

FY 2019 LEAD AND HEALTHY HOMES TECHNICAL STUDIES GRANT AWARDS

District of Columbia

George Washington University will be awarded up to \$850,000 to investigate the impact of HUD housing assistance on exposure to indoor environmental contaminants such as lead, secondhand tobacco smoke, and pesticides. This will be accomplished through extensive analysis of a unique dataset that links HUD administrative data with those from the National Health and Nutrition Examination Survey. The research also includes the development of a housing environmental quality index using American Housing Survey data.

Contact Person/Authorizing Official: Ms. Sylvia Ezekilova osr@gwu.edu (202) 994-0728

Illinois

The University of Illinois Chicago will be awarded up to \$999,999 to identify predictors of water lead levels in homes that rely on private wells for drinking water. Research will also be conducted to characterize the cost and efficacy of three interventions to remove lead from well water in 100 Illinois homes. The researchers will work closely with the Illinois Department of Health and the five local health departments in conducting the research.

Contact Person/Authorizing Official: Joanna Groden, PhD awards@uic.edu (312) 996-2862

The University of Illinois Chicago will be awarded up to \$700,000 to evaluate the HELP program in Galesburg, IL. Eligible pre-1978 households will receive a lead risk assessment and be eligible for lead service line replacement (linking the house to the main water line) and residential lead hazard remediation. The study will help determine the incremental benefits of lead service line replacement in reducing lead exposure. Researchers will also use an analytical predictive lead risk model to assess program outcomes.

Contact Person/Authorizing Official: Joanna Groden, PhD awards@uic.edu (312) 996-2862

The Illinois Institute of Technology will be awarded up to \$1,000,000 to study the use of portable high efficiency air cleaners to improve indoor air quality and health outcomes in the

homes of veterans with Chronic Obstructive Pulmonary Disease (COPD). The researchers will also investigate potential housing-related factors that may contribute to COPD exacerbations and the utility of using low-cost indoor air pollution sensors in conducting the research and improving air quality. The study will be conducted using a community-based participatory research model.

Contact Person/Authorizing Official: Robert J. Lapointe lapointe@iit.edu (312) 567-7135

Maryland

The National Center for Healthy Housing, Inc., partnering with the University of Illinois Indoor Climate Research and Training Institute, will be awarded up to \$799,999 to assess the effectiveness of kitchen range exhaust hoods (set to a low exhaust level) in achieving adequate ventilation and improving indoor air quality in homes that have been weatherized to improve energy efficiency. The study will assess the effectiveness of the range hoods compared to homes that are ventilated using a continuously operating bathroom vent fan.

Contact Person/Authorizing Official: Ms. Amanda Reddy <u>areddy@nchh.org</u> (443) 539-4152

QuanTech, Inc. will be awarded up to \$611,534 to develop a fast field procedure to determine if a unit can be cleared after completion of lead hazard control work. The chemical test kit will be based on previous research on development of a test kit to identify lead-based paint. The test kit has the potential to decrease the time period necessary to obtain clearance, reducing costs for resident relocation.

Contact Person/Authorizing Official: David Cox, PhD dcox@quantech.com (240) 397-2993

Massachusetts

Boston University will be awarded up to \$670,799 to study the potential effects of occupational "take-home contamination" on children's blood lead levels. This pilot study will characterize 60 homes of construction workers with a young child in the household. Researchers will evaluate the effectiveness of several interventions in reducing lead levels in household dust and children's blood. Collaborators will include the Massachusetts Coalition for Occupational Safety and Health, Brazilian American Center, Vietnamese Health Collaborative, New England Carpenters Training Fund, and New England Region Laborers' Health & Safety Fund of North America.

Contact Person/Authorizing Official: Ms. Diane Baldwin ospera@bu.edu (617) 353-4365

The University of Massachusetts Lowell will be awarded up to \$999,999 to test the effectiveness of portable high efficiency air filtration units in improving indoor air quality and reducing asthma symptoms and healthcare utilization among older adults with asthma living in

public or other federally assisted housing. The research will be conducted in units with gas stoves, which are known to emit contaminants that can trigger asthma.

Contact Person/Authorizing Official: Ms. Susan Puryear Susan_Puryear@uml.edu (978) 934-4170

North Carolina

North Carolina State University will be awarded up to \$999,295 to work with public housing agencies and the Lumbee Tribe to test a new pest control protocol for eradicating cockroach infestations and reducing cockroach allergen levels in homes in both urban and rural communities in North Carolina. Community members and pest management professionals will be included to help ensure the success of the study and the future application of study findings.

Contact Person/Authorizing Official: Wesley Winkelman wwinkel@ncsu.edu (919) 515-1800

Virginia

Virginia Polytechnic Institute and State University will be awarded up to \$746,570 to assess the efficacy and cost of assessment-based pest management protocols for controlling cockroaches and bed bugs in public and other HUD-assisted housing. The researchers will also study how the determination of pesticide resistance among cockroach populations can be incorporated into pest management protocols and they will test the efficacy of different heat systems for bed bug control.

Contact Person/Authorizing Official: Ms. Trudy Riley ospdirector@vt.edu (540) 231-5281