



United States Environmental Protection Agency

2011 Community Involvement Training Conference
 Community Involvement in the 21st Century: Embracing Diversity,
 Expanding Engagement, Utilizing Technology


Welcome to the online broadcast!

Partnering with Companies to Enhance
 Community Engagement and Understanding

July 20, 2011 8:00am

Leslie Rubin





United States Environmental Protection Agency

2011 Community Involvement Training Conference
 Community Involvement in the 21st Century: Embracing Diversity,
 Expanding Engagement, Utilizing Technology

Welcome to the online broadcast
 for the


Presentations will be visible here


For more details, please visit
<http://www.epa.gov/ciconference>

See the presenters

Report technical problems

Access related links



 **EPA** United States Environmental Protection Agency


2011 Community Involvement Training Conference
Community Involvement in the 21st Century: Embracing Diversity,
Expanding Engagement, Utilizing Technology


To listen to the presentation


- Dial into the conference phone line
 - Toll Free Call In # 866-299-3188
 - Conference Code 2025643797#


OR

- Listen via PC speakers or headphones
 - Make sure the speaker icon is clicked and shaded green to listen online









 **EPA** United States Environmental Protection Agency

2011 Community Involvement Training Conference
Community Involvement in the 21st Century: Embracing Diversity,
Expanding Engagement, Utilizing Technology

To download slides

- The presentation materials may be downloaded from
<http://epa.gov/ciconference/streamingregistration.htm>
- Remember, you can view the presentation in REAL time through the online broadcast





 **EPA** United States Environmental Protection Agency

2011 Community Involvement Training Conference
Community Involvement in the 21st Century: Embracing Diversity,
Expanding Engagement, Utilizing Technology

Questions for the speakers

- You will **NOT** be able to ask questions LIVE as a remote participant
- Instead, please refer to the conference agenda and materials to contact speakers with follow up questions AFTER the live broadcast





 **EPA** United States Environmental Protection Agency

2011 Community Involvement Training Conference
Community Involvement in the 21st Century: Embracing Diversity,
Expanding Engagement, Utilizing Technology

Feedback

- We will be collecting comments and feedback from remote participants
- Please visit
<http://www.epa.gov/ciconference/evaluations.htm>
to submit your feedback for this session



 **EPA** United States Environmental Protection Agency

2011 Community Involvement Training Conference
Community Involvement in the 21st Century: Embracing Diversity,
Expanding Engagement, Utilizing Technology

If you have technical problems

- You may use the Technical Support window to submit requests if you are having problems with the online broadcast
- Please be sure to include a description of your problem and telephone # where you can be reached

Technical Support

Jane Doe: I have a question on accessing slides. Where are they located?


Jane Doe: I have a question on accessing slides. Where are they located?


Jean Balent(privately): Slides can be downloaded from the conference website.

3) You will your request and the reply to your request here

1) Type your question/request here

2) Click here to submit





 **EPA** United States Environmental Protection Agency

2011 Community Involvement Training Conference
Community Involvement in the 21st Century: Embracing Diversity,
Expanding Engagement, Utilizing Technology

Thank you!

Let's begin today's session!







Break the Cycle of Environmental Health Disparities in Vulnerable Children

A Leadership Development Program of

Southeast
Pediatric Environmental
Health Specialty Unit

EMORY University

Leslie Rubin MD
Southeast PEHSU Emory University
Morehouse School of Medicine
Atlanta, Georgia, USA

Children: Poverty & Vulnerability

Child Outcomes	<u>Risk for poor relative to non- poor children</u>		
Child abuse and neglect	6.8		
Lead Poisoning	3.5		
Birth to unmarried teenager	3.1		
depression	2.3		
Experiencing violent crimes	2.2		
Short-stay hospital episode	2.0		
Grade repetition and high school dropout	2.0		
Substance abuse	1.9		
Low birth weight	1.7		
Mortality	1.7		
Learning disability	1.4		
Parent report of emotional or behavior problem that lasted 3 months or more	1.3		



Asthma and Equity

- Asthma prevalence twice as high, and mortality three times as high, in blacks as in whites
- Asthma prevalence three times higher in Hispanic than non-Hispanic children
- Asthma hospitalization among Medicaid children:
 - 93% higher in black children
 - 34% higher in Hispanic children

11



Environmental Exposure to Tobacco Smoke

- The main site of exposure to Second Hand Smoke (SHS) for children is **in the home**
- **22% of children** are exposed to SHS in their homes
- Smokers are more likely to be
 - Poor
 - Minority
 - Less educated
 - More anxious & depressed



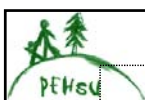
Built Environment Factors and Health Disparities

- Poor Neighborhoods are likely to have:
 - More Crime, Litter & Trash, Poor Lighting and increased Traffic Density with exhaust emissions
 - No Access to Parks or Playgrounds
 - No Access to Recreation or Community Centers
 - Fewer Health Amenities
- Children living in these neighborhoods are:
 - 50% more likely to be physically inactive
 - 52% more likely to watch television more than two hours per day
 - 55% more likely to be overweight
 - 104% more likely to be obese



