a number of important policies -- in particular the U.S. Environmental Protection Agency's (EPA) Policy on Evaluating Risk to Children in 1995 -- which directed the agency to consider environmental health risks to infants and children in all risk characterizations. This was followed by President Clinton's 1997 Executive Order 13045 -- Protection of Children from Environmental Health Risks and Safety Risks, which called for increased federal agency engagement, especially by the EPA, on children's environmental health and for the formation of a federal children's advisory committee. The Executive Order resulted in the creation of the EPA/National Institute of Environmental Health Sciences (NIEHS) Children's Environmental Health and Disease Prevention Research Centers ("Children's Centers") in 1998. And, led to the formation of the Pediatric Environmental Health Specialty Units (PESHUS); pediatric research centers that have been, and continue to be, critical to understanding and advancing the protection of children's health, and for establishing a scientific framework for research.

Several more recent policies and programs have helped to improve children's health, such as the Safe Routes to School Program (SRTS). SRTS helps communities across the country make it possible for families and children to increase their physical activity by walking and biking safely to school²².

The world in which today's children live has changed tremendously from that of previous generations. Changes in the built environment and in urban and suburban design have resulted in automobile-dependent communities where walking and biking are difficult and a vehicle is necessary to get around. A reliance on burning fossil fuels is contributing to poor air quality in many communities and to public health and

environmental threats posed by climate change. If left unchecked, climate change will have devastating consequences for future generations. Tens of thousands of chemicals, many untested for their health and development effects on humans, have been introduced into commerce in recent decades^{23,24}. In addition, the use of pesticides has become widespread^{25,26}. Recent research supports urgent action to address these wide-ranging environmental exposures and to make children's environmental health a priority for our nation's policies and programs.

A VISION FOR CHILDREN'S ENVIRONMENTAL HEALTH

A historic meeting was convened by the Children's Environmental Health Network at Wingspread, headquarters of the Johnson Foundation, in Racine, Wisconsin on October 21-23, 2014.

Over 30 visionary leaders representing perspectives from science, non-profit advocacy, environmental justice, child health, urban planning, academia, public health, business, economics, public policy, law, and agriculture gathered in urgent recognition that children are now suffering from an array of illnesses and chronic diseases linked to environmental exposures.

This diverse group of leaders drafted a dynamic vision statement calling for transformative change through renewed and collective action to provide all children with the protections from harm that they deserve. They also developed an outline of a blueprint for action that places children at the center of all key decision-making moving forward. In the weeks, and months that followed the retreat, this Blueprint for Action was developed to move the vision to reality.

**“If you bring remarkable people together in a remarkable place,
then remarkable things can and do happen”**

Roger Dower,
President of the Johnson Foundation
(At Wingspread)



Vision Statement

We believe that every child has an inalienable right to life, liberty, and the pursuit of happiness. Fundamental to that vision is the right of all children to play and learn, to breathe, eat and drink, and to dream safely cradled by their families and communities. All children should live free from violence, racism, poverty, hunger, life trauma, and poisons that will keep them from living up to their full potential. Indeed, society's soul is truly revealed by the way in which it treats its children.

We believe that the next generation must be better off than the last. We believe that it is our moral obligation to protect and nurture our children's health. And we believe that their health is a state of physical, mental, and social well-being, not merely the absence of disease.

We have gathered in urgent recognition that our children are gripped by an epidemic. It is a surge of illnesses and chronic diseases linked to environmental exposures. This may be the first generation of Americans to have a shorter life expectancy than their parents. We know that too many hazards in our homes, schools, child care facilities, businesses, and communities are threatening the health and well-being of our children and our nation. The water our children drink, the air they breathe, the food they eat, the schools and child care facilities in which they learn, the parks where they play, and the communities in which they live are in too many cases threatening their health during childhood and later in life. The security of their families, communities, and our nation's future is further imperiled by climate change. We know that children are uniquely susceptible and especially exposed to too many toxics. We also know that many of these threats stem from parents' exposures to pollutants before conception and children's exposures throughout childhood and into late adolescence – and that these early exposures can trigger diseases and disrupt development, learning, and behavior both in childhood and later in life.

Based on these facts, we unanimously support the following principles:

- ▶ *All children have the right to breathe clean air, eat safe and healthful food, drink pure water, and enjoy toys and products free from environmental health and safety threats;*
- ▶ *All children have the right to healthy, safe, and secure homes, child care facilities, schools, and communities;*
- ▶ *All children and their parents and caretakers have the right to know about proven and potential hazards to their environmental health and safety and to protection from these threats.*

It is our mutual responsibility to protect these rights and to act with forethought to protect children's health and development, regardless of their race or social circumstances. It is our special obligation to safeguard communities most at risk.

