



Community based participatory research partnerships for health: Lessons learned from the Healthy Environments Partnership

Amy J. Schulz¹, PhD and Angela Reyes, MPH²

1. University of Michigan School of Public Health

2. Detroit Hispanic Development Corporation

On behalf of The Healthy Environments Partnership (www.hepedetroit.com)

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Healthy Environments Partnership Steering Committee

- Brightmoor Community Center
- Detroit Department of Health & Wellness Promotion
- Detroit Hispanic Development Corporation
- Friends of Parkside
- Henry Ford Health System/AIMHI
- Rebuilding Communities Incorporated
- University of Michigan School of Public Health
- Community members

The Healthy Environments Partnership is a Project
Of the Detroit Urban Research Center (www.sph.umich.edu/urc/)

Detroit Community Academic Urban Research Center

- *Involves academic, community-based & health service partners*
- *Established in 1995*



Outline

- *Brief background, definition & rationale for CBPR*
- *Case Study: Healthy Environments Partnership*
- *Focus on:*
 - *Application of Findings for Community Change*
 - *Challenges, Benefits & Lessons Learned re CBPR Approach*

*Background**

- *Evidence that conditions in the social & physical environment are associated with poor health outcomes*
- *Extensive set of skills, strengths and resources exist among community members to address neighborhood conditions and promote health*

*Israel et al., 1998.



Background (continued):*

- *Historically, research has rarely directly benefited - sometimes actually harmed - the communities involved, and has excluded them from influence in the research process;*
- *Resulted in understandable distrust of, and reluctance to participate in, research.*

**Israel et al., 1998.*

*Background *(continued)*

- *Public health interventions have often not been as effective as could be because:*
 - *Often not tailored to the concerns & cultures of participants;*
 - *Rarely include participants in all aspects of intervention design, implementation & evaluation;*
 - *Often focused narrowly on individual behavior change with less attention to broader social & structural determinants of health*
- *Increasing calls for more comprehensive & participatory approaches to research and practice*

*Definition of Community-Based Participatory Research**

CBPR in public health is a partnership approach to research that:

- *Equitably involves, for example, community members, organizational representatives, and researchers in all aspects of the research process;*
- *Enables all partners to contribute their expertise, with shared responsibility and ownership;*
- *Enhances understanding of a given phenomenon; and*
- *Integrates the knowledge gained with interventions to improve the health and well-being of community members.*

**Israel et al., 1998.*

Healthy Environments Partnership Case Example:

Use a CBPR Process to:

- Examine racial, ethnic and socioeconomic disparities in cardiovascular health as products of inequalities that influence health outcomes through effects on:
 - the social environment (social stressors, economic factors),
 - physical environment (PM10 & PM2.5, & the built environment)
- Develop and implement multilevel interventions to reduce racial, ethnic and socioeconomic disparities in cardiovascular health.

Schulz et al, Environmental Health Perspectives, 2005.

Community–Based Participatory Research

- Engages partners from community, public health and academic perspectives in the research & intervention process, including:
 - *Identification of issue/research question*
 - *Data collection methods and processes*
 - *Interpretation of results*
 - *Dissemination of results*
 - *Decisions about how to apply results to address health concerns (e.g., policy implications, intervention design)*

*Key Principles of Community-Based Participatory Research**

- 1. Recognizes community as a unit of identity.*
- 2. Begins with & builds on strengths & resources within the community*



* Israel, Schulz, Parker, Becker, 1998.

*Key Principles of Community-Based Participatory Research**

3. Facilitates collaborative, equitable partnership in all phases of the research, involving an empowering and power sharing process.

4. Promotes co-learning and capacity building among all partners involved.

** Israel, Schulz, Parker, Becker, 1998.*



Key Principles of Community-Based Participatory Research (continued)

5. Integrates and creates a balance between knowledge generation and action for mutual benefit of all partners.

6. Emphasis on local relevance of public health problems and ecological approaches that address the multiple determinants of health and disease.



Key Principles of Community-Based Participatory Research (continued)

- 7. Involves systems development through a cyclical and iterative process.*
- 8. Disseminates findings to all partners and involves all partners in the dissemination process.*
- 9. Involves a long-term process and commitment.*