Density of Fast Food Restaurants



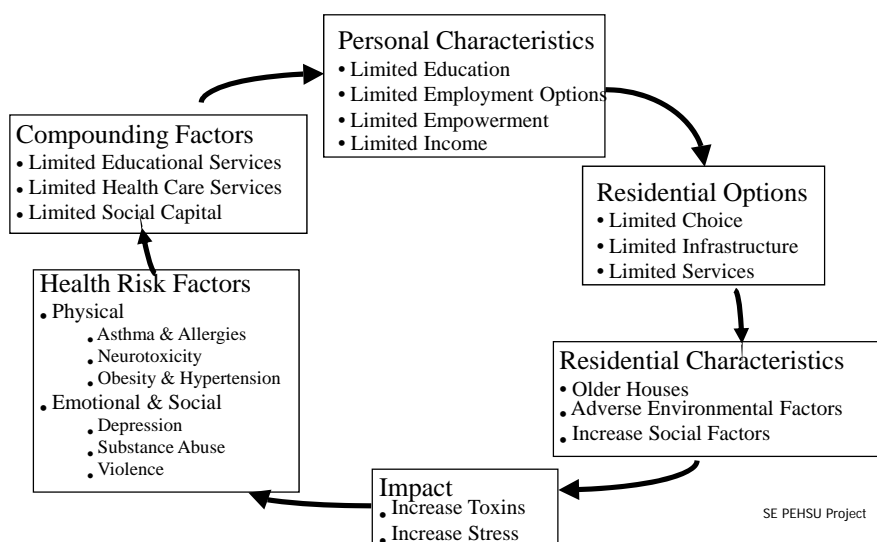


Environmental Living Conditions of Disadvantaged Children

- According to Grant Makers For Health (2007), environmental hazards are often located in or near poor communities because these areas are undesirable and inexpensive AND because they are politically disenfranchised.



Cycle of Environmental Health Disparities





Program


- The Built Environment
- Toxic Waste Sites in Duval County Florida: Reaching the Community
- Boom and Bust: Toxic Waste in Anniston Alabama

SE PEHSU Project

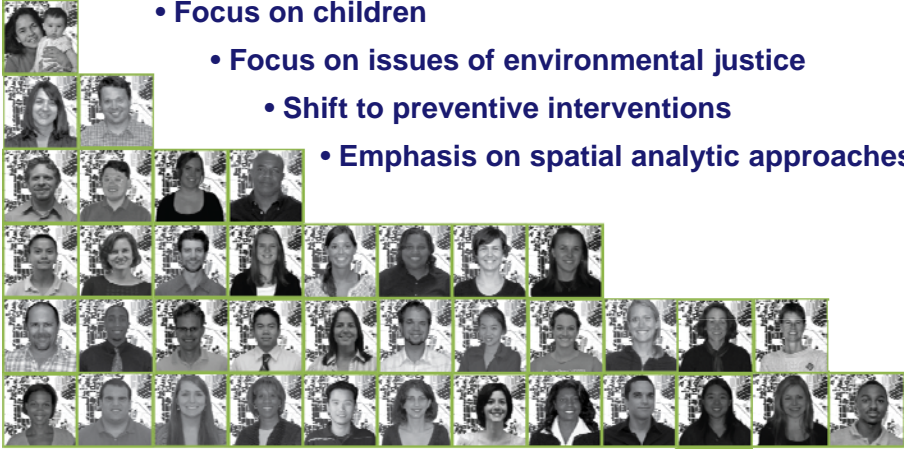
The Built Environment

Gretchen Kroeger
Children's Environmental Health Initiative
Duke University





Children's Environmental Health Initiative



- Focus on children
- Focus on issues of environmental justice
- Shift to preventive interventions
- Emphasis on spatial analytic approaches


19






The Built Environment and Health

With a focus on collaborations with community groups:

- Documenting and describing the built environment
- Mapping the collected data
- Identifying areas characterized by poor neighborhood conditions
- Training grassroots workers on the built environment and health
- Combining built environment data with individual-level data



The Built Environment

“The built environment encompasses all buildings, spaces and products that are created or modified people”


- Health Canada

Includes:

- Streets
- Homes
- Sidewalks
- Buildings
- Infrastructure
- Parks
- Shopping Centers

May affect:

- Indoor environment
- Outdoor environment
- Social environments
- Individual health
- Community health





Background

Why the study the built environment?

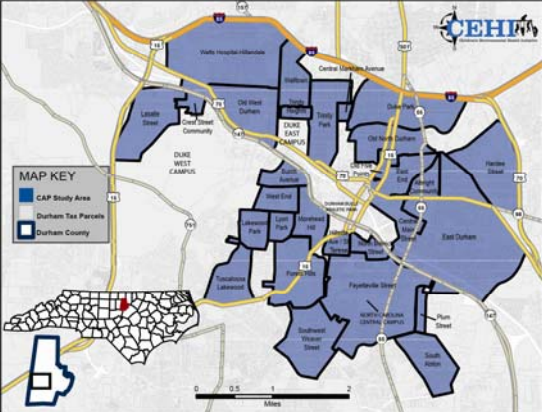
Southern Center on Environmentally-Driven Disparities in Birth Outcomes (SCEDDBO)

Healthy Pregnancy, Healthy Baby Study





Community Assessment Project (CAP)



Goals of the project:

- Better understand how neighborhood context affects birth outcomes

- Provide community residents and leaders with maps of Durham's built environment



