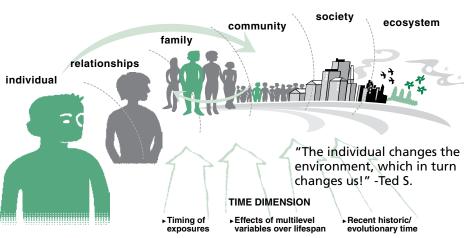
Healthy Environments Across Generations







A SYSTEMS APPROACH TO HEALTH



HEALTHY ENVIRONMENTS ACROSS GENERATIONS

Introduction

N JUNE 7-8, 2012 over a hundred and fifty participants gathered at the New York Academy of Medicine (NYAM) for the "Healthy Environments Across Generations" meeting which focused on the impacts that multiple, interacting environments can have on health (including the socioeconomic, chemical, food, built, natural, and psychosocial environments) as well as intergenerational and creative approaches to improve public and planetary health. CHE partnered with NYAM, AARP, the US EPA, The Intergenerational School, WE ACT for Environmental Justice, The Whole Child Center, and Gray is Green, along with over 60 co-sponsors from across many disciplines, to conduct this event.

The ecological or "systems" approach to health was the central theme. This document is designed to summarize key concepts about this approach to health through the eyes of leading thinkers in this area as well as those who participated in the event.



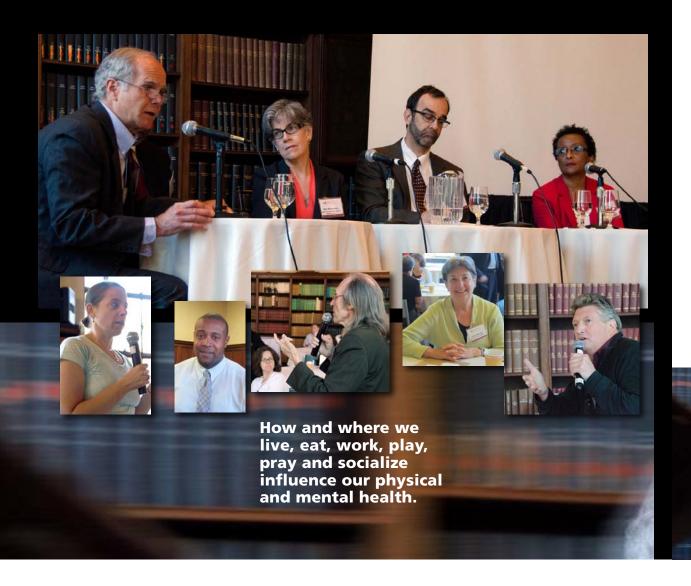


OUR GOAL FOR THIS DOCUMENT is to provide a comprehensive and cogent argument for broader and deeper investments in collaborative, cross-and multi-sector efforts to help prevent disease and disability and promote health and resilience across the lifespan.

We have seeded it with videos, illustrations, photos and excerpts from the rich discussions that took place over two days, to help mirror the stories that we believe will help us change existing paradigms.



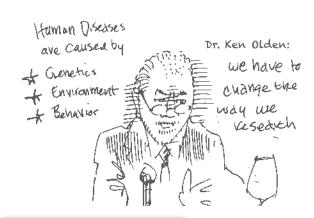
WATCH: Dr. Larry Rosen, an integrative pediatrician and founder of the Whole Child Center, describes an ecological approach from his medical perspective.



What Does "Healthy Environments Across Generations" Mean?

ow and where we live, eat, work, play, pray and socialize influence our physical and mental health. Healthy aging begins even before birth. Ted Schettler MD MPH, science advisor to both the Science and Environmental Health Network and the Collaborative on Health and the Environment, helps

on Health and the Environment, helps unravel and describe the complexities of multiple environmental influences on health and how they interact, and a health approach that considers these issues.





WATCH:
Dr. Schettler
discuss complexity
and health

HEALTH ACROSS THE LIFESPAN

BEGINNING IN THE WOMB and continuing throughout life, multiple environmental factors are strong determinants of health, even decades later, including enduring impacts on brain aging and function



It's never too late to begin healthy habits – much can be accomplished even in later years. Dr. Schettler further summarized these concepts in an opening panel.

"At this conference we want to dive more deeply into the messy interactions of the various environments: food, built, natural, chemical, socioeconomic. We have a long history of trying to understand this complexity by taking it apart, by trying to understand smaller and smaller pieces. Remarkable achievements in basic sciences have helped us learn more and more about how things work on smaller and smaller scales. The medical sciences have achieved dramatic advances in understanding the more proximate causes of diseases and interventions to address them in individuals.













