

# HEALTHY HOMES UNIVERSITY II GRANT SUMMARY

Healthy Homes Demonstration II Grantee: Michigan Dept. of Community Health-Healthy Homes Section  
P.O. Box 30195, Lansing, Michigan 48909  
517.335.9390 [www.michigan.gov/leadsafe](http://www.michigan.gov/leadsafe)

Project Contacts: Wesley Priem, Section Manager  
Courtney Wisinski, Project Manager  
Linda Stewart, Family Services Coordinator

Duration of Project: December 15, 2008 - December 14, 2011 (36 months)

HUD Award/Leveraged: \$875,000/ \$435,000

Key Partners: Allen Neighborhood Center, Baker Donora Center, Cristo Rey Community Center, NorthWest Initiative and Southside Community Coalition  
American Lung Association  
City of Lansing- Planning and Neighborhood Development and Code Enforcement  
Genesee County Asthma Network  
Greater Lansing Housing Coalition  
Lansing Area Safety Council  
Lansing Housing Commission  
Mid Michigan Asthma Coalition  
Michigan State University Extension Services, Ingham County  
Michigan State University, Department of Pediatrics and Human Development  
MDCH-Chronic Disease Section, Epidemiology Services, Injury and Violence Prevention Section, Lead Safe Home Program, Public Health Administration, Genomics and Genetic Disorders Section and Childhood Lead Poisoning Prevention Program  
St. Vincent Catholic Charities (Refugee Services)  
Ingham County Health Department, Bureau of Environmental Health

Target Area and Why: Ingham County and ZIP codes 48917, 48911 and 48906 of Eaton and Clinton counties.

Ten homes within the following ZIP codes of Flint, MI (48503, 48504 and 48505)

Analyzed housing age, hospitalization rates, income, and race data.

Participant Criteria: Household units where low to moderate income children under 18 years of age with asthma reside, with priority given to households with asthmatic children less than 4 years of age and households that reside in high priority target areas.

## Income Eligibility Limits for Ingham County Households:

		HOUSEHOLD SIZE							
COUNTY	INCOME STATUS	1	2	3	4	5	6	7	8
Ingham, Clinton & Ingham	Low-income	\$0-23,100	\$0-26,400	\$0-29,700	\$0-32,950	\$0-35,600	\$0-38,250	\$0-40,900	\$0-43,500
	Moderate-income	23,100-36,900	26,400-42,200	29,700-47,450	32,950-52,700	35,600-56,950	38,250-61,150	40,900-65,350	43,500-69,600

Technical Approach:

Site Visit Type	Curriculum	Estimated Timeline for Completion
Introductory Visit	<ul style="list-style-type: none"> <li>▪ Review of program application.</li> <li>▪ Review and sign informed consent and participation agreement.</li> <li>▪ Identification of health, environmental and safety hazards based on an interior/exterior visual assessment.</li> <li>▪ Qualified households will be referred to medical resources, lead programs, housing rehabilitation programs, weatherization, and other appropriate services.</li> <li>▪ Qualified households will be referred for custom intervention products or services.</li> <li>▪ Pre-intervention dust environmental sampling collected in 50 homes.</li> </ul>	Completed 30 days after application is accepted and unit enrolled in the Program.
Baseline	<ul style="list-style-type: none"> <li>▪ Completion of baseline questionnaire.</li> <li>▪ Basic product Installation.</li> <li>▪ Education of parent and/or child on methods to reduce asthma triggers and unintentional injuries within the home.</li> </ul>	Completed 2-4 weeks after the initial site visit.
Custom Intervention	<ul style="list-style-type: none"> <li>▪ Bidding process and contractor selection to happen simultaneously with follow-up visits.</li> </ul>	Simultaneous
3-Month Site Visit	<ul style="list-style-type: none"> <li>▪ Completion of a 3-Month Follow-up Questionnaire to asses change in medical visit frequency, symptoms, missed school/work days and trigger knowledge.</li> <li>▪ Obtain additional information on intervention effectiveness to measure the Program's impact and benefits.</li> <li>▪ Follow-up visual to check the status, quality and usage of the products provided.</li> <li>▪ Incentive product installation</li> </ul>	Completed 3 months after baseline site visit
6-Month Site Visit	<ul style="list-style-type: none"> <li>▪ Completion of a 6-Month Follow-up Questionnaire to asses change in medical visits frequency, symptoms, missed school/work days and trigger knowledge.</li> <li>▪ Obtain additional information on intervention effectiveness to measure the Program's impact and benefits.</li> <li>▪ Follow-up visual to check the status, quality and usage of the products provided.</li> <li>▪ Incentive product installation</li> <li>▪ Post-intervention environmental dust sampling</li> </ul>	Completed 6 months after baseline site visit
12-Month Site Visit  <b>50 HOMES ONLY</b>	<ul style="list-style-type: none"> <li>▪ Completion of a 12-Month Follow-up Questionnaire to asses change in medical visits frequency, symptoms, missed school/work days and trigger knowledge.</li> <li>▪ Obtain additional information on intervention effectiveness to measure the Program's impact and benefits.</li> <li>▪ Follow-up visual to check the status, quality and usage of the products provided.</li> <li>▪ Incentive product installation</li> <li>▪ Post-intervention environmental dust sampling</li> <li>▪ HHU Client Surveys distributed to allow for participant input.</li> </ul>	Completed 12 months after baseline site visit
Graduation	HHU Certificate of Graduation Healthy Homes Willow ornament	On completion of 6 or 12-Month site visit.

