Environmental Justice: Physical Activity, Healthy Eating, and Obesity **Robert Wood Johnson Foundation Active Living Research** February 26, 2005

Contributors

Wendell C. Taylor, Ph.D., M.P.H.
University of Texas Health Science Center at Houston

Walker Carlos Poston, Ph.D., M.P.H.University of Missouri at Kansas City

 Lovell Jones, Ph.D.
 University of Texas M.D. Anderson Cancer Center

Presentation Outline

- Environmental Justice Movement
- Environmental Influences on Behavior
- Physical Activity (target behavior) and Socio-demographic Characteristics
- Distribution and Impact of the Environment
- Environmental Correlates by Sociodemographic Characteristics
- Summary

- 1983 empirical study, eight southeastern states – EPA region IV, United States General Accounting Office
- Three of the four communities with large commercial hazardous waste landfills were predominately African American

• United Church of Christ (1987)

- National study of race and hazardous landfills
- Zip codes and demographic factors with and without waste treatment, storage, or disposal facilities
- Zip codes without facility 12.3% ethnic minority
- Zip codes with one facility 24% ethnic minority
- Zip codes with one or more facilities or one of the nation's five largest landfills – 38% ethnic minority

 Every 3 of 5 Black and Hispanic Americans lived in communities with uncontrollable toxic waste sites

 Environmental hazards not random, rather selective of socially and economically vulnerable populations



- Environmental injustice people of color and low-income communities suffer disproportionate exposure to environmental hazards
- Environmental Protection Agency (1998), Environmental Justice
 - Fair Treatment
 - Meaningful involvement of all people regardless of race, ethnicity, income, national origin, or educational level

- Institute of Medicine
- Toward Environmental Justice, 1999
- President Clinton's quote, 1994
- "Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionate high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and lowincome populations." President William Clinton

Environmental Influences

Physical Activity

• Healthy Eating





Environmental Influences on Behavior

- Robert Wood Johnson Foundation
- Special Issues of Journals
 - American Journal of Preventive Medicine
 - American Journal of Health Promotion
 - American Journal of Public Health
- Popular Media
 - Super Size Me

Physical Activity and Sociodemographic Characteristics

Physical activity patterns

- Lower rates of physical activity
 - People with lower incomes
 - People with lower levels of education
 - Some racial and ethnic minority groups
 - African Americans
 - Hispanics
 - Sources:

Surgeon General's Report on Physical Activity and Health Healthy People 2010

Distribution of Activity Unfriendly Environments

Physical Activity and the Physical Environment

- Persons with more education and higher incomes were more likely to have access to walking trails and indoor places to exercise
- Higher income groups used trails more than lower income groups
- Brownson et al. (2000)

Physical Activity and the Physical Environment

- Absence of data
- Harris County study (in progress)

- No significant, environmental physical activity correlates
 - African American women (Rohm-Young et al. 2003)
 - Hispanic/Latina women (Voorhees et al. 2003)

- Significant, environmental physical activity correlates
- Blacks positive association with frequently seeing others exercising in neighborhood (King et al. 2003)

 Women and persons with high school education or less significantly increased the amount of walking since using walking trails (Brownson et al. 2000)

Cross-sectional data

- Multi-use paths not being used
- Destination amenities and cultural influences (Lusk 2004)
- General destinations
 Sitting areas, lakes, gazebo shelters
- Key destinations that serve everyday needs

 Grocery stores, drug stores, post offices, banks

Summary

- Questions????
 - Are Environmental Justice principles appropriate and relevant?
 - Yes, appropriate and relevant. More data are needed.
 - A new topic for the physical environment, physical activity, and healthy eating.

Summary

– Should we be concerned with Environmental Justice principles?

-Yes

- Major initiatives to eliminate health disparities

Recommendations

- Inclusive public participation process (e.g., multiuse paths) (Assessment, Policy Development, Assurance)
- Distribution and impact of the environmental factors by socio-demographic characteristics for physical activity and healthy eating (location and density of supermarkets and fast food restaurants)
- Environmental correlates by socio-demographic characteristics for physical activity and healthy eating

Recommendations

 Social environment interactions with the physical environment by sociodemographic characteristics

White Oak Bayou in North Houston Amenities and Upkeep: West vs. East Sides (Political Boundaries)



Environmental Justice It's about people



• Where they work



Environmental Justice It's about people





• Where they Live

Environmental Justice It's about people



• Where they play



Confronting Inequalities

- Understanding Environmental Influences
- Reducing Barriers (Transportation vans to food markets and outreach programs)
- Providing Opportunities for Healthy Living for all segments of the population