The social sciences and public health take a more community-oriented approach, and are generally more interested in systemic causes. We see for example, the re-emergence of old infectious diseases and the emergence of new ones, as a direct consequence of ecological changes. Planetary health and the extent to which the planet will continue to be a hospitable place for people to live is getting increasing attention, particularly over the past 15-20 years. An ecological approach to health accommodates the multi-dimensional nature of this complexity. It grapples with the fundamental interactions across the food, built, natural, chemical, socioeconomic environments—their relationships.

This approach sees the individual as nested within a family, community, ecosystem, and society and recognizes influences of each on the others. An ecological framework recognizes the importance of time, the life-course and intergenerational considerations.



WATCH: Watch Dr. Peter
Whitehouse talk about "intergenerativity"

Others described the critical importance of an intergenerational approach to health. Peter Whitehouse MD PhD, co-founder of the award-winning Intergenerational School in Cleveland, spoke compellingly about the health benefits to all generations when all ages are honored and respected.











WATCH Gail Christopher DN, Vice President for Programs, W.K. Kellogg Foundation: "Health is so much more than the absence of disease."

CHAPTER 2

What Does "Health" Mean?

AIL CHRISTOPHER DN, Vice President for Programs, W.K. Kellogg Foundation, describes what health is from the molecular level to the community level. She makes the case for why health is "so much more than the absence of disease."

(WATCH: Gail Christopher video at left)
It was fitting that this event took
place at the NY Academy of Medicine,
said Ruth Finkelstein ScD, Senior Vice
President for Policy and Planning,
"We're not just the dance hall – we are
part of the dance."

Dr. Finkelstein also addressed health and underscored the need to think about place and the "upstream determinants of health," as well as health disparities that are deep and troubling issues. "we are going to demand transformation of the built environment."

WHAT WE MEAN BY "HEALTH" – Over two days participants from diverse sectors offered their insights into health. During the "Thinking Forward" sessions (breakout groups designed to evoke new ways of thinking), discussions included acknowledging a need to ensure that people – particularly when they are from different disciplines, sectors and communities – need to understand health can mean different things to different people. For some, health might mean not being sick, while to others "health" is a broader issue of quality of life.

Participants also discussed what "environment" means – some define environment as solely trees, land and rivers; others consider environment as everything from the womb to community development conditions. Learning more about how multiple environments impact health was a fundamental theme of this meeting.



WHAT WE MEAN BY 'HEALTH':

ROLLOVER TO FIND OUT what 'health' means from different viewpoints.



What Does "Environment" Mean?

IFELONG HEALTH DEPENDS on multiple healthy environments from the individual to the ecosystem. Within these spheres, we have the natural, built, food, chemical, socioeconomic and psychosocial environments. The overall health of these individual environments, as well as how they interact in the modern world, either promote health and resilience, or disease and disability. Insights from experts on these environments include:

CLICK A SELECTION FOR DESCRIPTION





Built Environment



Natural Environment



Food Environment



Chemical Environment



Socioeconomic Environment



Psychosocial Environment



HE BUILT ENVIRONMENT includes our homes and workplaces, schools and libraries, hospitals and long-term care facilities, streets and transportation systems, even our parks and playgrounds. The nature of our built environment, whether we are at home, work, school or play, can have a profound influence on our health, including our ability to exercise, buy nutritious food, socialize, and sleep. If it is safe, clean, accessible to all, and free of toxic chemicals and other kinds of pollution it can help foster exercise and stress reduction, provide fresh food, and offer opportunities for positive social activities.



WATCH: Richard Jackson, MD MPH, UCLA, School of Public Health – discuss improving health across the lifespan by improving the design of urban areas.

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climate change also drive

chronic disease.

East New York Farms, spoke about the youth mentoring program that

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Built Environment



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Socioeconomic Environment



Psychosocial Environment



David Wallinga MD MPA, Institute of Agriculture and Trade Policy – "Do you know a farmer? We are increasingly distanced from our food source, and we need more public funding of food system research"

environment," said Dr. David Wallinga

of the Institute for Agriculture and

Trade Policy." "There is a lack of

issues. We need to change that."

awareness of farmers and their

Supporting a healthier food system provides a wide variety

of health benefits.