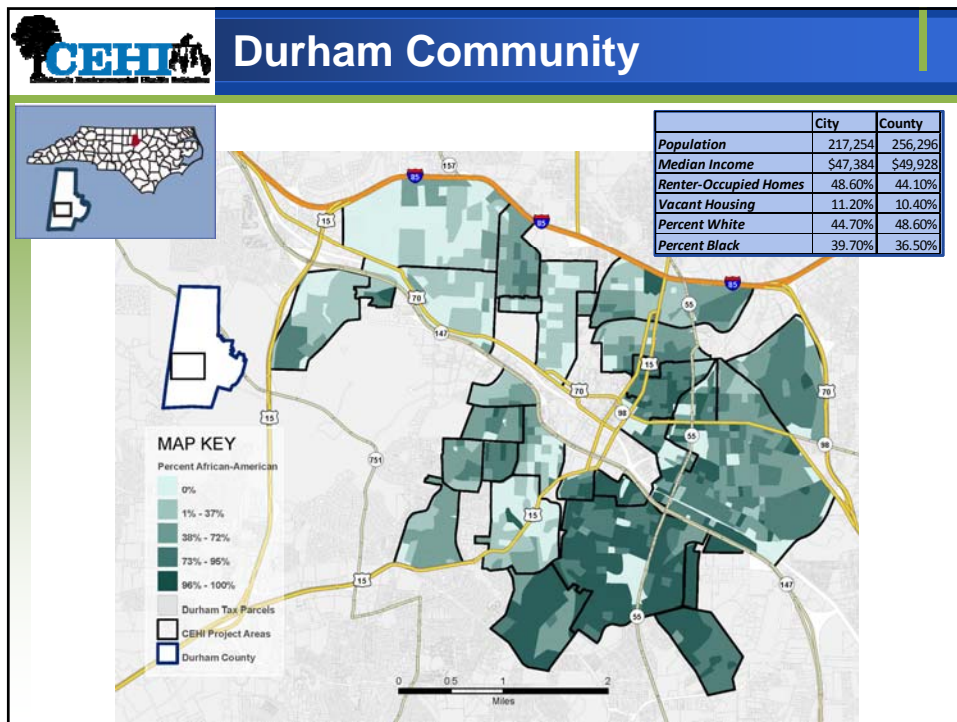
Community Assessment Project (CAP)




The CAP is a parcel by parcel visual assessment of Durham neighborhoods and communities using handheld GPS devices

- In 2008, over 17,000 parcels assessed

- In 2011, goal of assessing 39,000 parcels




CEHI The CAP Tool

What is it?

- A list of built environment features
- Stored on a handheld GPS unit

How was it developed?

1. Modeled after a community-based study conducted in San Diego
2. Community involvement
 - Heard from community groups – neighborhoods, organizations, churches, etc.
 - Feedback on built environment features to be observed



During Assessment


Communication is essential!


Community Outreach:

- Attendance at organization meetings
- Presentations to community leaders
- Emails with project details
- Alerting Durham Police Department

Field Team:

- Trained on how to communicate with residents
- Carried letters with project description and contact information





Outreach

Community Assessment Project Report


- Describes importance of the built environment
- Maps of summarized data are easily understood by community members with various backgrounds

Informational brochure

- General overview
- Provides link to online mapping tool

Online

- Interactive web application featuring a mapping interface where community members can explore the project



Resources

CEHI

CHART

ALL

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

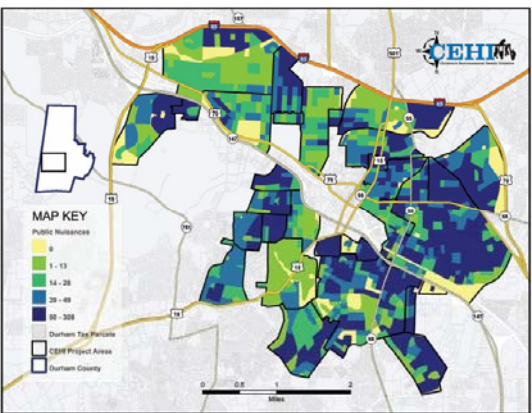
98

99

100

Public Nuisances: Litter, garbage, and other offensive materials discarded or left in public spaces also contribute to neighborhood conditions. Furthermore, the types of nuisances observed may indicate the behaviors that are considered acceptable in that community. While deferred maintenance describes tax parcels, public nuisances only include observations in public spaces such as roads and sidewalks.

Figure 7 represents the total number of public nuisances observed per Census 2000 block. Such nuisances include: graffiti, discarded shopping carts, furniture, and appliances, broken glass, excess litter, food garbage, dog waste, drug paraphernalia, condoms, cigarette litter, alcohol containers, tires, batteries, fallen telephone or electrical wires, damaged storm drains and meter covers, articles of clothing, construction debris, deep holes, and discarded baby diapers. The darker the color, the greater the number of observations of public nuisances.



