Advancing Children’s Environmental Health and Environmental Justice: A Community Perspective

Webinar Presentation to The National Center for Children in Poverty
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WE ACT For Environmental Justice
WE ACT FOR ENVIRONMENTAL JUSTICE

- WE ACT builds community power that improves environmental health, policy and protection in communities of color and low-income communities.

- Emerged in 1988 out of community struggles re: North River sewage treatment plant and diesel pollution.

- Programs: Environmental Health and CBPR, Government Accountability, Youth Leadership Development, Community Organizing and Education, Sustainable Development.

- Part of national, global EJ Movement
Northern Manhattan Profile

- 7.4 sq. miles; over 620,000 residents; 86% of whom are African-American and Latino.
- Median household income is $16,000.
- Multiple environmental exposures.
- Non-attainment area for Clean Air standards.
- Ranked #1 in cancer risk from air toxics by EPA.
Asthma Hospitalizations Rates by ZIP Code
Children Aged 0-4, Manhattan, 2000

Legend
Asthma Hospitalization Rates for Children 0-4 Years Old by Manhattan ZIP Codes (Rate Per 10,000)

- 0 to 55
- 56 to 92
- 93 to 142
- 143 to 234
- 257 to 505

- MTA Bus Depot
- DOT Diesel Truck Depot
- Marine Waste Transfer Station
- Port Authority Bus Terminal
- Dept. of Sanitation Facility
- Sewage Treatment Plant
- Train Yards
- Major Highways
- 96th Street Demarcation

Average Pediatric Asthma Rates:
- Northern Manhattan: 245 Per 10,000 Children
- New York City: 177 Per 10,000 Children
- Manhattan: 173 Per 10,000 Children

Northern Manhattan Facilities
MapID Facility Name
1 Kingsbridge MTA Bus Depot
2* DOS Garbage Truck Depot (Two Large Depots, One Services Residents of the Upper East Side)
3 MTA Train Yards
4 Department of Transportation / Division of Highways Diesel Truck Depot
5 George Washington Bridge Port Authority Bus Terminal
6 North River Sewage Treatment Plant / Riverbank State Park
7 135th Street Marine Waste Transfer Station
8 Manhattanville MTA Bus Depot
9 Amsterdam MTA Bus Depot
10 Mother Clara Hale MTA Bus Depot (Scheduled to Expand)
11 DOS Garbage Truck Depot
12 128th Street MTA Bus Depot
13 Ward's Island Sewage Treatment Plant
14 100th Street Bus Depot (Currently Expanding)
15 DOS Garbage Truck Parking Lot (Outdoor Parking Lot)

Southern Manhattan Facilities
MapID Facility Name
16 91st Street Marine Waste Transfer Station
17 59th Street Marine Waste Transfer Station
18 41st Street MTA Bus Depot
19 42nd Street Port Authority Bus Terminal
20 Hudson MTA Bus Depot (Scheduled to Close)

Source: NYC Department of Health SPARCS 2000 data on Asthma Admission Rates for children ages 0 to 4 years.

Map prepared by West Harlem Environmental Action, Inc. (WE ACT) with the Columbia Center for Children's Environmental Health (CCE), using ESRI ArcView® GIS v3.1.1. If you have any questions or concerns, please contact the WEACT GIS Mapping Specialist, Carlos M. Justino, at (212) 961-1000, ext. 307.

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Key Determinants Of Health

- Race, class, income, environmental injustice.
- Access to health care, environmental, occupational exposures, important contributors
- Doctors McCord and Freeman found in study: African American man in Harlem less likely to live to age 65 than man in Bangladesh.
- Concluded that contributors to excess mortality were excessive exposures to environmental pollutants, dilapidated housing, and over crowding.
Issues Are Linked

- Human and Civil Rights: Equal enforcement, civil rights and Title VI, land rights, sovereignty, reparations, globalization, food security.

- Children’s Environmental Health: asthma, lead and pesticide poisoning.

- Toxics and Waste: hazardous, radioactive, military toxics sites, brownfields development, schools and toxics, industrial facility siting, neighborhood relocation.

- Land Use, Planning & Zoning: suburban sprawl & smart growth, Transportation Equity, Sustainable Development

- Gentrification & Displacement.
Components of Our Environment

- The environment has three interacting components: (1) natural (2) built and (3) social environment that are interconnected in a way that policies and practices initiated in one area, inevitably affect the others and, ultimately, people’s health, safety, and well being.

