The Healthy Environments Partnership (HEP)

Partner Organizations
- Chandler Park Conservancy
- Detroit Health Department
- 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

About Healthy Environments Partnership
The Healthy Environment Partnership (HEP) is a community-based participatory research (CBPR) partnership focused on promoting heart health in Detroit. Established in 2000, HEP examines and develops interventions to address social determinants of racial and socioeconomic inequities in cardiovascular disease (CVD). See Partner Organizations for a list of HEP partners.

Our Approach
HEP’s CBPR approach actively engages community-based organization, public health and health service, community resident, and academic partners in all phases of our work. This includes working together to define our research questions, design and implement studies and interventions, interpret and disseminate research results, and to decide how results will be applied to interventions and policies to improve heart health in Detroit.

Since 2000, we have examined how the following social determinants of health (SDOH) affect cardiovascular disease risk in Detroit:
- Stressful social and economic conditions in Detroit neighborhoods
- Built environments (e.g. neighborhood walkability)
- Food environments (e.g. location of grocery stores, access to healthy foods)
- Air pollution (e.g. exposure to fine airborne particulate matter (PM2.5))

About Social Determinants of Health
Social determinants of health are aspects of the social environment, outside of individual characteristics, that influence health, such as educational opportunities, food access and quality, social networks and relationships, neighborhood violence, housing quality, access to recreational opportunities, and dimensions of the built environment (e.g. green space, sidewalk conditions).

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HEP Findings on Social Determinants of Health in Detroit

**FOOD ENVIRONMENT**

- Detroit residents of neighborhoods with less access to fresh fruits and vegetables eat fewer of them.\(^3\),\(^4\) Eating fewer fruits and vegetables can increase risk of heart disease.
- Detroiters who shop for food far from home are more likely to experience discrimination and unfair treatment.\(^2\)
- Neighborhoods with the most segregation and poverty tend to have fewer large grocery stores.
- Residents eat more fruits and vegetables when there is a large grocery store in their neighborhood. Those with more convenience stores in their neighborhood tend to eat fewer fruits and vegetables.\(^5\)

**PHYSICAL ACTIVITY ENVIRONMENT**

- Sidewalk quality influences physical activity particularly among younger residents.\(^6\)
- Walking group interventions promote physical activity and reduce cardiovascular risk \(^7\)
- Social support can motivate people to continue participation in community walking programs.\(^8\)
- Environmental characteristics inside and outside of residential neighborhoods shape diet and physical activity.\(^9\)

**AIR QUALITY**

- Exposure to particulate matter (PM2.5), a form of air pollution, is associated with increased blood pressure among Detroit residents; residents of southwest Detroit are most vulnerable.\(^11\)
- Obesity can increase adverse effects of PM2.5 on blood pressure \(^12\)
- Stress can increase adverse effects of PM2.5 exposure on blood pressure \(^13\)
- Higher intakes of antioxidant-rich foods may provide some (small) protection against adverse effects of PM2.5 on blood pressure.\(^14\)

**STRESS**

Residents of poorer neighborhoods experience:

- More stressful life conditions and these are associated with physiological responses which may have long-term health effects.\(^15\)
- Increased cardiovascular risk, in part due to higher levels of stressful life conditions \(^17\)
- Increased stress associated with conditions in their social and physical environments.\(^18\)
- Biological response to stress that are associated with earlier onset of illness, and shortened life expectancy.\(^15\),\(^16\),\(^19\)

**References**