MAP KEY

Public Nuisances

0

1 - 13

14 - 28

29 - 43

44 - 58

59 - 300

Durham Tax Parcels



CEHI Project Areas

Durham County

0 0.5 1 2 Miles

-2- Neighborhood Conditions

Assessment Project

11



Community Utility

Use of web-based resources by community groups

- Training for community health organizers and partner organizations

Custom-made maps used for grassroots community efforts

- Laminated maps of specific neighborhoods to aid community health organizers

City projects and strategies

- Data sharing agreement with Neighborhood Improvement Services



Challenges

Reaching hard-to-reach populations

- Considering sensitivity of certain communities
- History of Duke-Durham relationship

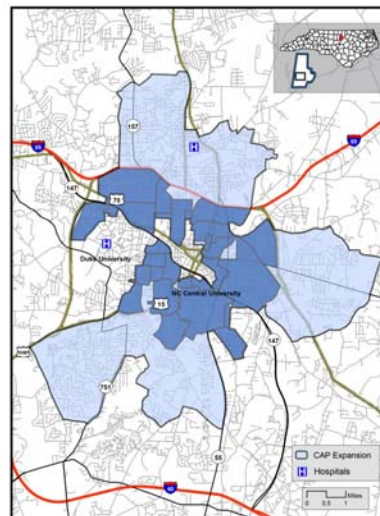
Ensuring resources are used to full potential

- Getting data and maps in the hands of those who are in the communities
- Training community workers on how to use resources and educate residents about the built environment and health
- Working with the City of Durham so results can be used to inform policy and programmatic decisions



Next Steps

1. CAP 2011
2. Continue to engage community partners
3. Track neighborhood change, improvement
4. Identify shifting concerns at the neighborhood level






Acknowledgements

Durham Community and Partner Organizations

CEHI Team:
Dr. Marie Lynn Miranda
Dr. Pamela Maxson


CAP Field Team:
Melvin Gaddy, Jim Davy, Kelly Henderson, Rebecca Ouyang,
Kim Smith, Joshua Worthy, John Post, Cassie Robertson, Andy
Holland, Jessica Laine, Ruth Joo, Matt Holsclaw

Funding:
US Environmental Protection Agency, RD 83329301



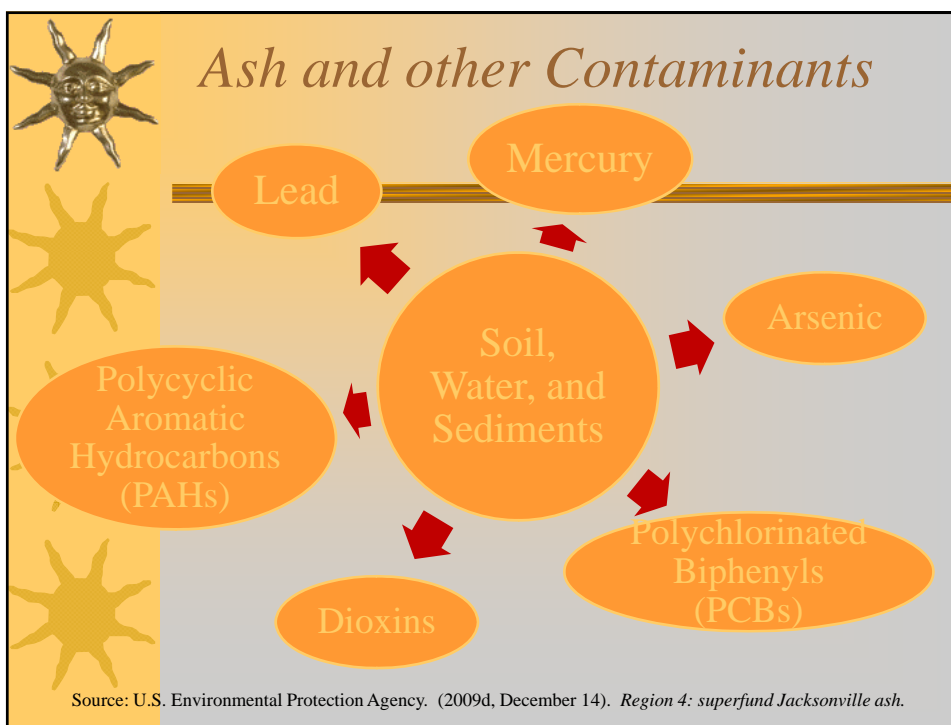
Community Action to Address Toxic Wastes

Aaron L. Hilliard, Ph.D.
Assistant CHD Director
Duval County Health Dept.

