#### **Community-Based Participatory Research: A Partnership Approach to Promoting Health Equity\***

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# What's the concern?

### Health & Health Inequities

Despite #3 worldwide in person spending on health care, out of 35 developed and developing nations, U.S. ranked 26<sup>th</sup> in life expectancy among industrialized countries in 2015, and 29<sup>th</sup> in infant mortality.



#### Across America: How Long & How Well We Live





#### A Short Distance to Large Health Inequities: Subway Map, Washington, D.C.





### Differences in life expectancy vary by zip code



DETROIT COMMUNITY - ACADEMIC URBAN RESEARCH CENTER

Source: Detroit News, 2016.

#### Age-adjusted cardiovascular mortality rates Detroit, 2000



Data sources: Michigan Department of Community Health, 2006 and Detroit Department of Community Health, 2000. Map source: Healthy Environments Partnership



# A note on language...

- Health disparities
  = differences
- Health inequities
  - = unnecessary, avoidable, unfair



# What is health equity?

 "Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care"

 "For the purposes of measurement, health equity means reducing and ultimately eliminating disparities in health and its determinants that adversely affect excluded or marginalized groups."



## What are health gaps and why do they matter? Do we strive for "equal" or "equity?





Source: County Health Rankings, Michigan. 2017.

#### Key Strengths and Resources in Michigan











# Why do health inequities exist? The role of social determinants of health

Social determinants of health (SDOH) are the conditions in which people live that affect their health, risk for illness, and length and quality of life. These conditions are shaped by forces such as economics, politics and social policies.



# **Upstream Determinants**

#### Upstream:

"Personal resources such as education and income and the social environments in which people live, work, study, and engage in recreational activities.

These contextual conditions influence people's exposure to environmental risks and their personal health behaviors, vulnerability to illness, access to care, and ability to manage conditions at home—for example, the ability of patients with diabetes to adopt necessary lifestyle changes to control their blood sugar."



#### **Multiple Determinants of Health**



Source: County Health Rankings, Michigan. 2016. p.1



#### Deaths Attributable to Social Environment Factors, 2000



Source: Galea S, Tracy M, Hoggatt KJ, Dimaggio C, Karpati A. Estimated deaths attributable to social factors in the United States. Am J Public Health. 2011; 101(8): 1456-65.

URBAN RESEARCH CENTER

### Social determinants of health

- Our income, education, & neighborhoods affect the conditions in which we are born, live, work, learn & age
- These conditions shape the quality & length of our lives
- When these conditions differ systematically, they contribute to health inequities



## **Determinants of Health**

Societal Economic, Social, & Political Conditions

Neighborhood and Community Living & Working Conditions

Social & Family Networks

Individual Factors

Health



#### What can we do about it?

# What is the role of research in understanding and addressing social determinants of health to promote health equity?



### Rationale

- Historically, research has not often directly benefited and sometimes actually harmed the communities involved
- Public health interventions have often not been as effective as could be because not tailored to the concerns & cultures of participants
- Communities most impacted by health inequities least likely to be involved in the research process
- Resulted in understandable distrust of, and reluctance to participate in, research



### **Rationale** (continued)

 Increasing calls for more comprehensive & participatory approaches

 Increasing support for such partnership approaches

 Community-based participatory research is one such partnership approach



# Definition of Community-Based Participatory Research

- Community-based participatory research is a partnership approach to research that:
  - equitably involves all partners 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.



# **Key Principles of CBPR**

- 1. Recognizes community as a unit of identity
- 2. Builds on community strengths and resources

3. Promotes collaborative and equitable partnerships





## Key Principles of CBPR (continued)

- 4. Facilitates co-learning and capacity building
- 5. Balances research and action for mutual benefit of all partners





# Key Principles of CBPR (continued)

- 6. Focuses on determinants of health from a local standpoint
- 7. Disseminates findings to all partners and involves them in the dissemination process
- 8. Promotes long-term process and commitment





#### Community-based participatory research contributes to examining health inequities and promoting health equity





#### **Detroit URC Partner Organizations**













**SOCIAL WORK** 

CITY OF







Neighborhood Service Organization Celebrating 60 Years of Service and Impact











#### History & Goals of Detroit URC: Celebrating Over Twenty Years of Partnership

Funded in 1995 by CDC as one of three Urban Research Centers in the U.S.