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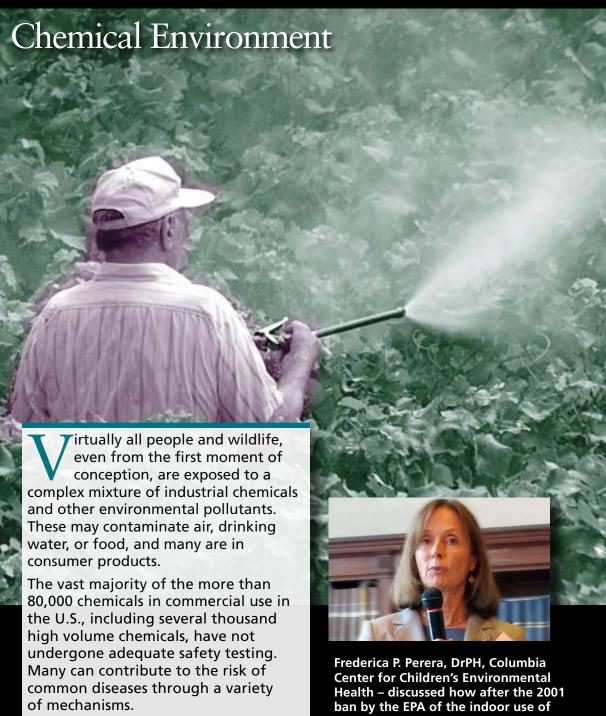
Chemical Environment



Socioeconomic Environment



Psychosocial Environment



Center for Children's Environmental
Health – discussed how after the 2001
ban by the EPA of the indoor use of
chlorpyrifos – an insecticide linked
to children's IQ deficits and motor
delays as well as lower birth weight,
measures of chlorpyrifos in kids
decreased significantly testifying to
the immediate benefit of regulatory
intervention.

Minimizing exposure to toxic chemicals

through green chemistry, pollution

prevention, safer substitution, toxic

of energy will help reduce the risks

diseases and disabilities.

waste remediation, and cleaner forms

and health care costs of many chronic

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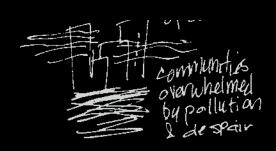
Socioeconomic Environment



Psychosocial Environment



Peggy Shepard of WEACT for Environmental Justice talked about health and environmental justice in urban communities - that the right to clean air, water and soil extends to all people and communities.



of most diseases and premature mortality. Reducing poverty and improving economic opportunities

for all people.

are the best ways to promote health

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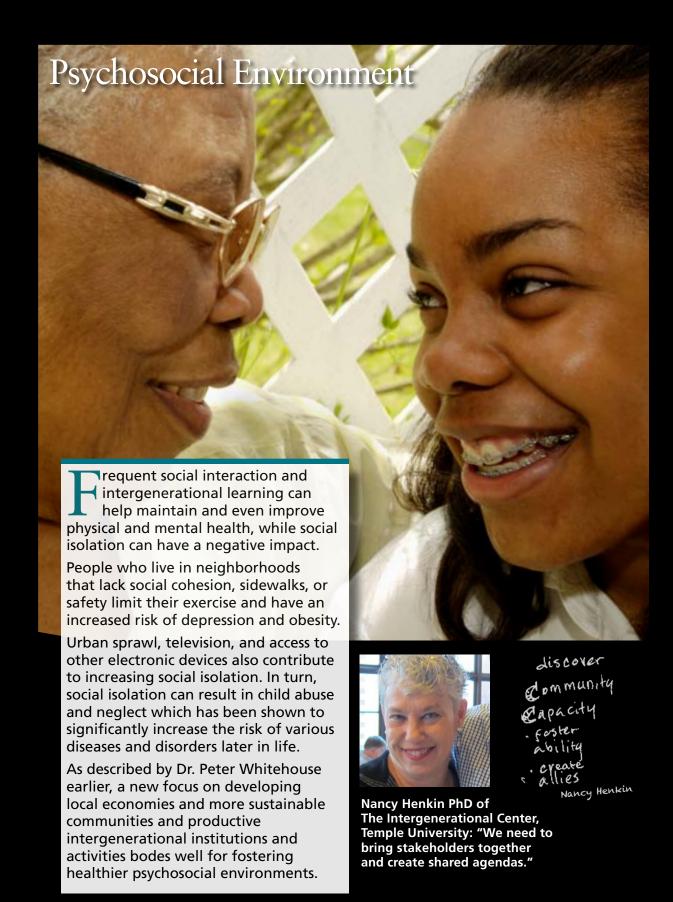
Chemical Environment



Socioeconomic Environment



Psychosocial Environment





AND NOW...