Community-Based Participatory Research

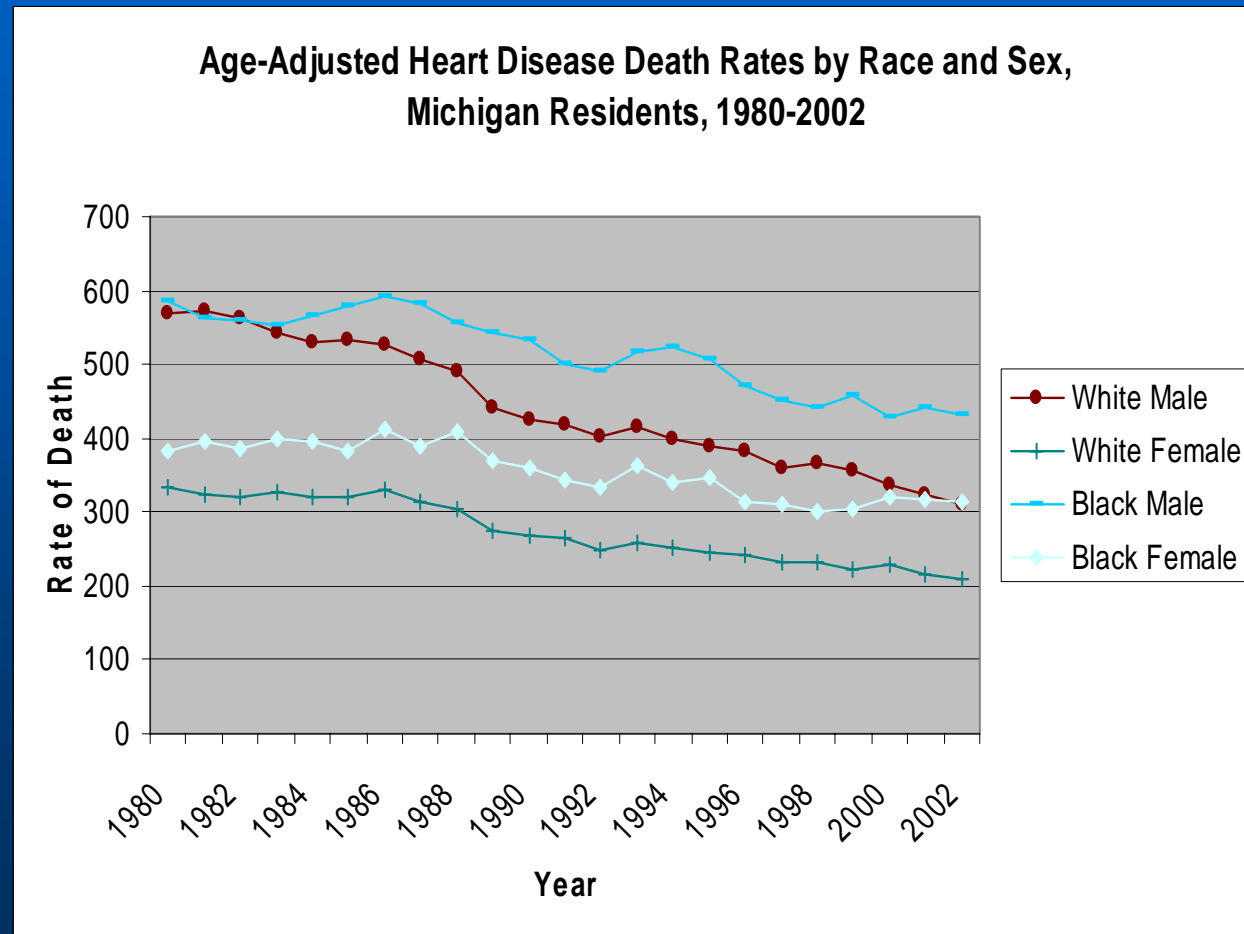
- Engages partners from academic, public health and community perspectives in all aspects of process, including:
 - *Identification of research questions*
 - *Data collection methods and processes*
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Case Study: Healthy Environments Partnership

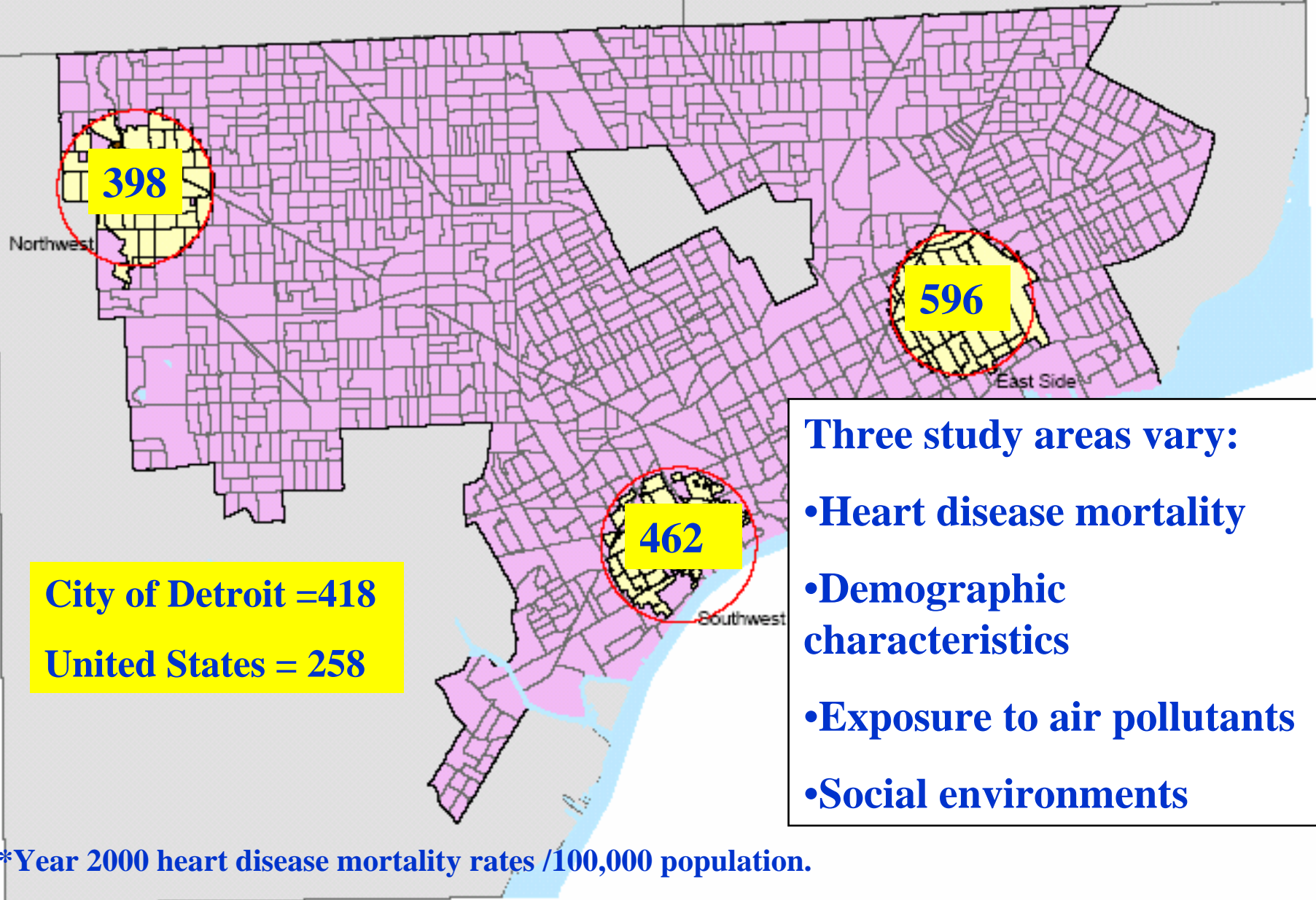
- Research questions & process shaped by:
 - URC Overall Goal (addressing health disparities)
 - URC priorities (contributions of environment to health)
 - URC values (CBPR)
 - RFAs
- Conceptual model shaped by:
 - Detroit history & context
 - Prior research
 - Literature on social and environmental determinants of health.