Our vision is of a society that puts children at the center. We urge renewed and collective societal action to make this vision real by:

- ▶ *Mobilizing society to take action on children's environmental health -- placing a strong priority on children and families;*
- ▶ *Creating knowledge essential for effective action and making use of the knowledge we have;*
- ▶ *Marshaling the engine of the economy to achieve environments in which children can thrive and enjoy abundant opportunity for building a sustainable, economically secure future; and*
- ▶ *Building the political will in our institutions of government for child-centered policies.*

RECOMMENDATIONS AND CALL TO ACTION

Recommendation 1: Mobilize “society” to take action on children’s environmental health - Place a strong priority on children and families

Rationale

- ▶ There is an urgent need to transform society’s understanding of children’s environmental health and put children and families at the forefront of society’s conscience and thinking.
- ▶ Science showing irreversible and severe harm calls for urgent action now.
- ▶ We now know that children suffer more harm at nearly every level of exposure to pollution and toxics than do adults and that early life exposures are risk factors for chronic diseases such as diabetes, obesity, cardiovascular disease, cancer, asthma, and neurological and reproductive health disorders.



Challenges

- ▶ Mobilizing society requires significant and long term organizing.
- ▶ Scientific knowledge has not been translated in a way that is understood and accessible to the general public.
- ▶ Families face multiple challenges yet public resources are scarce and policy attention is limited.
- ▶ There is no single collective message and not enough messengers to move the needle on children’s environmental health and make transformative change.

Actions

- ▶ Develop a detailed, comprehensive communication strategy with compelling messages and stories that communicate the key environmental health issues facing children.
 - Identify and deliver effective and compelling messages for key audiences and influencers, including success stories from different perspectives.
 - Identify and secure key messengers – including youth and children – for effective deployment of these messages.
 - Identify (if necessary develop) a set of indicators that can help to assess, measure, and depict healthy environments for children. Use these indicators to measure progress, educate the public, and hold society accountable.
 - Use social media and other innovative communication tools to reach, engage, educate and empower the general public especially youth and children.
- ▶ Launch a movement and capture the public’s attention through a national event such as a million children march.
- ▶ Create a cohesive and forceful network of support, including a coalition of traditional and non-traditional supporters.

Recommendation 2: Create knowledge essential for effective action and make use of the knowledge we have

Rationale

- ▶ Knowledge is critical for transformative change in children's environmental health.
- ▶ Clear and accessible information about children's environmental health, including advancements in science, is imperative to educate and equip lay audiences, decision makers, and others with the information they need to act.
- ▶ It is important to harness existing information, identify gaps in information, and strengthen the understanding of the relationship between children, their environment, and their experiences, including psychosocial stress.

Challenges

- ▶ Credible and accessible information about children's environmental health is not collected in one place that is easily accessed by the public.
- ▶ Research on children's environmental health – including pediatric research and prevention – is often underfunded or is in some cases not funded at all. Applied research that would help to develop effective public policy often falls outside of existing funding programs.

Actions

- ▶ Create a reliable, credible hub of information on children's environmental health that is accessible and includes both original scientific research and research findings translated for lay audiences (to include the "meaning" and "weight" of the science).
- ▶ Develop a research agenda that builds on past and existing research efforts and that addresses important knowledge gaps.
- ▶ Craft ways to overcome funding obstacles, particularly within philanthropy and the federal government, for research in the area of pediatrics and prevention.
- ▶ Develop mass-media materials to inform a comprehensive communication strategy about children's health and development to help educate society broadly about the underpinnings of children's environmental health.
- ▶ Create information about children's environmental health to engage parents, families, and members of the public – e.g., the top 10 actions for protecting children from environmental hazards; stories about children's environmental health in everyday life; recognition for champions of children's environmental health.
- ▶ Disseminate information about children's environmental health through existing networks such as schools and child care, and through non-traditional partnerships (i.e., businesses), and community groups.
- ▶ Create curricula for elementary and high schools on children's environmental health issues.



Recommendation 3: 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

Rationale

- ▶ There is a critical need for the use of safer chemicals and manufacturing of safer products.
- ▶ There are a growing number of businesses which are working towards safer chemical production, sales, and uses, but these businesses are still the minority.
- ▶ There is a need for more life cycle assessment (cradle to grave) of products and their potential environmental impacts and harm to children's health.
- ▶ Business and industry can be allies (along with government) in the work to protect children's health and can be encouraged to use safer chemicals and develop safer products.
- ▶ Consumers are increasingly aware of the impacts of chemicals in products (i.e. BPA).
- ▶ There are tremendous opportunities to create greater awareness of and to encourage the purchase of child safe products.