- In the urban environment, land use and building design decisions are de facto public health decisions.
Urban Environment Has Special Characteristics

- Over saturation of communities with multiple sources of environmental toxicants in congested spaces;

- Co-existence of residential and industrial sites as a result of imprudent land use decisions;

- Inadequate documentation of most environmental health risks in urban communities;

- Existence of effects of multiple and cumulative exposures and synergistic effects;

- Little environmental enforcement and compliance activity in communities of color.
Issue of EHP, guest edited by WE ACT, published April, 2002
Built Environment Is An Exposure That Shapes Community Residents’ Lives, Health, Behavior

- Studies link the built environment and people’s health.
- Densely populated urban areas face range of indoor & outdoor environmental risks.
- Building characteristics, land-use patterns, transportation choices & urban design decisions present opportunities and barriers to minimizing these risks.
- Not only public health – but air pollution, outdoor recreation, heat-island effect, climate change— all are influenced by what is built and how.
Environmental Justice Focus on Science

- Realized that evidence-based campaigns moved policymakers, empowered residents.
- Important tool and dynamic-- science and technology.
- Has great impact on our ability to develop safe, sustainable communities.
- Lack of scientific literacy, information, data, and context was serious void contributing to systemic exclusion of communities of color from decision-making.
- Demanded health studies to assess environmental exposures or residents living in polluted areas.
Building Partnership and Methods To Engage Academics and Residents

1st Level of Environmental Health Literacy: Raising Awareness

- 10-year partnership with Columbia’s Children’s Environmental Health and NIEHS P30 centers.

- Early years: town hall meetings, led local public outreach campaign through fact sheets, health fairs to raise awareness of 5 key actions parents can take in the home.

- Hosted conferences on asthma in 1996, lead poisoning, children’s environmental health, and Ethical Issues of Genomic Research.
Community-Based Participatory Research as an Outgrowth of Collaboration

- Airborne concentrations of PM$_{2.5}$ and diesel exhaust particles on Harlem sidewalks (PI: Dr. Kinney)
- Measured concentration of fine particles and elemental carbon on 4 intersections in Harlem; compared these to diesel traffic counts
- WE ACT’s Earth Crew youth trained as field technicians
Healthy Home Healthy Child Campaign WE ACT and the Columbia Children’s Environmental Health Center

The Truth about AIR POLLUTION... Don’t just breathe it all in!

Dying causes lung diseases. The tiny particles from diesel exhaust form rusts and fires, which can cause cancer and can trigger asthma attacks, heart attacks, and premature deaths.

What is air pollution?

Air pollution includes tiny particles as well as gases, such as ozone. Most air pollutants are produced by burning fossil fuels, including coal, oil, diesel, gasoline, and wood. People inhale these harmful particles, called particulates, which lodge into the lungs and can cause illness. The largest pollutants are cars, trucks, and buses, coal-fired power plants, and industrial boilers.

What types of health problems are caused by air pollution?

Air pollution can cause diseases and trigger asthma. Air pollution has been linked to reduced lung function, increased hospital and emergency room admissions, and premature death. A recent study by the Natural Resources Defense Council linked particulate pollution to 64,000 deaths per year.

Tips for Fighting Air Pollution

- Use mass transportation as an alternative to driving whenever possible.
- Write to the New York City Metropolitan Transportation Authority and demand that they convert all diesel buses and depots to natural gas.
- Join a clean air campaign in your community to combat air pollution. For information contact West Harlem Environmental Action (212) 961-1009.

Developed by:
The Columbia Children for Children’s Environmental Health (CCCEH)
Contemporary Parents
West Harlem Environmental Action (WE ACT)

For Further Information Contact WE ACT at (212) 961-1009
Goals for the Campaign—Training Residents and CBOs Citywide

- **Organize & Mobilize** NYC tenants to win safer housing.
- **Illustrate** the connection between poor quality housing & poor health.
- **Reduce** use of dangerous household products (ex: Tempo & Tres Pasitos)
- **Empower** residents to respond to health risks linked to poor quality housing.
Trainings Refocused on Healthy Homes

- Week 1: Intro to Housing & Environmental Health.
- Week 2: Safe Ways To Rid Pests
- Week 3: Asthma and Mold
- Week 4: Community Organizing
- Week 5: Air Pollution & EJ
Personal Transformation

Transformed Communities

- EHJLT encouraged leaders to explore the various environments in which they lived.
- Challenged leaders to understand their roles and responsibilities in creating the neighborhoods they’ve envisioned.
- Visualized the type of neighborhoods they wanted for themselves and future generations.
- Charted a course of action to achieve their vision.
Educating Residents To Impact Public Policy

- Developed a Housing and Health Leadership Council comprised of motivated residents and organizations from communities in Northern Manhattan and the South Bronx, that will identify and pursue a needed change in housing policy and practice.

- Developed a citywide network of housing and health organizations to share information and resources related to housing and children’s health, and to serve as a platform to discuss and address the policy issues identified by the Leadership Council on a citywide scale.
Through our interactive and capacity-building trainings, a broad spectrum of citywide, community-based organizations and residents primarily in Northern Manhattan and the South Bronx have acquired an increased awareness of housing related environmental health issues and deficiencies in current policies.