Why Heart Disease?

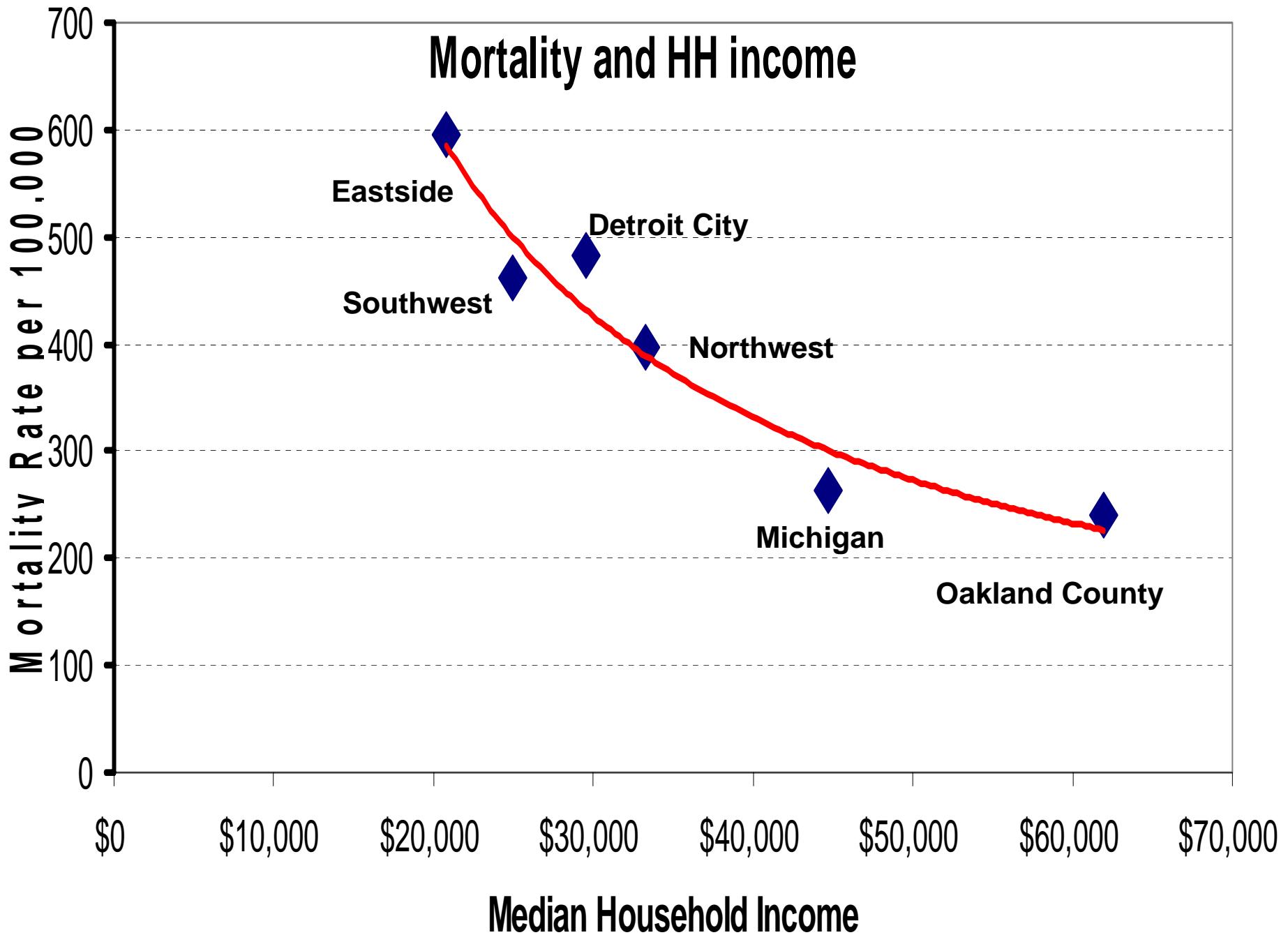
- *Leading cause of death* in the US, Michigan and Detroit;
- Deaths from heart disease in have *declined steadily* over the past 25 years, but more for some groups than for others;
- Racial and socioeconomic *disparities* remain in heart disease.



Heart Disease Rates: Eastside, Northwest, Southwest



Mortality and HH income



*In each area of the city,
we examined....*



Resources for physical activity



Levels of air pollution



Stress &
social support



Access to healthy
foods

...and their effects on heart health

Community–Based Participatory Research

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 - *Identification of research questions*
 - ***Data collection methods and processes***
 - *Interpretation of results*
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Structures for participation & influence in decisions re methods

- *Steering Committee*
- *Subcommittees (Survey, Biomarker, Neighborhood Observation Checklist)*
- *Photovoice*
- *Town Hall Meetings*
- *Intervention Planning Team Meetings*
- *Focus groups (participation but not influence)*



Community–Based Participatory Research

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Engage academic, community and practice partners in interpretation