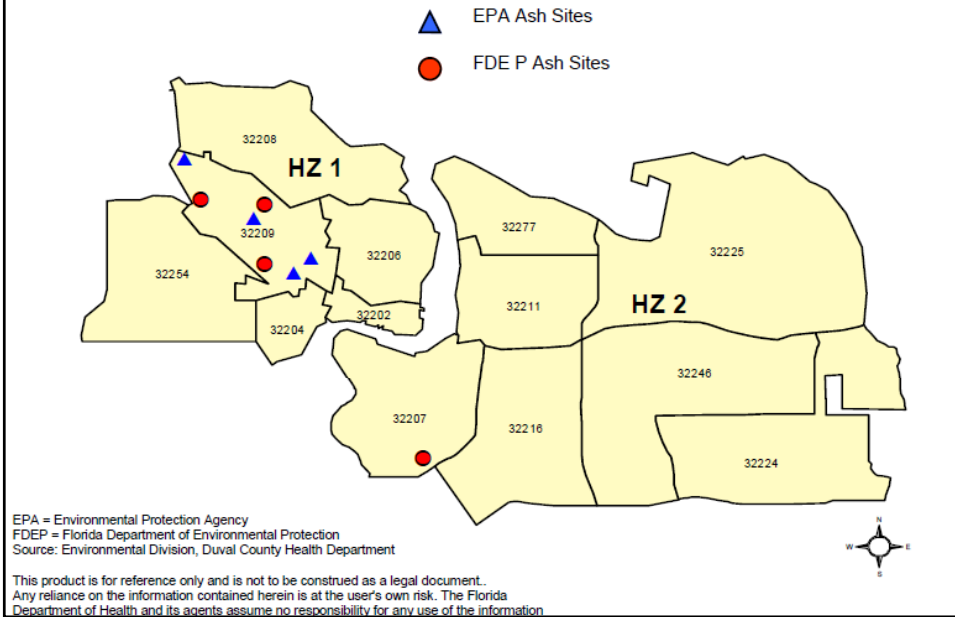


History of Ash Disposal Sites

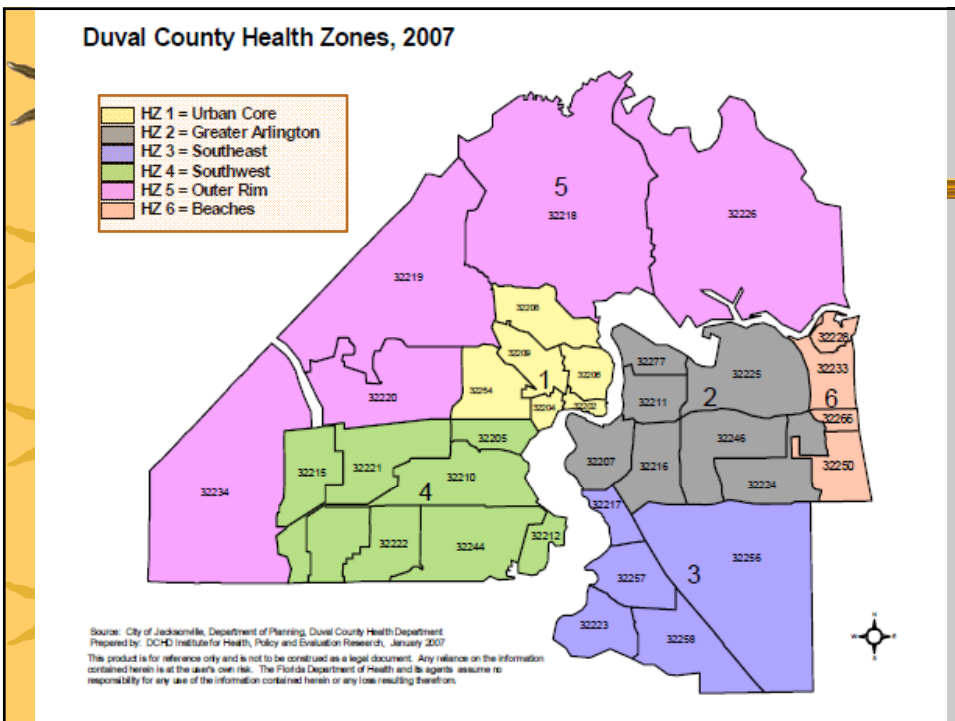
- ★ 1940's - 1960's the City operated 3 incinerators.
- ★ The ash from the incinerators was felt to be beneficial to soil.
- ★ The ash was disposed in many sites around Duval County.
- ★ The City has identified 5 primary ash disposal sites for evaluation.



FDEP and EPA Ash Sites by Zip Code, Duval County, 2006




Duval County Health Zones, 2007



Slide 37


d1 please put in here where the UF&Shands--32209.
dawood, 4/16/2010



Health Zone 1


	HZ1	Health Zone 2	Health Zone 3	Health Zone 4	Health Zone 5	Health Zone 6	Duval County
Poverty	28%	8.8%	5.3%	11.7%	10.8%	7.3%	11.9%
Education level high school or greater	63.7%	87.2%	92.5%	82.6%	75.7%	89.6%	82.9%
Children in poverty less than 18 y/o	38.4%	12%	6.4%	16.6%	14.5%	9.2%	16.4%
Average median household income	21,185	44,509	53,972	39,610	42,040	44,765	41,118
African American population	79.2%	19.8%	9.3%	21.4%	27.7%	10.8%	27.8%

Source: Duval County Health Department, Health Policy and Evaluation Research Institute. (2008, March). *Health: place matters*.
 Jacksonville Children's Commission. (2009). 2009 State of Jacksonville's children: racial and ethnic disparities report.




Community Response

- ★ 1997- 1998 EPA environmental site investigation
- ★ 1999 State of Florida Health risk assessment of Brown's Dump
- ★ 1999 State of Florida Contracted ATSDR to perform Health risk assessments of the other 3 sites
- ★ Provided Informational Exchanges
- ★ Created Environmental Toxicology Program



Community Response cont....

- ★ Developed a Citizens Health Advisory Committee
- ★ Issued a Health Advisory to prevent fish consumption from Doeboys dump
- ★ City of Jacksonville signed Administrative order.
- ★ EPA/COJ initiated Remedial Investigation and Feasibility Study.
- ★ CDC Funded Pregnant Women Study.
- ★ CDC/EPA/DCHD Pesticide Exposure study in children.



Community Response cont....

- ★ Partnering with Fresh Ministries (Faith Based Organization) and the University of North Florida on an Environmental Justice Collaborative Problem solving Grant
- ★ UNF College of Health Nursing Program
 - Introduce students to community environmental health and outreach.
- ★ High Schools lectures
 - Allows students to see the real world application of the scientific principals they are currently studying.




Citizens Health Advisory Committee



- ★ The Citizens Health Advisory Committee (CHAC) was formed by the mayor in august of 1999.
- ★ The CHAC which includes CPAC's, neighborhood groups, NAACP and various academic institutions works very closely with the health department.
- ★ The committee participates in providing education to the community as well as increasing community involvement.