Housing Treatments (Intervention Products and Services):

<b>Basic Treatment</b> (average \$475/unit)	<b>Custom Treatment</b> (average \$385)
<p><b>Asthma Related Products</b></p> <ul style="list-style-type: none"> <li>HEPA vacuum</li> <li>Trash can with secure cover</li> <li>Food containers with securing lids</li> <li>Smoking cessation kit</li> <li>Green cleaning supplies</li> <li>Pillow and mattress covers</li> <li>Integrated Pest Management traps and baits</li> <li>Foam crack sealant</li> <li>Caulk</li> <li>Shower curtain</li> <li>Low allergen furnace filters</li> <li>Door mats</li> <li>HEPA room filter</li> </ul> <p><b>Safety Related Products</b></p> <ul style="list-style-type: none"> <li>Outlet safety plugs</li> <li>Carbon monoxide and smoke detectors</li> <li>Cabinet safety locks</li> <li>Skid proof bathtub mats</li> <li>Fire extinguisher</li> <li>Gun trigger locks</li> <li>Mercury-free thermometers</li> <li>Nightlights</li> <li>Poison Control Stickers</li> <li>Fan</li> <li>Child safety gate</li> <li>Mini blind cord wind-ups</li> <li>Flashlights</li> <li>Step stool</li> <li>Replacement batteries</li> <li>First aid kits</li> <li>Lead-based paint cleaning kits (post 1978)</li> </ul>	<p><b>Asthma Related Products/Services</b></p> <ul style="list-style-type: none"> <li>Beds and pillows</li> <li>Window air conditioning unit for asthma child's sleeping area</li> <li>Dehumidifiers</li> <li>HVAC maintenance and repair</li> <li>Plumbing repairs</li> <li>Minor roof repair</li> <li>Gutter installation/repair</li> <li>Dryer vent installation/repair</li> <li>Bathroom vent installation</li> <li>Improve ventilation (soffit/roof/foundation vent installation)</li> <li>Carpet removal/floor replacement</li> <li>Bush removal/landscaping (rodent and moisture control)</li> <li>Integrated Pest Management services</li> </ul> <p><b>Safety Related Products</b></p> <ul style="list-style-type: none"> <li>Outdoor play area improvements</li> <li>Garbage removal</li> </ul> <p><i>* Custom Intervention product installation will include one or more of these products and/or services and is based on the Project Manager's review of the visual assessment, program compliance and the severity of asthma symptoms</i></p>

**Desired Outcomes:**

- Decrease in asthma symptoms and days of reduced activity due to symptoms
- Decrease of acute asthma care events, including unscheduled doctor/clinic visits, urgent care, ER and hospitalizations
- Increase number of well-child doctor visits
- Decreased number of missed school/work days
- Increase of knowledge of asthma triggers and trigger reduction/ avoidance measures
- Positive change in attitude and behaviors regarding ability and barriers to trigger reduction/avoidance

**Methods for Capturing Outcomes:**

- Questionnaires (co-designed by an Asthma Epidemiologist) with households at Baseline, 3, 6 and 12-months post-intervention.
- Pre and post-intervention environmental dust sampling

**Results:**

During the HHU I grant period (2005-2008) evaluation results showed a significant decrease in asthma symptoms, emergency rooms visits, hospitalizations and missed school days as a result of the program. Based on the study, a 70% decline in urgent care visits during six month of enrollment as compared to six months prior was detected. In addition, there was a decrease in asthma symptoms of greater than 50% during the third month of enrollment in HHU, as compared with the month prior to enrollment. A cost-benefit analysis of the program resulted in a cost savings of approximately \$1,849,309.83 over the grant period of three years.