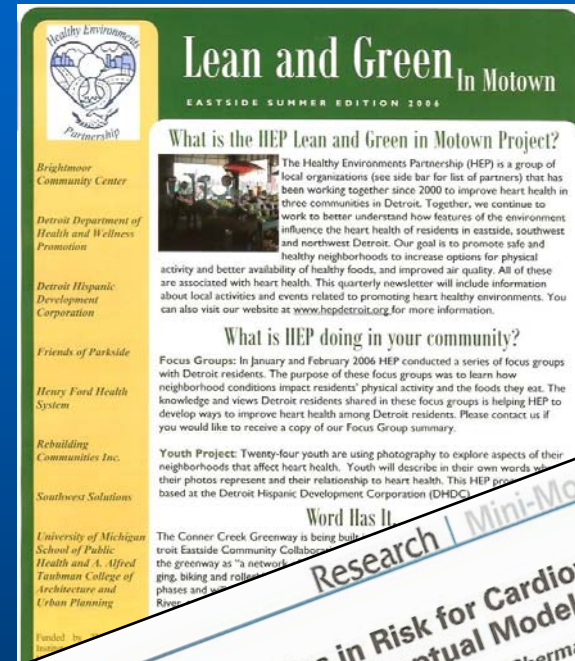
- *Identification of key analyses*
- *Analysis and writing teams*
 - *Community & academic partners involved in all writing teams*
- *Discussion of results*
 - *Within writing teams*
 - *Full Steering Committee*

Community–Based Participatory Research

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 - ***Dissemination of results***
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Dissemination Principles

- *Decisions about dissemination activities:*
 - *Peer reviewed publications*
 - *Presentations at professional meetings, community venues, policy makers*
- *Acknowledge all partners in presentations & publications*
- *Co-authored/co-presented*



Social and Physical Environments and Disparities in Risk for Cardiovascular Disease: The Healthy Environments Partnership Conceptual Model
 Amy J. Schulz,¹ Srimathi Kannan,² J. Timothy Dvorch,² Barbara A. Israel,¹ Alex Allen III,³ Sherman A. James,⁴ James S. House,⁵ and James Lepkowski⁶

¹Health Behavior and Health Education, and ²Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, Michigan, USA; ³ISLES, Inc., Trenton, New Jersey USA; ⁴Duke University, Durham, North Carolina, USA; ⁵Survey Research Center and Department of Sociology, and ⁶Institute for Social Research and Department of Biostatistics, University of Michigan, Michigan, Ann Arbor, USA

Community–Based Participatory Research

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*Decisions about how
to apply key findings*