Back from Left to Right: Antonio Nichols, Dr. Aaron Hilliard, Frank Priestly, Jimmy Orth, Hastings Williams, David Jones

Front from Left to Right: Kathryn Kehoe, Jean Downing, Angie Vannatter Diane Kerr, Helen Jackson



Citizens Health Advisory Committee cont..


- ★ This is accomplished through community outreaches, information exchanges, and local ministries.
- ★ The committee continues to provide an invaluable resource for identifying potential concerns in the community.






Importance of Community Partners




- ★ In Environmental Health community partners play an important role.
 - They provide frontline insight to potential hazards
 - They work as partners to accomplish community environmental health goals
 - They are advocates for public health
 - They assist in our assessment, assurance, and policy development role.



Information Exchange



- ★ Meeting types
 - Town hall
 - Information Exchange
 - International Café
 - Etc
- ★ Benefits
 - Permits expression of diverse viewpoints
 - Encourages group dynamics
 - Small group discussions are more comfortable
 - Creates dialogue




Message

- ★ Topic; 1, 2, 3
 - Communicate clearly
 - Positive conclusion; what it is instead of not
 - At least 2 supporting facts; 3rd party best
 - Future Action; what we will do
 - Poster Stations
 - Central main point flanked by supporting points
 - One message on each panel
 - As you go down it gets more detailed
 - Technical handouts on adjacent table




Children's Environmental Health


- ★ Educate
 - Knowledge will guide practice
 - Knowledge will empower
- ★ Advocate
 - Prevention is the key to protection!
 - Policy development at Local, State, and Federal levels.




Children's Environmental Health

- ★ Environmental health is an ongoing concern within the pediatric clinical practice.
- ★ Children live in a very different environment today than previous generations.
- ★ It is our job to protect our children and the future
- ★ Thank you.....






Boom and Bust: the Story of Toxic Wastes in Anniston Alabama



Southeast
Pediatric Environmental
Health Specialty Unit

EMORY University





Anniston, Alabama

- Anniston city: 26,000 (54% white)
- Calhoun County: 116,000 (80% white)
- 1872: Anniston founded as a company town for the Woodstock Iron Company
- By 1929: 117 foundries, mostly in west Anniston
- Late 1920s: Biphenyl manufacturing began
- 1935: Monsanto purchased the facility, began manufacturing PCBs, parathion, phosphorous pentasulfide, para-nitrophenol, and polyphenols — one of two U.S. PCB manufacturing sites

SE PEHSU Anniston Project



Exposure history

- Two large landfills were used throughout the plant's operation, one (west) until 1961, the other (south) until 1988
- Some product was given to local people for termite control, fencepost treatment, etc.
- 1970s-80s: Intermittent PCB detection in downstream fish and sediment
- Early 1990s: Recognition of downstream fish contamination; ADPH fish advisory.

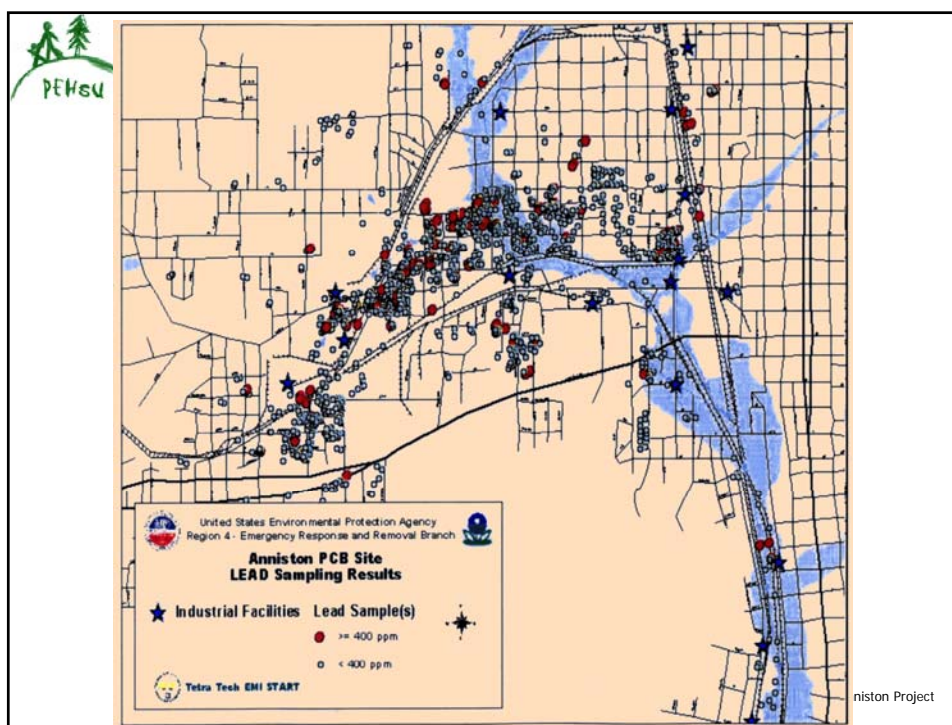
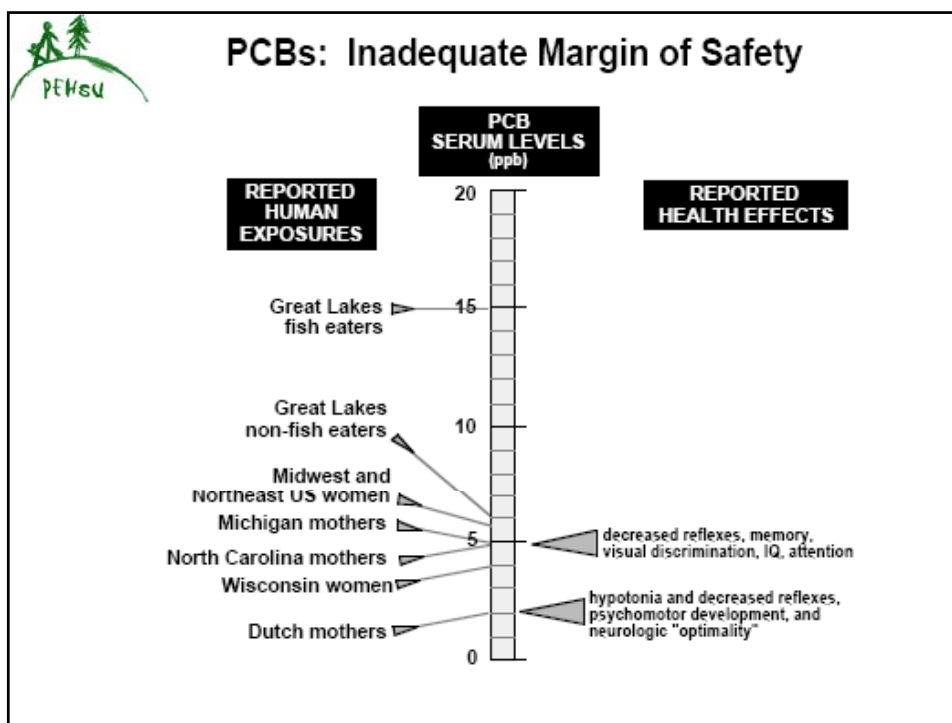
SE PEHSU Anniston Project