GOALS:

- 1. Foster and sustain CBPR partnerships in Detroit
- 2. Enhance capacity of all partners
- 3. Enhance capacity to engage in policy advocacy
- 4. Translate research findings to promote policy change



## Detroit URC Programs & Resources

- Community-Academic Research Network
- Collaborative Research Support
- CBPR Capacity Building







## **Detroit URC Accomplishments**

- Established over 20 CBPR partnerships and implemented over 35 research projects
- Over \$45 million grant funding received
- Improved health status of intervention participants
- Built new relationships linking University and communities and different parts of the University
- Hired over 400 Detroit residents
- Increased capacity to engage in policy advocacy, resulting in policy change



#### The Healthy Environments Partnership



A community-based participatory research partnership working together since 2000 to understand and promote heart health in Detroit.

We examine aspects of the social & physical environment that contribute to

racial & socioeconomic inequities in cardiovascular disease (CVD), and develop, implement & evaluate interventions to address them.

Detroit Hispanic Development Corporation | Eastside Community Network | Friends of Parkside | Henry Ford Health System | Institute for Population Health | University of Michigan School of Public Health | Community Members At-Large



#### HEP Projects & Data Collected

Social & Physical Environments & CV Health Inequities (2000-2005)

Community Approaches to Cardiovascular Health (2005-2014)

Lean & Green in Motown Project (2005-2010)







#### **CBPR Data Collection Processes**

- Focus groups co-facilitated with community and academic partners
- Survey subcommittee to develop and pretest survey questionnaire
- Steering committee finalized all major decisions about survey, including questionnaire, data collection mechanisms, sample
- Photovoice project with youth to understand youth perspective on neighborhood conditions and health
- Steering committee provided oversight for all aspects of data collection and analysis



#### **Selected Survey Findings: Food Access**

High percent poverty + high percent African American associated with:

► Reduced access to supermarkets<sup>1</sup>

► Reduced quality and range of produce<sup>1</sup>

♦ Proximity to large grocery stores → increased fruit & vegetable intake<sup>2</sup> + increased DGLO fruit & veg. intake<sup>3</sup>

♦ Proximity to convenience stores → reduced fruit & vegetable intake<sup>2</sup>

- (1) Zenk et al 2006, "Fruit & vegetable access differs by community racial composition & socioeconomic status." *Ethnicity & Disease.*
- (2) Zenk, S., Schulz, A., Kannan, S et al (2009). <u>Neighborhood retail food environment and fruit and vegetable intake in a multiethnic</u> <u>urban population</u>. *Am J Health Promot*.
- (3) Izumi et al 2011, "Associations between neighborhood availability & individual consumption of DGO..." JADA.







"(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."

SUPERMARKET

- Eastside Detroit resident, 2002

Photograph by Janae Ashford 2006





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.



Environmen Food Retail

Environmer Food **Retail** 



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.





# AND BILLIONS SERVED

"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."

Pho

DV

"Tell the fast food places to serve healthier food."
## Selected Survey Findings: Physical Activity Environments

Sidewalk condition associated with physical activity, independent of structural characteristics (e.g. density of households per acre).<sup>1,3</sup>

Police presence, presence of other pedestrians, absence of stray dogs, moderate traffic (as opposed to no traffic) associated with greater pedestrian use of greenways.<sup>2</sup>





(1) Kwarteng, Schulz, Zenk, Mentz, Wilson. 2013. Are observed neighborhood conditions associated with physical activity?: Findings from a multilevel analysis... Journal of Public Health
 (2) Miranda, P.Y. et al Built environment as a predictor of physical activity. Presented at APHA 2008
 (3) Schulz, Mentz, Johnson-Lawrence, et al (2013) Independent and joint associations between multiple measures of the built and social environments.... Journal of Urban Health





## What Makes it Hard to be Physically Active?

- "There is no
  equipment youth
  play basketball
  in the street."
- "Parks don't have swings – just chains."
- "Closing of local recreation centers."
  - 2006 Focus Groups