Access to healthy foods

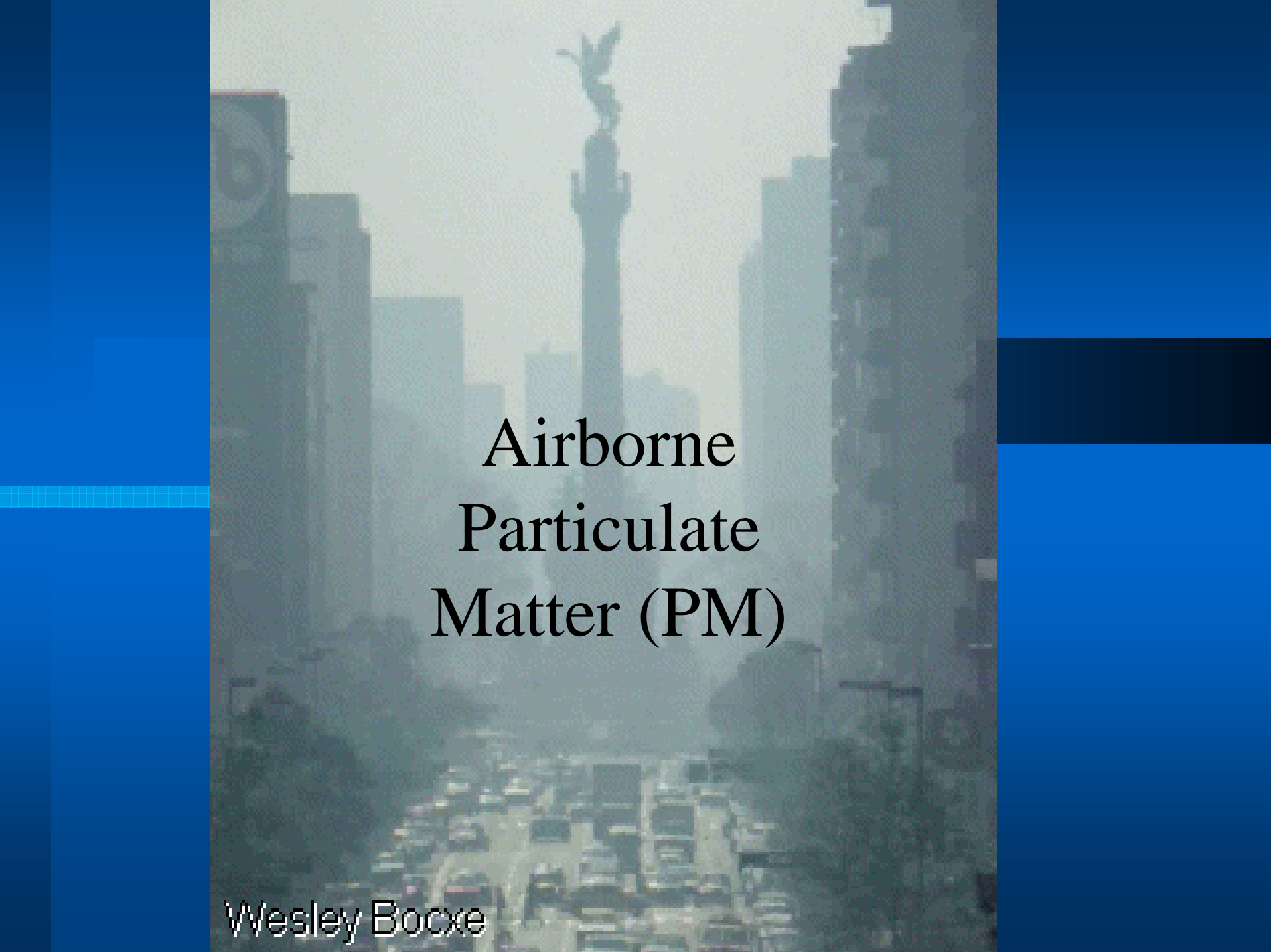


Air pollution & blood pressure



Built environment & physical
activity

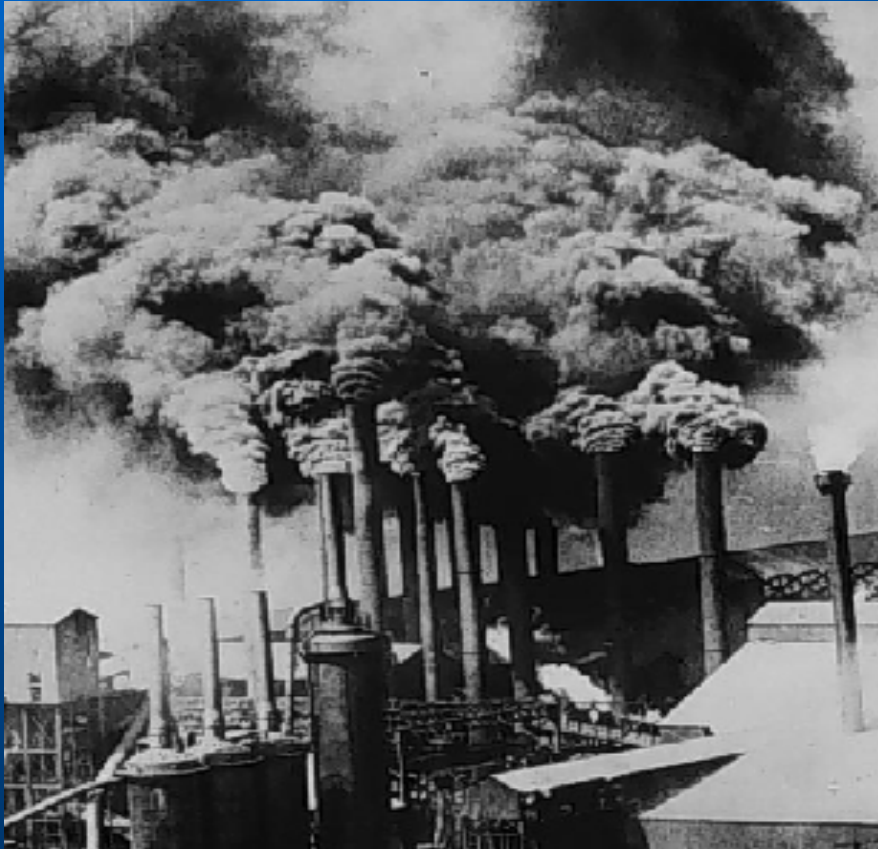
...and their effects on heart health.



Airborne Particulate Matter (PM)