Anniston, Alabama PCB levels in blood

- 1995 ATSDR sampling of 103 people:
 - 46 (45%) with serum PCBs >10 ppb
 - 28 (27%) with serum PCBs >20 ppb
 - 5 (5%) with serum PCBs > 100 ppb
- 1999 Plaintiff sampling of $\approx 2,970$ people:
 - 1,037 (35%) with serum PCBs > 10 ppb
 - 521 (17.5%) with serum PCBs >20 ppb
 - 41 (1.4%) with serum PCBs >100 ppb

SE PEHSU Anniston Project





Revised History of Anniston

- Factories brought jobs, people and prosperity
- Factories brought pollution
- Pollution made people ill
- Factories left
- People were out of work
- The people became poor
- The community lost tax base and resources
- People were trapped by poverty and unemployment

SE PEHSU Project



Community Response to Contamination

- Mid-1990s
 - First citizens group started, litigation began
- 1998-2000
 - Broader contamination recognized, new citizens groups started, EPA involvement sought, further litigation launched.
- 2000-2004
 - Superfund designation being considered.

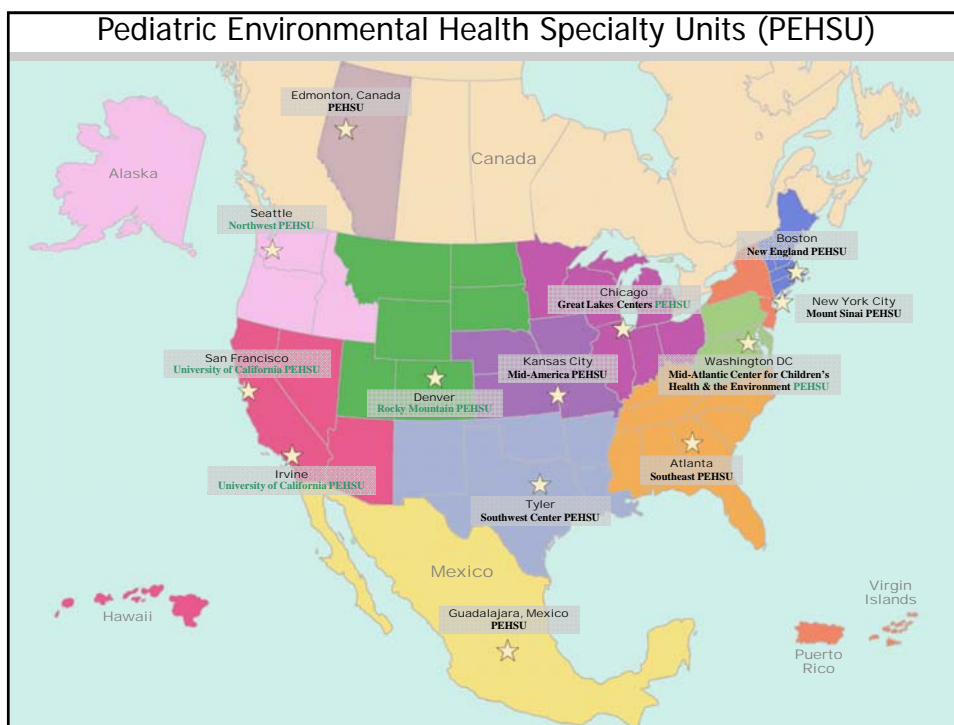
SE PEHSU Anniston Project



Summary of the Situation

- History of Pollution in Anniston
- An Affronted Citizenry
- Litigation
- Fractious situation
- EPA & ATSDR involvement
- Need for information and education