Challenges

- ▶ Current manufacturing and production processes do not support the use of safer chemicals and safer products.
- ▶ There is not enough market demand for safer products, as many products are either not available or not affordable to many people throughout the U.S.
- ▶ There is little awareness or recognition of labels for existing safer products.
- ▶ Federal and state regulations and incentives are not adequate for promoting green chemistry and safer chemical production and use.
- ▶ Many businesses and trade associations deploy substantial resources to challenge protective policy efforts and undermine credible science.

Actions

- ▶ Encourage the production and purchasing of safer products – by creating a market demand:
 - Harness the consumer power of youth – e.g., through a social media/marketing strategy.
 - Facilitate development of a children's environmental health certification for products that children use.
- ▶ Engage the business community as part of the solution to protect children's environmental health.
 - Work with businesses in the development of criteria and guidelines for safer products.
 - Work within the business sector to advance children's environmental health and foster business champions.
 - Develop a business led media campaign.
 - Encourage and support aligned community-based entrepreneurship and business development.
- ▶ Provide a sound assessment of the economic case (e.g., the business case or return on investment) at the societal level that prevention from early exposures is beneficial to society, and an investment in national security and a vibrant workforce.

Recommendation 4: Build the political will in our institutions of government for child centered policies

Rationale

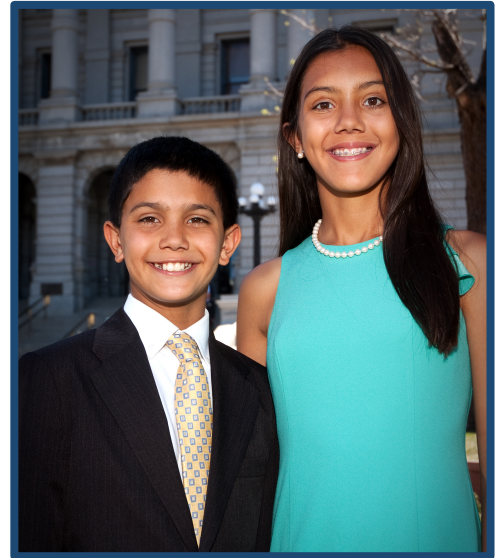
- ▶ The political will for protection of children's environmental health has waned over the years – children's environmental health is not a high priority among many -- as a matter of policy or for political decision makers.
- ▶ Transformative change in children's environmental health will only occur with political will and support.

Challenges

- ▶ Changing political will to embrace a societal issue – such as children's environmental health – requires a ground swell of activity and support, as well as elevation of the value of children's environmental health among decision makers.

Actions

- ▶ Develop a way – either through a new or existing organization – to recognize elected leaders who are champions of children's environmental health and to educate the public on their representatives' actions on children's environmental health issues.
- ▶ Develop briefs on key children's environmental health issues for elected officials.
- ▶ Draft and promote a strong and innovative policy platform for children's environmental health, including a "Promise to Our Children" – a set of 10 principles for policy actions at all levels of government.
- ▶ Write and advocate for a Children's Bill of Rights – potentially drawing upon the United Nations Convention on children's rights (United Nations, 1989).
- ▶ Promote children's health in all policies.



Recommendation 5: Establish a connected and vibrant children's environmental health community

Rationale

- ▶ An established, connected, vibrant, and multi-sector children's environmental health community is vital to strengthening and aligning efforts, creating a collective voice, and catalyzing action.
- ▶ The children's environmental health community must work closely with the public health community.
- ▶ The children's environmental health community can benefit by working closely with those who work outside the health sector but have a profound influence on children's health and safety.
- ▶ A vibrant community must have youth and family representation at its center.
- ▶ The children's environmental health community must work closely with housing, school, and child care communities especially to benefit from lessons learned and existing science on indoor air exposures and protections.

Challenges

- ▶ Harnessing the multitude of groups, organizations, stakeholders, and sectors involved in children's environmental health is a significant endeavor that involves considerable resources and time.
- ▶ There is no single leader or convening body for children's environmental health.
- ▶ Given the diversity and number of organizations, agencies, and individuals involved, it will be challenging to develop a collective and universal message that all can embrace.