Wesley Boore

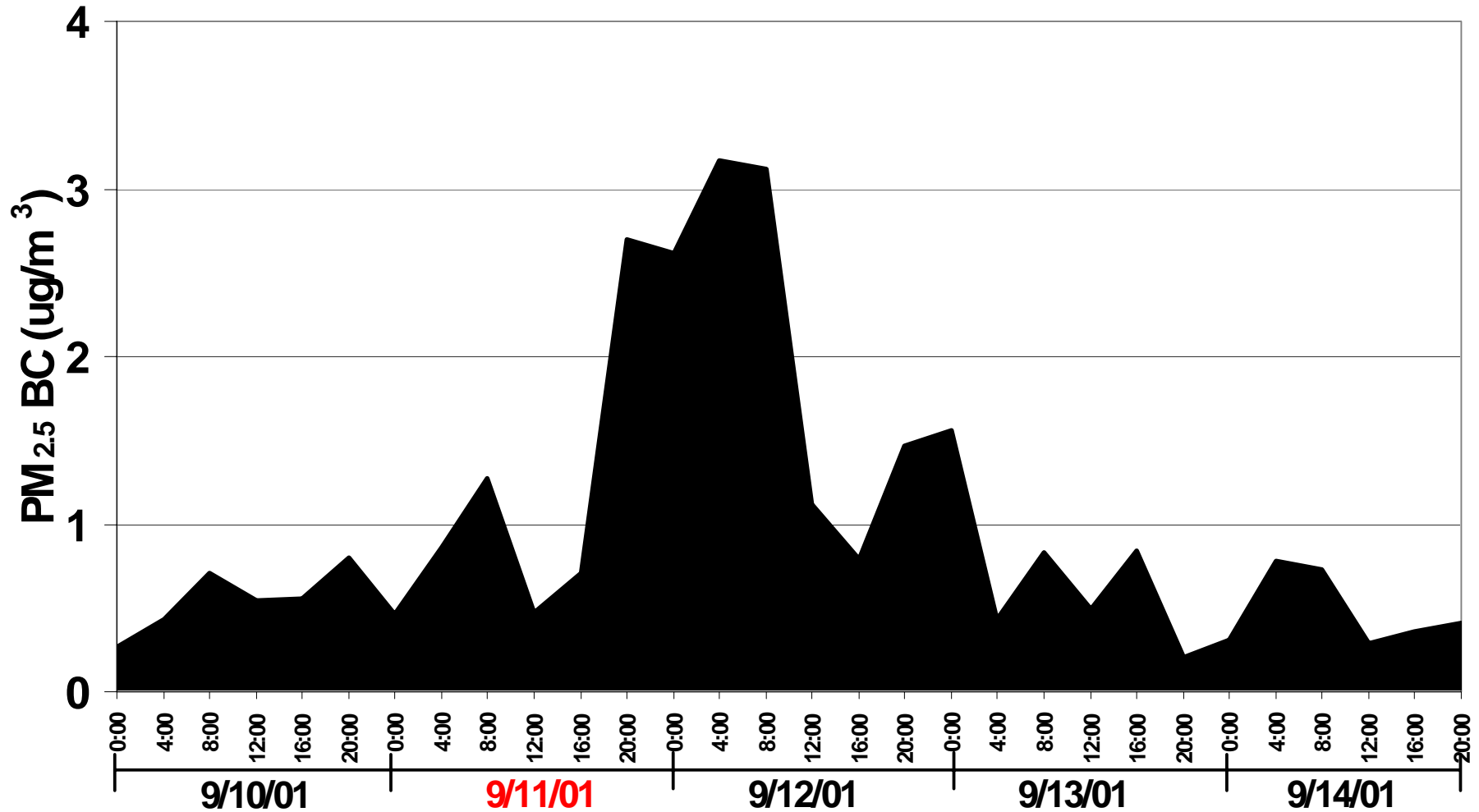
Air Pollution in Detroit



- Air Quality in Detroit was generally quite poor prior to the 1990's.
- Reductions in the emission of many air pollutants during the 1970's, 80's, & 90's resulted in steadily improved air quality in Detroit over those time periods.

- **However: Significant concerns remain for PM**

SW Detroit Black Carbon – 9/11/01



Air Pollution and Cardiovascular Health in Detroit

Previous scientific studies have found PM pollution to cause: lung disease, decreased lung function, asthma attacks, irregular heart beats, heart attacks, premature death.

During the HEP Project, we found that:

*** PM pollution is associated with increases blood pressure

*** Increase in blood pressure greatest in SW

Application of Findings

- *Air quality & land use decisions in Detroit*





Access to Healthy Foods

9/9/2002 10:15am

“(We need) a supermarket honey. Someplace other than the corner store where they charge you 10 times what it costs anywhere else.”

-NW Detroit focus group, 2006

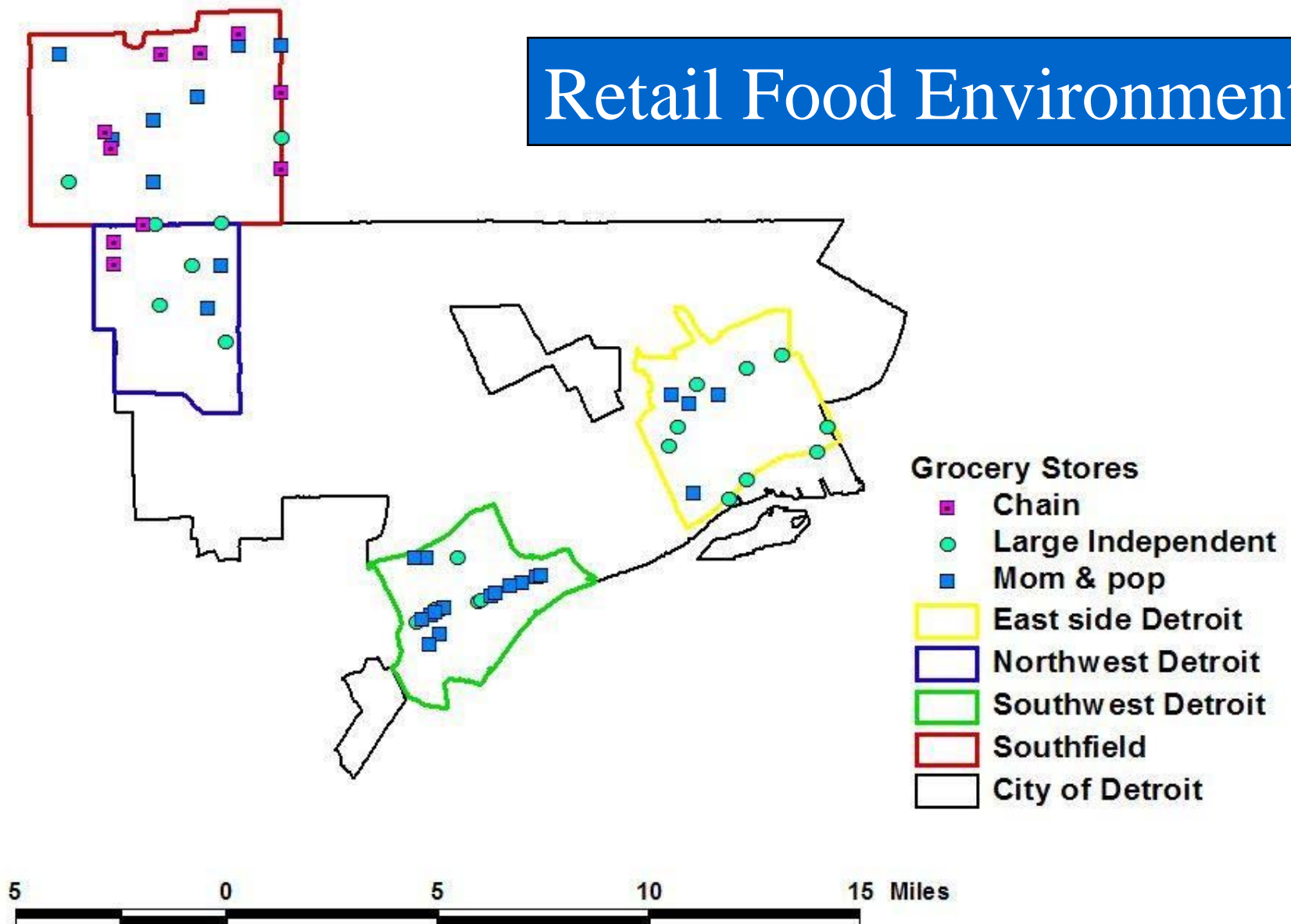
“They just don’t care what they put (in the local grocery store). I feel it’s because we are Black, the community is Black.”