Photograph by Crystal Sims 2006

#### What Makes it Hard to be Physically Active?









#### **CATCH-PATH Multilevel Intervention: Overview** Pathways to Heart Health

Promote Walking

Promote Community Leadership & Sustainability

Promote Activity Friendly Neighborhoods



#### Walk Your Heart to Health Walkers

- ♦ Walking Group Aims:
   ▶ Promote heart healthy behaviors → walking
   ▶ Provide opportunities for other heart healthy activities (e.g., food demos)
  - Offer social support for heart healthy activities

- Evaluation: Pre & post surveys (e.g., health indicators, attitudes, social support)
- Pedometers –monitor steps
- Participant observation
- Attendance records
- Session summary sheets





# What We Learned

#### 1. WALKING GROUPS INCREASE PHYSICAL ACTIVITY

12000 11000 10,161 10,221 10,097 9,899 10000 9000 8000 6,993 6,956 6,893 6,839 7000 5,800 5,796 5,751 5,711 6000 4,729 5000 4000 3000 2000 1000 0 Baseline 8 Weeks 16 Weeks 24 Weeks 32 Weeks Steps on days participants did not walk with the group Overall mean steps Steps on days participants walked with the group

#### Mean Number of Daily Steps Walked by WYHH Participants



#### What We Learned 2. WYHH WALKING GROUPS REDUCED CVD RISK FACTORS

Adjusted High Blood Pressure Prevalence Estimates for WYHH Participants with an Average Increase of 4000 Steps per Day





### What We Learned 3. ALMOST ANYONE CAN WALK!



"I loved it! The people in the group and the Community Health Promoters, we became family...Everybody in my household walks, I changed my diet & lost weight. The program should never end..."

WYHH Manual www.HEPdetroit.org



#### **Changing Social & Physical Environments**

WYHH Network of Community Organizations to Support Walking Groups

Supporting Walking Groups (SWAG)Training

Walking Group Capacity Building Mini-grants

Policy Advocacy Capacity Building Workshops







## **Partnership Development and Action Planning**

- 1. Discuss the aims of your CBPR partnership/project to ensure a common understanding of goals and expectations of each partner.
- 2. Who are the partners involved in the project (i.e., individuals, and organizations), and what are the roles and responsibilities of each partner?
- 3. Using a CBPR approach, what research, interventions and/or policy changes could be carried out to improve health and promote health equity in your community?



# Benefits of Using a CBPR Approach

- Helps focus research on practical issues of importance to community members, thereby enhancing relevance and use of data
- Enhances quality and validity of research
- Provides funding and publication opportunities





# Benefits of Using a CBPR Approach (cont.)

- Strengthens intervention design and implementation
  - Recruitment
  - Retention
- Knowledge gained and interventions benefit the community
- Makes sure the knowledge gained gets back to the people who need it most
- Helps safeguard community members against undue burdens, insensitivity, or research misconduct





# Benefits of Using a CBPR Approach (cont.)



- Provides resources for communities involved
- Joins partners with diverse expertise to address complex public health problems
- Increases trust and bridges cultural gaps between partners
- Has potential to translate research findings to guide development of further interventions and policy change



### **Recommendations for Conducting CBPR: Developing a Partnership**

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





## **Developing a Partnership (continued)**

- Jointly develop CBPR principles and what it means to have a "collaborative, equitable partnership"
- Follow agreed-upon CBPR principles in practice
- Need to work together amidst ethnic, cultural, social class and organizational differences



#### **Developing a Partnership (continued)**

- Focus on community strengths
- Select mutually defined priority issues, goals and objectives
- Establish procedures for dissemination
- Establish and maintain an infrastructure





## Maintaining a Partnership

- Create a balance between time spent on process issues and tasks/products
- Reach a balance in the distribution of benefits and resources
- Engage all partners in shared leadership roles





## Maintaining a Partnership (continued)

- Conduct ongoing evaluation of the partnership process
- Develop processes to promote sustainability
- Have fun and celebrate successes!





## Questions, Discussion, Concluding Remarks