Actions

- ▶ Develop a systems map to better identify and understand key stakeholders and to define the community.
- ▶ Galvanize students in academic institutions, including Historically Black Colleges and Universities and other universities serving Latino and Native American students.
- ▶ Train family doctors, OB GYNs, pediatricians, nurses, and other relevant health care professionals about the range of children's environmental health issues (from toxic exposures to childhood obesity to impacts of climate change to the positive impacts of livable communities).
- ▶ Connect with the environmental justice movement and ensure that marginalized communities and populations and those facing health disparities have a voice and are part of the community.
- ▶ Identify, connect with, and integrate into strong, existing, and relevant infrastructures and initiatives that benefit children's environmental health. This includes housing, schools, and child care networks, livable communities and active transportation, the sports community, redevelopment and housing authorities, arts and youth parks, the majors youth commission, sustainable businesses, and many more.
- ▶ Acknowledge and work with existing children's advocacy groups – including public health and environmental health – and ensure children's environmental health is part of their agenda.
- ▶ Use a children's bill of rights and top 10 list of principles embodied in policy to create a policy platform to rally around.

PRIORITY ACTIONS FOR MOVING FORWARD

Several priority actions cut across the recommendations and emerged as the first steps to creating transformative change in children’s environmental health. These priority actions are also listed within the recommendations.

Action 1. Create a Children’s Environmental Health Collective and Coordinated Body

- ▶ Creating transformative societal change requires coordinated support and action at the national, state, and local levels and among many entities – government, non-government, the general public, businesses, and more.

Action 2. Develop and Deploy Strong and Effective Messaging

- ▶ Strong, effective, and collective messages that resonate with target groups – public, youth, and business – are essential. The development of these messages will require the guidance of communication experts. The messages need to be value and evidence-based.

Action 3. Engage and Involve Youth

- ▶ Youth must be included in the call to the action and among the primary messengers. And, they need to be engaged in all activities and levels of this blueprint including message and policy development.

Action 4. Develop Top 10 Policy Actions

- ▶ A robust policy framework as the foundation is needed for all actions moving forward.

Action 5. Enhance and Use Online Technology and Social Media

- ▶ Easily accessible, relevant, and timely information is critical to empowering action.

Action 6. Determine and Enhance Children’s Environmental Health Indicators

- ▶ Children’s environmental health indicators are critical to hold society and others accountable, to help make the case for the urgency of the problem, and to demonstrate where progress has been made or not. These indicators need to be understandable, measurable, and evidence-based and must include the health costs and benefits of prevention.



Summary of Priority Actions:

Priority Actions	Mobilize Society	Create Knowledge	Marshal the Engine of Economy	Build Political Will	Establish Community
Create a Children’s Environmental Health Movement	X	X	X	X	X
Develop and Deploy Strong and Effective Messages	X	X	X	X	X
Engage and Involve Children/Youth	X		X	X	X
Develop Top 10 Policy Actions			X	X	X
Enhance and Use Online Technology and Social Media	X	X		X	X
Develop Children’s Environmental Health Indicators	X	X		X	

MAJOR PLAYERS AND INFLUENCES

Creating a robust children's environmental health movement and putting the recommendations and activities outlined in this blueprint into action will require the engagement of many groups and "influencers."

Historical homes of influence for children's environmental health include:

- ▶ the health professional community;
- ▶ non-profit advocacy organizations;
- ▶ impacted communities;
- ▶ federal, state, and municipal governments and policy makers;
- ▶ the research community;
- ▶ educators (at all levels including schools and child care);
- ▶ industry;
- ▶ and funders both from government entities and foundations.

These groups all continue to play a role in children's health. Additional major players and groups include business, individuals and families, media, and non-health sector entities such as those in housing, planning, transportation, and food and agriculture.



CONCLUSIONS, COMMITMENTS, AND NEXT STEPS

Leaders and organizations from across the country joined together at Wingspread to develop and commit to a vision for children's environmental health. This blueprint for action is the first step in realizing this vision. The recommendations and actions are the frame for moving forward. This is just the beginning. Bold and robust actions are necessary.

Creating a movement and transformative change will require the commitment and action of many actors and will take time.

The process for putting this blueprint into action will require the following steps:

1. Identify a primary coordinating body
2. Form a Task Force to provide leadership and guidance
3. Determine any existing or new initiatives for potential collaboration and synergy
4. Identify key actors and actions
5. Engage with actors – secure commitments for action
6. Develop a Blueprint for Action, Action Plan
7. Seek and secure funding and resources
8. Implement the Action Plan (with measurable goals and timelines)
9. Monitor, track and report progress



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