- Eastside Detroit resident, 2002



Photograph by Janae Ashford 2006

Retail Food Environment



Zenk, S.N., Schulz, A.J., Israel, B.A., James, S.A., Wilson, M.L. "Spatial distribution of food stores shapes availability, quality, and cost of fresh produce in four Detroit area communities." Presented at the Annual Meeting of the American Public Health Association, San Francisco, CA, November 18, 2003.

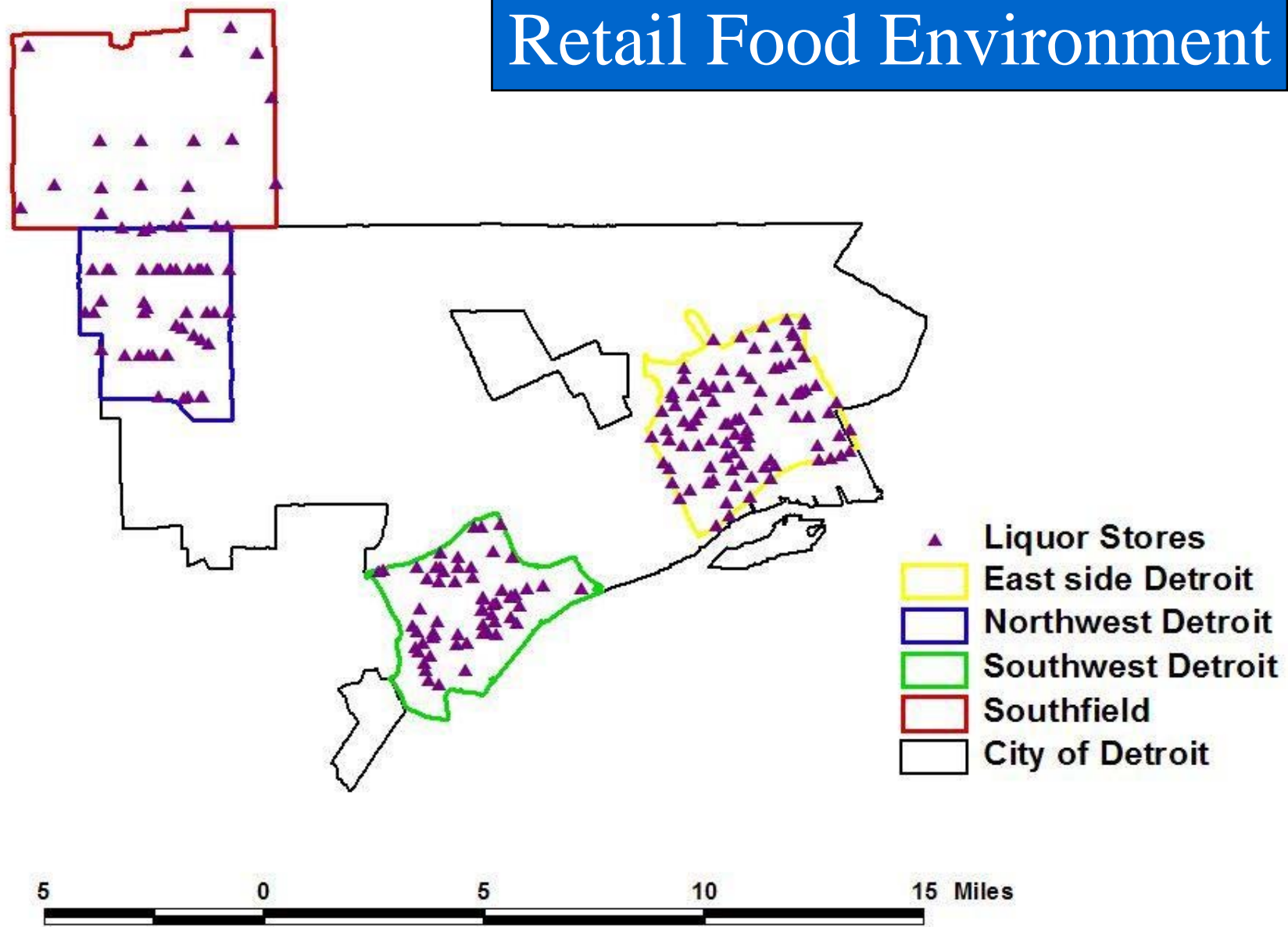


“In my community, there is no grocery store. You can’t eat right if there is not good produce. It’s easier to get a box of mac and cheese.”

“Tell the fast food places to serve healthier food.”

Photograph by Derrik McIntosh 2006

Retail Food Environment



Zenk, S.N., Schulz, A.J., Israel, B.A., James, S.A., Wilson, M.L. "Spatial distribution of food stores shapes availability, quality, and cost of fresh produce in four Detroit area communities." Presented at the Annual Meeting of the American Public Health Association, San Francisco, CA, November 18, 2003.

Application of Findings

- *LISC/SIA*
- *URC Policy initiatives*
- *HEP-CATCH Intervention activities*
- *Collaborations with food security groups in Detroit to increase access to healthy foods*

A photograph of a person riding a bicycle on a city street. The sun is low in the sky, positioned between two tall buildings, creating a bright lens flare and silhouetting the cyclist and the buildings. The scene is captured from a low angle, looking down the street.

Physical Activity

Types of activity Detroit residents enjoy

- *Walking ...*
 - *...Children to school*
 - *...Dogs*
 - *...With friends or around neighborhood*
- *Gardening or landscaping*
- *Helping neighbors*
 - *Help elderly neighbors maintain homes*
- *Team sports (basketball, soccer, football)*
- *Dancing*

2006 Focus Groups with ES, NW and SW residents

What makes it hard to be physically active...?



