FY 2012 Healthy Homes Technical Studies Grant Abstracts
HUD Office of Healthy Homes and Lead Hazard Control
May 8, 2012

New York

Project Title: Measuring the asthma-related costs and benefits of a large-scale, state-funded healthy homes program to inform Medicaid policy for residents with asthma

Health Research, Inc./New York State Department of Health will be awarded $500,000 in fiscal year 2012 Healthy Homes Technical Studies funds to assess and articulate the costs and benefits of providing home-based environmental asthma interventions on a large-scale, to pediatric and adult populations within the context of a comprehensive healthy homes program. The existing data in the New York State Healthy Neighborhood Program provide a unique opportunity to assess the effectiveness of the healthy homes approach for residents with asthma. The study will generate evidence about the costs and effectiveness of home-based environmental interventions as implemented on a large-scale and in real-world urban and rural settings.

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Massachusetts

Project Title: Impact of green renovations on asthma and IEQ in public housing: The role of phthalates, glycol ethers, flame retardants, perfluorinated compounds and PCBs

Silent Spring Institute will be awarded $699,793 in fiscal year 2012 Healthy Homes Technical Studies funds, and will collaborate with the Green Housing Study (implemented by HUD and the Centers for Disease Control and Prevention), to analyze chemicals of emerging concern, including phthalates, glycol ethers, flame retardants, perfluorinated compounds, and polychlorinated biphyenyls (PCBs). Laboratory and epidemiologic studies suggest that these compounds are associated with asthma, endocrine disruption, and effects on brain development. The study team will evaluate associations between household levels of phthalates and glycol ethers and asthma symptoms in children. The applicant also will investigate how green renovations affect exposure to phthalates, glycol ethers, flame retardants, perfluorinated compounds, and PCBs.

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Michigan

Project Title: Wayne State University Center for Urban Studies Healthy Homes Rating Tool Three-city Survey

The Center for Urban Studies at **Wayne State University** will be awarded $692,221 in fiscal year 2012 Healthy Homes Technical Studies funds to assess the application of a British housing assessment tool (the Home Health and Safety Rating System; HHSRS) on housing in three U.S. cities. The researchers will determine the extent to which housing hazards measured by the Healthy Homes Rating Tool, a modified version of the HHSRS, vary across cities in the U.S. when compared to the results in England, and to assess the reliability of assessments completed using the Healthy Homes Rating Tool. The researchers will also test the assessors on providing likelihoods and outcomes based upon U.S. data, and assess the effect of training on assessment quality and reliability.

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North Carolina

Project Title: Indoor Air Quality and Energy Efficiency: Establishing baselines before and after home weatherization measures.

Appalachian State University will be awarded $696,810 in fiscal year 2012 Healthy Homes Technical Studies funds to compare measurements in homes in two North Carolina communities (one community in each of the mountain and coastal climate zones) before and after weatherization. Specifically, the researchers will examine how weatherization may be changing indoor air contaminant concentrations (particulate matter, total volatile organic compounds, radon, formaldehyde, carbon monoxide, nitrogen dioxide) and carbon dioxide, temperature and relative humidity. The researchers will analyze the environmental measurement data in conjunction with participants' daily logs, building characteristics, ventilation status, and the weatherization measures that were implemented. The researchers will also test the effects of different ventilation strategies, including exhaust fans and energy recovery ventilators, on post-weatherization contaminant levels, and they will perform one year follow-up monitoring on a subset of the study homes.

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