A"Breath of Fresh Art"

he arts are often ignored as a gateway to health. To illustrate how art can help inspire and engage, a "Breath of Fresh Art" was integrated throughout the New York Academy of Medicine event. Artistic expressions included dance, music, drawing and poetry that were interwoven around sessions to remind participants that creativity and imagination – not just data – are needed to develop 'real-world' solutions to address complex issues.

Presentations were punctuated with musical interludes, invitations to attendees to stretch and even dance around the room! (All of this brought to us by Maria Genné, MEd, Kairos Dance, Anthony Hyatt, Moving Beauty, Cris Anderson, Big Woods Theater.) Drawings and caricatures of panelists and ideas were posted via social media for community participation. (At right, Kath Schomaker of Gray is Green wrapped up a panel discussion with an inspirational poem).

CLICK on this icon throughout this document to release a 'Breath of Fresh Art'





All Will Come Again Into Its Strength

All will come again into its strength: the fields undivided, the waters undammed, the trees towering and the walls build low.

And in the valleys, people as strong and varied as the land itself.

And churches where no God is imprisoned and lamented like a trapped and wounded animal. The houses welcoming all who knock and a sense of boundless offering in all relations, and in you and me.

No yearning for an afterlife, no looking beyond, no belittling of death, but only longing for what belongs to us and serving Earth, lest we remain unused.

Rainer Maria Kilke, Rilke's Book of Hours: Love Poems to God, Translated by Anita Barrows and Joanna Macy (Riverhead Press, 2005)





ODELS OF TRANSDISCI-PLINARY APPROACHES AND COLLABORATIONS are not just distant dreams; they are realities being implemented around the country and world. A wide range of examples were offered by event participants, including those described on this page. How can we ramp up these efforts to put health at the center of all programs and policies? One participant suggested nothing less than another "space race," which worked to put a man on the moon within ten years.

CHAPTER 4

Working Together

THE INTERGENERATIONAL SCHOOL, CLEVELAND – co-founded by neuroscientist Peter Whitehouse and his wife, the school is a model of how to successfully integrate multiple levels and types of healthy environments to form a "sense of community, sense of purpose, sense of legacy." Intergenerational relationships are nourished, organic food is planted and harvested, toxic chemicals are banished, learning is exciting and play is encouraged. The result? An award winning school for kids, a restorative environment for elders, and a model of multiple environments interacting to foster health and resilience.



WEACT FOR ENVIRONMENTAL

JUSTICE – "I started WEACT 24 years ago to create a powershift and address serious changes of environmental justice," said Executive Director Peggy Shepard. She has been a leader for decades since then to help address the greater vulnerabilities of not only her own community but the communities of everyone who is disenfranchised and disempowered. WEACT's "Theory of Change" has helped re-create Northern Manhattan as a healthy community.

Detail from a SCHEMATIC OF WE ACT'S THEORY OF CHANGE: How the organization contributes to Northern Manhattan becoming a healthy community through key, short-term, intermediate and long-term outcomes. See more <a href="https://example.com/here/be/



BHUTAN AND "GROSS NATIONAL HAPPINESS" –

Donna Butts, Executive director of Generations United, described the country of Bhutan's decision to take a holistic or systems approach to national development, known as Gross National Happiness (GNH).

The four "pillars" of GNH are sustainable development, cultural preservation and promotion, environmental conservation, and good governance.

Happiness indicators include physical, mental and spiritual health; social and community vitality; cultural vitality; education; living standards; good governance; and ecological vitality. Results are a dramatic increase in lifespan and one of the fastest growing economies in the world – along with being the "happiest."



East New York Farms





EXPERIENTIAL TRANSFORMATION – was a the model for change recounted by both David Shuffler of Youth Ministries for Peace and Justice, and Sarita Daftary of East New York Farms, as they described their journeys to help restore their New York communities through youth involvement in community service, community gardens, and community farms and farmer's markets. David suggested that everyone need to take the trip upriver and see how things change in areas of greater wealth, envision what could be with the right resources. "We need a multifaceted approach" said David.



'Everyone needs to take the trip upriver and sees how things change in areas of greater wealth, and envision what could be with the right resources."

-David Shuffler of Youth Ministries for Peace and Justice

INPUTS

What WE ACT invests: funds, people, and materials

OUTPUTS

WE ACT
Program
activities
and
products

SHORT-TERM OUTCOMES

- WE ACT produces essential
 knowledge
- relevant knowledge
- Key constituencies acquire
 colorant skills
- Key constituencies develo
- Key constituencies ma
- Key constituencies undertake effective organized actions

W W W . H E A L T H A N D E N V I R O N M E N T . O R G



The goals put forth relate back to in-depth discussions among participants on definitions of health and environment, the need for justice and reduction of health disparities, an imperative to foster intergenerational approaches, and the importance of life-course approaches to solve seemingly intransigent problems. The goals also emphasize a need for societies, foundations, businesses and communities to invest in many more collaborative efforts, and include all the environments in our approaches to health

FOUR KEY GOALS that emerged include:



IMAGINE A WORLD UNPAVED— Communities designed to nuture our health and wellbeing! Conference attendees contributed some creative ideas online.