Photograph by Crystal Sims 2006

“I can’t go out and walk without pushing my daughter’s stroller into the street to get around piles of trash”

– Northwest Detroit, 2001



“There is no equipment – youth play basketball in the street.”

2006 Focus Groups

What makes it hard to be physically active

Immigrants don't want to walk outside – They feel vulnerable to the border patrol.

“The wooded areas are dangerous. Why take the risk if you don't have to?”

So much traffic - cars driving up and down the streets real fast. Especially in summer...”



Photo by Derrick McIntosh 2006

2006 Focus Group Participants

What Encourages Physical Activity?

Outdoor community events – music, dancing, activities for youth AIDS walks.

Trails and parks that are easy to get to.



More trails all over the neighborhood; having the pathway connect to other areas of the city ...

“If I saw more people walking I would be more involved.”

Application of Findings

- Work with Greenway groups to develop activities along new walking trails;
- Analyze and create changes in built environment to promote safety, accessibility, and enjoyment of outdoor spaces (e.g., curb cuts, visibility, cleanliness)



HEP-CATCH Intervention Planning



Town Hall Meetings



Intervention Planning Team



Design & Pilot
Intervention



Develop Full
Intervention

Applications of Findings...

- *Detroit Community Academy for Environmental Justice (not funded)*
 - *Land use and air quality issues*
 - *Detroit Hispanic Development Corporation lead*
- *Lean & Green in Motown: Built environment and obesity (funded)*
 - *Urban planners, public health and community groups*
 - *Built environment, physical activity, food access*
- *Community Approaches to Cardiovascular Health (CATCH) (funded)*
 - *3 year planning and pilot intervention*
- *Fresh Ideas: Improving the Health of Immigrant and Refugee Communities (under development)*
 - *Detroit Hispanic Development Corporation lead*
 - *Health literacy*

Challenges of using a CBPR approach *

- *Establishing and maintaining trust;*
- *Agreeing upon a common purpose;*
- *Significant time required to develop positive relationships & jointly carry out tasks;*
- *Seeking balance between task & process/ research & action.*



**Israel et al 2001; Lantz et al 2001.*

Challenges (cont)

- *Working together amidst ethnic, cultural, social class and organizational differences;*
- *Following agreed-upon CBPR principles in practice;*
- *Working toward fair/equitable distribution of resources & benefits;*
- *Questions of scientific quality of research;*
- *Proving partnership/intervention success;*
- *Competing institutional demands & risks.*

**Israel et al 2001; Lantz et al 2001.*

Benefits of using a CBPR Approach

- *Enhances relevance & use of data*
- *Enhances quality & validity of research*
- *Strengthens intervention design & implementation*
- *Knowledge gained & interventions benefit the community*



**Israel et al 2001; Lantz et al 2001.*

Benefits of using a CBPR Approach (cont)

- *Provides resources for communities involved*
- *Joins partners with diverse expertise to solve complex public health problems*
- *Increases trust & bridges cultural gaps between partners*

**Israel et al 2001; Lantz et al 2001.*

Benefits of using a CBPR Approach (cont)

- *Enhances individual, organizational & community capacity*
- *Potential to translate research findings to guide further interventions & policy change*



Lessons Learned & Recommendations for Conducting CBPR

- *Jointly develop CBPR principles & discuss what it means to have a “collaborative, equitable partnership”;*
- *Create balance between time spent on process issues & on tasks/products;*
- *Identify and select mutually defined priority issues, goals & objectives*

**Israel et al 2001; Lantz et al 2001.*

Lessons Learned & Recommendations: Partnership Process

- *Decide how community is defined & who represents the community;*
 - *Start small, involving a few highly regarded CBOs & community leaders within communities of identity;*
 - *Obtain support & involve top leadership from partner organizations;*
 - *Build on prior history of positive working relationships.*

**Israel et al 2001; Lantz et al 2001.*

Lessons Learned & Recommendations : *Partnership Process*

- *Establish procedures for dissemination;*
- *Establish and maintain infrastructure;*
- *Reach a balance over time in the distribution of benefits & resources*
- *Conduct ongoing evaluation of the partnership process.*

**Israel et al 2001; Lantz et al 2001.*

Lessons Learned & Recommendations:

Capacity building

- *Build capacity to assess, communicate clearly & establish mutual expectations - not all researchers are the same, even if they come from the same University, School or Department.*
- *Recognize opportunities for mutual growth*
 - *Build cultural sensitivity and understanding of community reality among researchers;*
 - *Build working understanding of research language & processes among CBOs & community partners.*

Lessons Learned & Recommendations: Community Change

- *Build on community strengths to address challenges*



Lessons Learned & Recommendations: Policy & Community Change

- *Improve partners capacity to influence environment & health policies;*
 - *Different partners may have more or less flexibility to take a stand on a policy issue, depending on institutional realities: Recognize & value diff. roles.*
- *Communicate findings widely, through different venues*
 - *Work with existing organizations to integrate findings to create change;*
 - *Disseminate findings to local & regional decision makers*

Recognition of Key Collaborators

- *HEP Steering Committee Members*

- *J. Tim Dvonch, Causandra Gaines, Sonya Grant Pierson, Barbara Israel, Murlisa Lockett, Paul Max, Angela Reyes, Zachary Rowe, Amy Schulz, Sheryl Shellman Weir, Carmen Stokes, Denise White Perkins.*

- *Other Key Collaborators:*

- *Sachiko Woods, Survey Field Coordinator, Graciela Mentz, Data Manager, Sharon Sand, evaluator*
- *Chris Coombe, Patricia Miranda, Denise Carty, PhD Candidates*
- *Sicari Ware, Youth Photovoice Coordinator*
- *Margaret Dewar, James House, Robert Marans, Jean Wineman, Shannon Zenk, Co-Investigators.*

The End