The trainings increase resident’s level of engagement, directly involving them in the design and implementation of comprehensive solutions.
Fostering Community-Academic Partnership

The partnership between WE ACT and the NIEHS Center at Columbia and the Columbia Children’s Center for Environmental Health began in the mid 90s with two goals:

1. studying the relationship between community-level environmental exposures and environmental health outcomes and

2. translating those findings into policy changes that create equity in environmental decision making and environmental protection.
Recent Outcomes of *Our Housing Is Our Health* Campaign

**WE ACT Healthy Homes Street Team**

*Neighborhood Pesticides Survey Team*

- Investigated the availability of pesticides at 135 neighborhood stores.
- Worked with Columbia Center to determine the effectiveness of a Federal ban of 2 of the most toxic pesticides used in Northern Manhattan.

**Healthy Homes Leadership Council**

- Identified indoor air quality issues and advocated for needed policy change: Revision of NYC Mold Guidelines to address the prevalence of toxic mold; catalyst for state mold task force being implemented.
Earl Crew members (from left to right: Carl Willis, David Betancourt, Latanya Stevens and Felicia Reynolds) keep a close watch as they count the number of diesel buses and trucks rolling down the streets of Northern Manhattan.
Special Issue: Children’s Environmental Health

ALL CHOKED UP:

Diesel Exhaust Exposure Among Adolescents in Harlem

by Joanne Yankura, MPH and Mary Northridge, Ph.D.

In 1998 concern was raised by members of the Harlem community when the Manhattanville bus depot was constructed on 135th Street, directly across from Intermediate School 43 in West Harlem. It was the sixth bus depot operated by the Metropolitan Transportation Authority (MTA) constructed in a Northern Manhattan neighborhood - a seventh depot is located on 59th Street.

In 1994, WE ACT approached investigators at the Harlem Center for Health Promotion and Disease Prevention to request their assistance in determining what impact diesel exhaust might have on the community’s health, especially on the respiratory health of its youth, a heavily exposed and vulnerable population. As a result, a study was designed in order to determine the background exposure levels to diesel exhaust and to measure baseline lung function of school aged Harlem youth.

Continued on page 3
Healthy Home Healthy Child Campaign WE ACT and the Columbia Children’s Environmental Health Center
1st Community Conference On Lead Poisoning in NYC

- Led to 6-year coalition effort to achieve more protective lead legislation at the City Council level.

- Parent training and organizing was one essential key to success.
IF YOU LIVE UPTOWN, BREATHE AT YOUR OWN RISK. Diesel bus fumes can kill.

West Harlem Environmental ACTion
WE ACT for Environmental Justice.
Press conference launching “Breathe At Your Own Risk”
Building Community Capacity

Environmental Health & Justice Leadership Training
Environmental Health Leadership Training Graduates
Environmental Health & Justice Leadership Training
Education and Outreach Activities

- Human Genetics, Ethics, and Communities of Color conference
  - February 4, 2002
  - Educate environmental justice and other community advocates on science and implications of human genetics research
  - Create a space to discuss ethical and social concerns
Primer for *Human Genetics, Environment & Communities of Color: Ethical and Social Implications*, compiled by WE ACT
Peggy Shepard with conference speakers Dr. Troy Duster and Dr. Kenneth Olden, former NIEHS Director, new Founding Dean, CUNY School of Public Health
Attendees at Genetics conference listen to Keynote Speaker, Dr. Troy Duster, of the Dept. of Sociology at New York University
1) The Diesel Emission Reduction Act of 2006. A.11340 (Grannis et al) / S.8185 (Marcellino et al)—This bill, which was signed into law, will reduce the public’s exposure to diesel, by requiring all NYS owned heavy duty vehicles working on state contracts to use the best retrofit technology.

Local Law 77 requires use of ultra low sulphur diesel and best available technology for non-road vehicles in city construction.

Also there is a new state mandate for NYC to adopt best available technology for pollution control on school buses.
Decreasing Health Disparities

- The partners’ roles in creating awareness of, and leading the fight for environmental justice and the reduction in health disparities around asthma has been widely recognized and cited (Brown et al, 2003; Lee, 2004; Corburn, in press; Blackwell et al, 2005). As Brown et al (2003) have noted:

- “Asthma has become perhaps the primary disease in which poor and minority people have pointed to social inequality and have engaged in widespread political action. The case of asthma demonstrates how environmental justice approaches place ethics and rights issues in the center of health policy” [40].
Kellogg-Funded Case Study

- “Conversion of NYC’s bus fleet to clean diesel and installation by the EPA of permanent air monitors in Harlem and other hot spots were among outcomes for which the partnership’s research and policy work was given substantial credit.”