SE PEHSU Anniston Project





PEHSU in Anniston

- Late 2000
 - Preliminary work
- Jan 2001
 - Presentations to Pediatricians
 - Meetings with Community representatives
- Spring 2001
 - Developing a Vision
- 2001-2004
 - Community Forums and Health Fairs

SE PEHSU Anniston Project



Community Partners

- Community Representatives
- Alabama Early Intervention Services
- Anniston School Systems
- Local Pediatricians
- Local Business
- Academic Institutions

SE PEHSU Anniston Project



Vision for Anniston

- Defocus from litigation and conflict
- Focus energy and efforts on Children
- Develop a program to identify infants and children at risk for developmental, behavioral and learning problems and provide early intervention to improve health and well-being
- Develop a research project based on findings


SE PEHSU Anniston Project



Formation of a Steering Committee

- Gather information on status of children
- Gather information on existing resources
- Develop ways of improving availability and access to services for the children and their families
- Explore potential funding sources for improving services and developing research project initiatives
- Reaching out to the Community at large


SE PEHSU Anniston Project



Vision 2020: for the Children of Anniston

- Establish a Community-based Collaborative Partnership focusing on the education of children
- So that..... by the year 2020 there will be academic success in High Schools with pride and shared prosperity for all
- To serve as a model for other cities and towns around the country

SE PEHSU Anniston Project




Break the Cycle of Environmental Health Disparities in Vulnerable Children

A Leadership Development Program of

Southeast
Pediatric Environmental
Health Specialty Unit

EMORY University

Leslie Rubin MD
Southeast PEHSU Emory University
Morehouse School of Medicine
Atlanta, Georgia, USA





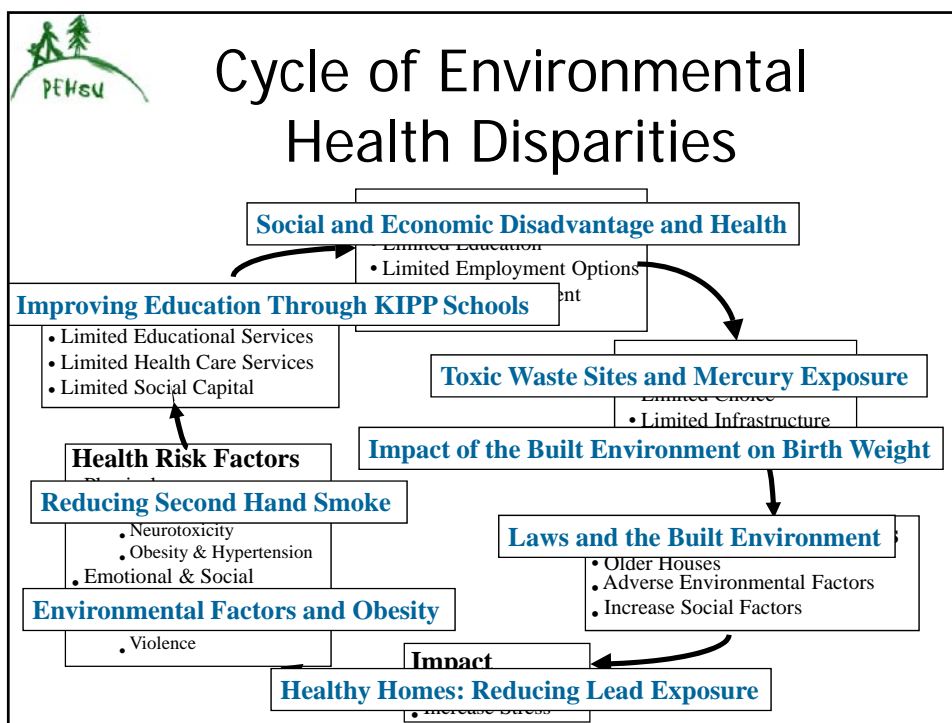
Can we make a Difference?

- ***Break the Cycle*** is a collaborative interdisciplinary research and training program with University faculty who mentor graduate students in academic tracks that focus on the environmental impact on children's health.
- The target populations are communities where the environmental and children's health hazards are related to circumstances of social and economic disadvantage.



Students' Role

- Each student is be required to develop a project that focuses on reducing or preventing environmental health related illnesses and disorders for children who live in adverse circumstances.
- At the end of the project period the students will present their studies and their findings in a conference.
- The reports of their studies are compiled and published in a monograph & scientific journal that will be available for distribution and dissemination.



Desired Outcomes

- Inspire students from a variety of academic disciplines to explore the relationship between the environment and children's health and to develop strategies to address the challenges,
- Collaborate with an interdisciplinary team of academic leaders at major universities to creatively examine the broader issues in these topic areas,
- Promote leadership among the students and faculty of the university partners
- Encourage the development of curriculum changes that address social awareness of children's environmental health,
- Cultivate future leaders and advocates in children's environmental health.



To Date...

- We have had 6 "Cycles"
- 52 Student projects
- 20 Universities
- 28 Departments
- 6 States
- 2 published monographs, 1 in press and 1 in preparation

SE PEHSU Project



- We may not be required to complete a task but we are not allowed to desist from undertaking the challenge