Promote integration

Foster innovation



CLICK THROUGH OTHER GOALS

Build a 'culture of prevention' through economic and legal incentives

Develop positive messaging and a network of communicators

CHAPTER 5

Thinking Boldly, Investing in Change



- ► Develop cross-disciplinary and transdisciplinary approaches.
 'Cross-disciplinary' tends to imply communicating from known positions across silos, while 'transdisciplinary' can mean coming up with something new altogether
- ► Identify values across disciplines and generations (what we care about; what guides us; what underlies choices and practices)
- ► Identify issues or practices that we want to prioritize collectively
- Create hybrid institutions that marry fresh thinking with best practices in multiple sectors





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A panel discussed 'What Will It Take to Get Us to the Future We Want'



FOSTER INNOVATION

- Solve problems with new ways of thinking and evaluate for efficacy, e.g., installing urban zip lines to deliver goods and reduce truck emissions pollution
- Develop "hybrid institutions" that do not meld old ideas but that marry new ideas with best practices from existing programs/approaches
- ▶ Develop another "space race", which was launched in the 1950s and 1960s to put a person on the moon, for promoting primary prevention and life-long health
- ➤ Bridge gender, race and income gaps through building personal relationships, an idea offered by two of the youngest event participants from Cleveland and the Bronx who invited each to "come to my neighborhood."

WATCH: Natalie Jeremijenko PhD,
Director of NYU Environmental
Health Clinic talks about fostering
innovation.



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Ken Olden PhD ScD, CUNY School of Public Health at Hunter College discussed the need for new approaches to research.

BUILD A 'CULTURE OF PREVENTION' THROUGH ECONOMIC AND LEGAL INCENTIVES

- ➤ Create new indicators of progress that don't rely on "growth" but rather on a system of values that puts health at the center of all institutions, redefine "wealth" beyond money, and revalue our natural world as an integral part of our healthy economic ecosystem
- Challenge the current corporate structures that make it a legal obligation for CEOs to maximize profit without concern for how their activities impact health
- ► Increase incentives for preventionoriented research and approaches, rather than rewarding focused attention on cures and responding to problems after the fact
- Invest in projects and programs for the long term to help create systemic change"

"We can't use the data that got us here in the first place. We have to use our imagination to move from research projects to solutions."



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Thinking Boldly, Investing in Change



DEVELOP POSITIVE MESSAGING AND A NETWORK OF COMMUNICATORS

- Collect and disseminate stories, including stories of success, about integrative approaches to improving environmental health across the lifespan
- Provide examples that reach and engage people "where they're at"
- Use social media to broaden the public's understanding of these issues (Watch Dr. David Wallinga's video at right)
- ► Educate key decision and policy makers in different sectors about the science so they can become stronger communicators within their organizations and communities and when talking with policymakers and others in positions of influence
- Use innovative terms to convey messages about integrative approaches, such as 'interwell', 'interhealth' or 'intergenerativity'



WATCH: Dr. David Wallinga talks about incorporating play and social media into models for change.



The Story Continues...

ave you had success in collaborative work to improve health and environment across generations? Share your stories, and celebrate our collective victories! We'll post innovative news on our webpage, and occasionally update this organic publication. Join our List Serve for updates and event news, and send your contributions to erika@healthandenvironment.org.

Follow us on Facebook





(O) WATCH: Paul Santomenna's short documentary of the un-conference



Participants attended post-conference activities in Central Park.



WATCH: See a slideshow of photos from the un-conference

ACKNOWLEDGEMENTS

Written and edited by Maria Valenti, Elise Miller Photos: Peter Whitehouse, Kathy Sykes, Maria Valenti, others

Videos by Paul Santomenna, Strategic Narratives Music by Tina Lear

Graphics and 'Breath of Fresh Art' illustrations by Stephen Burdick. Download the conference sketchbook here (pdf), and see what took place through the lens of an artist!



Collaborative on Health and the Environment

www.healthandenvironment.org

The Collaborative on Health and the Environment (CHE), is an international partnership committed to strengthening the scientific and public dialogue on environmental factors linked to chronic disease and disability. Find out more. >