

Healthy Homes Grantees in Region III, Mid-Atlantic

Name of Grantee: University of Maryland, Baltimore School of Nursing
Name of Project: Park Heights Healthy Homes Demonstration and Education Project
Amount Awarded: \$ 435,510
Year of Grant: 2001

Contact Info:

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Project Partners: Baltimore's Park Heights chapter of the Association of Community Organization for Reform Now (ACORN)

Summary of Project Activities:

The University of Maryland, Baltimore, School of Nursing in collaboration with Baltimore's Park Heights chapter of the Association of Community Organization for Reform Now (ACORN) and expert consultants will develop and implement a 1-year Healthy Homes Demonstration and Education Project in Baltimore's Park Heights neighborhood. Funding is from federal Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control. The project will develop community capacity to assess the environmental risk factors associated with the housing stock in the community, implement strategies to reduce the environmental health risks in 30 housing units, educate neighborhood residents, and evaluate the efficacy of the interventions. Targeted housing units will be those in which a child under the age of 18 with asthma spends at least 10 hours a week. The objectives of the Park Heights Healthy Homes Project are to: 1.) Develop and implement a cost-effective protocol to screen homes for environmental risks that are known to exist in older inner city homes and to assess residents' health status, beliefs and behaviors related to these environmental hazards; 2.) Build community-based outreach capacity to assess, reduce, and evaluate reduction of environmental risks in homes; 3.) Develop, implement and conduct a preliminary evaluation of cost-effective protocols for reduction of housing-based, health-related environmental risks to human health and for educating residents about ways to reduce their exposure to these risks; 4.) Develop, implement and evaluate an education outreach program to sustain the maintenance of Healthy Homes in Park Heights; and, 5.) Through partnership with ACORN, to lay the groundwork for the development of a model to reproduce this Healthy Homes approach in other inner cities throughout the U.S. To raise awareness and build skills within the nursing profession regarding environmental health and housing issues. 6.) Evaluate the impact of the program in promoting health among residents. This Healthy Homes project will develop local capacity through partnerships with community residents, faith communities, the elementary schools serving the neighborhood, service organizations in the community, and local health care providers.

Community Description:

Park Heights is a low-income, predominantly African American residential community in Northwest Baltimore City. The housing stock consists primarily of row homes built before the 1950's and occupied by a mix of renters and owners. Most of the homes have gas furnaces, but many residents use gas ovens as a secondary source of heat either to reduce their heating bills or because their kitchens have no other source of heat. Childhood lead poisoning and childhood asthma rates are major health issues in this community.

Recruitment:

Participants will be recruited through a variety of community outreach activities such as phone calls from ACORN members and community events. Once a family has agreed to participate, a home visit will be made. A brief visual inspection will be performed to determine eligibility to the program. If the family and house are eligible, the family will be enrolled in the program and informed consent will be obtained.

Educational activities:

Will include the following: participation in local block fairs and health fairs; development of two community videos on the Healthy Homes Project in Park Heights (low-budget production with much community participation); a logo contest at the elementary and secondary schools (with prizes); one-on-one education sessions; group education sessions; and education of local health care providers. Community members will help select educational materials from existing materials that will be tailored to the community. Additional material will be developed as needed. Educational material will be targeted at a 5th grade reading level to accommodate those with low literacy.

Project Personnel:

The community residents will be the prime personnel in all educational and housing related activities. A team of community residents will be hired and trained by housing and environmental consultants to perform assessment and reduction of environmental hazards in the homes. Community-based meetings will be convened by ACORN for educational and recruitment activities, as well as meetings to celebrate completion of intervention rounds. Doctorally prepared community health nurses from the School of Nursing will provide community-based education strategies to improve the residents' understanding of the relationship between environmental exposures in their homes and health risks. The nurses will train and mentor the team of community employees in conducting the educational activities. The community health nurses with expertise in community-based project intervention and evaluation, will direct the project and provide continuity of communication.

Evaluation, Sustainability, and Reproducibility:

Evaluation of the hazard reduction strategies will be based on the pre- and post-intervention samples of environmental toxins and indoor air quality within the homes. Program objectives will be used to evaluate outcomes. Also evaluation of the success of health education strategies will be based on changes in behavior and health status

reported by the residents in interviews. In addition, a project evaluator from the University of Maryland School of Nursing will create benchmarks for process evaluation throughout the project.

Sustainability of the project will be assured through creating a core of community residents who are trained in healthy homes and by permanently modifying health behavior. ACORN is active in over 30 cities throughout the United States; therefore, partnering with Park Heights ACORN provides the groundwork for **replicating** this Healthy Homes initiative in other urban neighborhoods throughout the United States. Additional funding will be obtained to fund continuing education modules for nurses regarding assessment and reduction of health-related environmental risks in housing. These modules will be published through partnership with the American Nurses Association to a potential audience of 200,000 nurses nationwide.

Product Outcomes/Outputs:

Project Activities:

The following activities will be completed in at least 30 homes through a series of seven home visits, by active partnering with and training of community residents through each project phase: 1) Home assessment that includes sampling for lead and dust (analyzed for dog/cat dander, dust mites, molds, cockroach exoskeleton, and mouse urine) and data logging levels of CO, temperature, and humidity in the home over 7 days. The home assessment will also include a survey to identify environmental health hazards such as pesticide use, environmental tobacco smoke, and use of ovens for heating. The presence of safety-related housing code violations, such as absence of smoke detectors, will be noted. Data logging instruments will be installed. 2) Recover data logging instruments. Data will be evaluated by project staff. Intervention options will be selected and a report with recommendations will be prepared for each household. 3) Meet with household residents to review report and discuss the exposures and options for hazard reduction. Negotiate and agree upon the terms of interventions to decrease exposures. (Staff will write intervention specifications.) Education about integrated pest management, smoking cessation, and other behavioral changes will be initiated. As necessary, the landlord and/or appropriate city agencies will be contacted. 4) Begin hazard reduction activities. The range of activities will include lead dust reduction and combustion appliance testing and installation of a supplemental electric heat source in kitchens that have none. 5) Re-assessment of home after intervention, sampling home again for the same environmental exposures and interviewing families regarding behavioral changes. 6) Recover data logging instruments. (Evaluate data.) 7) Re-visit family to review results of post-intervention sampling and behavioral changes and to develop a plan for the long-term maintenance of the Healthy Home.

